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A PHENOMENOLOGICAL DEFENSE OF SEXUAL PHARMAKOTHERAPY

by

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Abstract

In August 2015, the Food and Drug Administration approved flibanserin, a serotonin modulator, to treat hypoactive sexual desire disorder. Then, in November 2016, they approved prasterone, an intravaginal dehydroepiandrosterone suppository to treat pain upon intercourse. Utilizing different mechanisms of biochemically altering the body, these drugs are pharmaceutical attempts to improve the distress experienced by women lacking sexual desire.

The pharmaceuticalization of feminine sexuality, then, is not inherently problematic. Rather, it is a biochemical attempt to change the relations among bodies, worlds, and desires. Admittedly, pharmaceutical approaches to women's sexuality have typically been reductionist, but a phenomenological deployment of pharmaceutical data need not proceed this way. Utilizing sociological studies of women's experiences of their sexuality and pharmacokinetic data, this paper seeks to lay the groundwork for a pharmakological phenomenology that recognizes the ambiguous biochemical changes induced by pharmaceuticals as having as much import for our lived experiences as the external world.

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Case Study

Chief Complaint/History of Present Illness:

PY is a 52 year-old self-identified African American, cisgender, bisexual female who

presents to the clinic with concerns regarding decreased sexual activity. She reports

persistent pain with penetrative sexual activity despite consistent use of a water-based

lubricant. She feels her symptoms have prevented her from being intimate, and she is

experiencing marked distress because of her inability to enjoy activities she previously

found pleasurable. Additionally, she reports she does not desire sexual activities as much

as she used to and thinks this is linked to her vaginal pain.

Past Medical History: Hypertension, dyslipidemia

Social History:

Drug use: quit smoking 6 months ago, denies alcohol and illicit drug use

Exercise: jogs 3 miles 1-2 times per week

Relationship status: single with multiple sexual partners

Pronouns: she, her

Medications: none

Insurance: Caremark

Physical Exam:

Vaginal mucosal thinning with dryness

Introduction

In August 2015, the US Food and Drug Administration (FDA) approved flibanserin, a serotonin and dopamine modulator, to treat hypoactive sexual desire disorder (HSDD) – revised as sexual interest/arousal disorder (SI/AD) in the most recent edition of the *Diagnostic and Statistical Manual of Mental Disorders*. Flibanserin is thought to increase women's sexual desire by altering dopamine and serotonin levels in the brain. Then, in November 2016, the FDA approved prasterone, an intravaginal dehydroepiandrosterone (DHEA) suppository, to treat pain upon intercourse in postmenopausal women. Prasterone is thought to relieve vaginal pain by increasing vaginal lubrication and nerve fiber density. Researchers have studied how this change in vaginal mucosa affects women's sexual desire and postulate that prasterone can also improve libido. Utilizing different mechanisms of action – different ways of altering the body – these drugs are pharmaceutical attempts to improve the sexual distress experienced by women lacking sexual desire.

Deploying pharmaceutical treatment from a feminist, phenomenological perspective has the capacity to alleviate sexual distress because it recognizes the body as a complex entanglement of milieu and materiality, irreducible to social structures or biochemistries alone. Flibanserin and prasterone affect this entanglement by altering our biochemical materiality – our neurotransmitters and vaginal nerve fibers, respectively – and so change our relation to our milieu and being-in-the-world. The pathological relation between a feminine organism and her environment is altered by pharmaceuticals, enabling a sexual engagement with the world otherwise prevented by distress.

Current clinical treatment of the body often fails to account for the body as lived. The lived body is a concept explored by phenomenology and conceives of the body as always operating in situation. This situation includes discourses, societies, and our facticity. Our bodies cannot be separated from our situations and thus the body-as-lived – as a body-in-situation – has import for clinical encounters and pharmaceutical treatment. In reference to the previous case study, treating PY's sexuality as only an issue of vaginal nerve fibers is to ignore the complex social world which is entangled with her distress. She reports concerns not only of vaginal pain, but of how this pain has compromised her ability to experience intimacy and pleasure with her partners. Simply put, clinical constructions taken as singular definitions of sexuality are problematic because they reduce the complex relationality of biochemistries, social relations, discourses, and the world.

Phenomenological treatment of the body enriches clinical understandings since it understands the body is always a body-in-situation. Phenomenological accounts, however, often fail to address the body as living. Despite recognizing that our facticity is an essential part of lived experience, many phenomenological accounts do not consider the impact of biochemical changes to the body as having as much import for lived experience as our external relations. To treat PY only as a social being without unconscious bodily processes is to deny her biological and chemical agency as a living organism. In order to address her barriers to intimacy and pleasure, her vaginal pain needs to be improved. Simply, while clinical understandings of the body tend to be biochemically reductionist, phenomenological understandings tend to ignore our biochemical capacities. Treating PY's sexuality as a matter of biochemistry or society,

but never both simultaneously, is to grossly underestimate the complex relationship of an organism's materiality and their environment.

This project attempts to complicate clinical assumptions of the body through the example of the pharmaceuticalization of sexuality and explore what phenomenology offers clinical practice and pharmacotherapy. This project also seeks to enrich phenomenology by exploring the notion that the lived body is inextricable from the material (pharmaceutical) body. Our bodies are entangled in a complex network that informs, and is simultaneously informed by, our lived experience. Attempts to heal ourselves must recognize our material bodies are always bodies-in-situation. I consider this project phenomenological because I maintain that the lived subject is central in clinical medicine and, while our facticity includes our materiality, pharmacotherapy and other interventions must always be aimed at improving the quality of lived experience.

As a feminist pharmacist, I am interested in utilizing pharmaceuticals to improve people's quality-of-life and recognize that this quality is affected not only by pharmacology but by oppressive social structures. I do not pretend pharmaceuticals can overcome these structures, but I believe they can help us navigate them. I want to reconceive of flibanserin and prasterone, not as prescription solutions, but as providing symptomatic relief from the structures affecting our sexual intentionalities.

Admittedly, flibanserin is a controversial drug within pharmacy practice due to concerns about lack of safety and efficacy and within feminist theory because of its problematic construction of an idealized sexual woman. I am interested in engaging with these criticisms as well as complicating them because, while I find them compelling, I think both pharmacy practice and feminist theory could benefit from a more nuanced

understanding of drug action. I focus on prasterone as well because I am concerned that it mimics the idealization and standardization of the sexual woman promoted by flibanserin, yet has escaped the criticism of pharmacy and feminist scholars. But for me, these critiques do not preclude the use of these drugs for the treatment of sexual distress.

We can consider the dangers of uncritically accepting biomedicine's definitions of pathological feminine sexuality, but this does not mean that biomedical solutions are not useful. Biomedical interventions alter the relationship between an environment and an organism, and in doing so, may ameliorate sexual distress. Changing our environment can be an arduous task unrealizable in a person's life, but changing ourselves is something we may be able to achieve. Social structures are entangled with our biochemistries, and as diffuse power systems, are often challenging to change on a population-scale. Unable to change these structures, pharmaceuticals offer organisms the ability to change their relation to the environment by altering the self. Pharmaceuticals achieve this if they are utilized from a critical feminist perspective that recognizes the complex relationality of bodies and worlds.

In Chapter 1, I review the diagnostic criteria of Sexual Interest/Arousal Disorder, and the pharmaceutical construction of sexuality through the pharmacologic agents: flibanserin and prasterone. Since these clinical constructions include discursive elements, I briefly consider Latour and Woolgar before presenting the feminist critiques of these clinical constructions. The diagnostic criteria of Sexual Interest/Arousal Disorder (SI/AD) is contentious within feminist discourse because it constructs normal and pathological sexuality without regard to normative social structures which impact sexual experience. Prescribing pharmaceutical treatment for a condition constituted by contested

diagnostic criteria risks being ineffective, if not harmful. These rhetorical constructions and feminist analyses undermine the current clinical approaches to treating sexual distress, and associatively, compel us to develop a more robust definition of pathological sexuality before we can explore the role of pharmaceutical treatment in alleviating this distress.

Chapter 2 attempts to move toward a definition of pathological feminine sexuality that incorporates the relationality of the lived body as a body-in-situation — as an organism-in-environment. This chapter explores the concept of the normal and the pathological provided by Georges Canguilhem in order to examine how diverse sexualities challenge the pathologization of feminine sexual function and its requisite pharmaceutical treatments. In understanding pathology as a relation between an organism and their environment, between a body and situation, we are compelled to understand our situation in order to appropriately utilize therapeutic interventions.

Phenomenology approaches the body as a lived body, as a body-in-situation, and can therefore enrich biomedical definitions of pathology and the application of pharmacotherapeutics. Chapter 3 utilizes phenomenology to examine how diverse embodiments operate in relation to oppressive social structures and how this relation informs sexual distress. Specifically, this chapter explores lived sexuality using the works of classical phenomenologists such as Simone de Beauvoir, Sartre, and Merleau-Ponty, as well as recent scholarship on black feminine sexuality, pregnant embodiment, sexuality in motherhood, and aging sexualities in order to illustrate the diversity of feminine situations and complicate naïve biomedical conceptions of sexual pathology and pharmacotherapeutics.

Chapter 4 explores how focusing on lived experiences cannot provide an exhaustive account of sexuality if it does not include our materiality. This chapter seeks to lay the groundwork for a pharmakological phenomenology that recognizes sexual distress as a complex entanglement irreducible to chemistry or consciousness alone and that the ambiguous biochemical changes induced by pharmaceuticals have as much significance for our lived experiences as the social world. In order to make these claims, I review the pharmacokinetic data of flibanserin and prasterone, illustrate how this data can be reapplied to move beyond current, naïve understandings of pharmacological action that compartmentalize effects as primary (therapeutic) and peripheral (adverse) in order to enhance both biomedical and phenomenological accounts of sexual pathology and treatment. Building upon notions of the body as both lived and living, I hope to provide a more holistic account of feminine sexuality that includes our perceptive capacities yet is not limited to them.

Throughout this discussion, I refer to the specific socio-historical situation of women's sexual experiences. I do not presume the terms "female" and "woman" represent a stable biologic category or essence, but instead I use these terms to reflect a particular way of being-in-the-world that Iris Marion Young (1980) refers to as "feminine bodily comportment" (138). Here, the "feminine" describes a situation of socio-historical structures which prescribe appropriate attitudes, behaviors, and interests, which we navigate according to our gender identities. Therefore, the raced, classed, and queered sexual situations outlined below are neither fixed nor stable, but rather represent structures of feminine experience which affect our sexual intentionalities without determining them and condition our agency without denying us action.

Chapter 1:

Clinical Constructions of Normal and

Pathological Feminine Sexuality

Clinical treatment involving pharmacotherapy – therapy using pharmaceutical drugs – is preceded by the diagnosis of a pathological condition. The diagnostic criteria of Sexual Interest/Arousal Disorder (SI/AD) is controversial with feminist scholars, in part, because it constructs normal and pathological sexual bodies without reference to normative social structures. Therapeutic interventions, such as pharmaceuticals, based on problematic diagnostic criteria risk being ineffective, if not harmful. These feminist critiques and analyses are concerning because they undermine the legitimacy of current clinical approaches to relieving sexual distress, and associatively, they challenge the efficacy of treatment with pharmaceuticals such as flibanserin and prasterone.

In this chapter, I review the diagnostic criteria for SI/AD and the feminist critiques of this conception of pathological feminine sexuality and its requisite pharmaceutical treatments. In doing so, I highlight the dangers of uncritically accepting clinical definitions of pathological sexuality and appropriate treatment modalities. This does not eliminate pharmaceuticals as a mode of treatment for sexual distress but recognizes that we need a more comprehensive definition of pathological sexuality, one that is not provided by current clinical understandings, before we can understand their place in therapy.

Diagnostic Constructions

The model of feminine sexual response proposed by Masters and Johnson (1966), and later by Kaplan (1974), described five major transition stages – desire, arousal,

plateau, orgasm, and resolution – which proceed linearly as a function of sexual tension and time. According to this model, desire precedes arousal and should lead to orgasm, normalizing spontaneous sexual desire and orgasm as requisite steps in feminine sexuality.

The DSM-IV criteria adopts this model in their definition of Hypoactive Sexual Desire Disorder (HSDD), diagnosing as pathological women lacking this spontaneous sexual desire. Basson (2000), however, challenges this model and argues that it does not provide an exhaustive account of feminine sexual experience. According to her research, women do not typically experience spontaneous desire and, instead, women's sexual arousal often precedes desire. She proposes an alternative model for understanding the feminine sexual response utilizing an intimacy-based sexual response cycle. Her model proposes that emotional intimacy and positive sexual experiences form a positive feedback loop to increase women's responsivity to sexual stimuli. This responsiveness to sexual stimuli causes arousal which in turn leads to desire, a marked contrast to the model proposed by Masters, Johnson, and Kaplan. Basson's (2000) model has been adopted by the most recent edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) in which HSDD has become Sexual Interest/Arousal Disorder (SIAD).

The American Psychiatric Association's (2013) *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* updated its name for feminine sexual dysfunction from "Hypoactive Sexual Desire Disorder (HSDD)" to "Sexual Interest/Arousal Disorder (SI/AD)" and this name change signified shifting conceptions of what constitutes pathological feminine sexuality. The criterion of receptivity or receptive desire was added to the newly categorized SI/AD in this update in order to normalize women who do not

initiate or desire sex spontaneously (as previously pathologized in HSDD) and, associatively, to diagnose as pathological women who are unreceptive to their partner's advances.

The American Psychiatric Association's (2013) *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* defines the criteria for sexual interest and arousal disorder as follows:

Lack of sexual interest/arousal for a minimum duration of approximately 6 months as manifested by at least three of the following indicators: 1. absent/reduced frequency or intensity of interest in sexual activity, 2. absent/reduced frequency or intensity of sexual/erotic thoughts or fantasies, 3. absent/reduced frequency of initiation of sexual activity and is typically unreceptive to a partner's attempts to initiate, 4. absent/reduced frequency or intensity of sexual excitement/pleasure during sexual activity on all or almost all sexual encounters, 5. absent/reduced sexual interest/arousal in response to any internal or external sexual/erotic cues, and 6. absent/reduced frequency or intensity of genital and/or nongenital sensations during sexual activity on all or almost all sexual encounters

These criteria were established in response to feminist critiques that the previous diagnosis for hypoactive sexual desire disorder (HSDD) was based on hegemonic masculine standards of sexuality. Incorporating such criticism into a new conception of feminine sexual dysfunction, the component of "receptiveness" was added to account for a feminine sexual response cycle that proposes women are sexually aroused after a partner initiates sexual activity. However, these criteria merely reestablish sexual stereotypes – with woman as passive, receptive objects in the erotic situation.

While purported as an improvement to the diagnosis established by HSDD, SI/AD reinforces harmful stereotypes about women's sexuality and constructs pathological feminine sexuality as deficiencies in either cognitive interest in or physiologic response to sexual activity. This diagnosis implies physiologic arousal precedes cognitive interest

in sex, or that cognitive interest in sex precedes physiologic arousal, reinforcing problematic causal links which divorce cognition from the body (Spurgas 2013).

Furthermore, sexual dysfunction's pathophysiology and treatment are predicated upon the mind-body dualism. If a woman experiences physical arousal but fails to cognitively recognize her physiologic response, sexual dysfunction results. Spurgas (2013) explains that the diagnosis of sexual dysfunction arises upon a disconnection between our physiology and psychology – when we are not psychologically receptive to our bodies. The remedy for this manifestation of sexual dysfunction dictates a realignment of this idealized woman's disordered mind with her appropriately aroused body. Flibanserin thus treats this disordered mind to become receptive to the sexual body. If we consider the other proposed response cycle, that women may be cognitively interested in sex but cannot will their bodies to become aroused, our remedy dictates realignment of the disordered body with the appropriately interested mind.

Prasterone treats this pathologic unresponsiveness by increasing vaginal lubrication, leading researchers to conclude that improved vaginal lubrication increases sexual desire without direct action on the brain (Labrie et al. 2016, 2409). Improved vaginal mucosa not only reorders a woman's dysfunctional body, but possibly reorders her brain as well. Interestingly, in recognizing indirect communication between the vagina and brain, this conclusion challenges the localization of prasterone's effects and the causal, unilateral communication between brain and body upon which the researchers rely. This is a point I will return to later in the third section on feminine materiality.

The receptive sexual response model, in forming the basis for the DSM-5 revisions, provides the foundation in which pharmacotherapy is investigated and

prescribed. Flibanserin and prasterone, as pharmacologic agents, are not only operating within this model but are also operating to (re)construct understandings of feminine sexual response which emphasize the centrality of the brain and vagina, precluding consideration of the clitoris in this sexual response. In addition to the physio-chemical materiality of feminine sexuality proposed by their presumed mechanisms of action, the inclusion/exclusion criteria of the clinical trials operate to define normative and non-normative sexualities.

Pharmaceutical Constructions

The clinical trials leading to the Food and Drug Administration (FDA) approvals of flibanserin and prasterone reveal biomedicine's limited conceptualizations of feminine sexuality and embodiment. The inclusion criteria of these trials construct women's sexuality and embodiment as white, cisgender, heterosexual, monogamous, and abled. The pharmacologic mechanisms of these pharmaceutical agents can reduce sexual phenomena to issues of neurochemistry and physiology if biomedical practices continue to ignore institutional structures which impact sexuality and the significations of embodiment in erotic encounters. Similarly, considering only institutional structures when addressing feminine sexuality can fail to appreciate the complex materiality of women's bodies and its import for lived experience.

The demographics of the participants in the three landmark trials leading to the approval of flibanserin reveal the construction of feminine sexuality as heterosexual, monogamous, youthful, cisgender, and white. All participants were in monogamous, heterosexual relationships with a mean duration of 11 years, and the mean age of study participants was 36 years. Eighty-nine percent of participants were white while only 8%

Hawaiian or other Pacific Islander (Flibanserin Package Insert 2015, 11). Despite providing a subgroup analysis for race, given that the overwhelming majority of participants were white, flibanserin represents another example of extrapolating white women's experiences to represent the experiences of all women of color. The consequences of these demographics representing the diverse, heterogeneous social category of "women" include reinforcing normative stereotypes of sexuality and erasing the lived experiences of non-normative sexualities. Apparently, sexual interest and arousal disorder, which is purportedly a serious obstacle to sexual satisfaction, is only worth treating if a woman is white, heterosexual, monogamous, cisgender, and premenopausal.

That post-menopausal women are included in treatment with the approval of prasterone is not a straightforward victory, however. The demographics of the two landmark clinical trials leading to prasterone's approval mimic the exclusionary practices evidenced by flibanserin. Of the 554 participants, 90% were white, 7% were black, 1% Asian, while 0% were American Indian or Alaska Native, Native Hawaiian or other Pacific Islander (Labrie et al. 2016, 249, and Labrie et. al 2015, 2404). Participants' relationship statuses are not disclosed. While this is in contrast with flibanserin's explicit exclusionary practices, prasterone's may simply be operating implicitly.

Flibanserin: Feminine Sexuality as Neurotransmission

Flibanserin was approved by the FDA in August 2015 for hypoactive sexual desire disorder – updated in the most recent revision of the Diagnostic and Statistical Manual for Mental Disorders (DSM-V) as sexual interest/arousal disorder. Originally

investigated as an antidepressant, flibanserin exerts its pharmacologic action as a serotonin and dopamine modulator. Denied by the FDA as a treatment for depression, investigators later sought approval for its purported effect on libido. Denied by the FDA twice more due to lack of safety and efficacy in remedying sexual dysfunction, flibanserin was finally approved in August 2015.

Physicians, bioethicists, and feminist scholars alike have attributed this final approval to the politicization of flibanserin and the use of pseudo-feminist rhetoric in the media campaign, "Even the Score" (Jaspers et al, 2016). The campaign contended that sexism prevented flibanserin's approval rather than the lack of safety and efficacy data. Erroneously claiming men have 26 medications to treat erectile dysfunction while women have none, the "Even the Score" campaign coopted feminist and ethical rhetoric and disseminated misinformation in order to pressure the FDA for approval. This is problematic given that flibanserin provides on average 0.5-1 additional sexually satisfying events per month despite its daily dose, risk of fainting, and interaction with alcohol.

The feminine sexual response cycle, including the etiology of sexual interest/arousal disorder, is highly contested in biomedicine (Spurgas, 2015). The package insert for flibanserin explicitly states that its mechanism in treating hypoactive sexuality is unknown. Yet, despite its controversial approval history and unknown mechanism, later studies conducted to assess feminine sexual dysfunction take imbalanced neurotransmission as a pre-given. Latour & Woolgar (1979) warn of this process whereby data is used to construct problematic causal links that stabilize as facts. These constructions fundamentally appear unconstructed, as products of rhetorical

persuasions in which no one acknowledges they have been persuaded. The circumstances of these constructions, such as the "Even the Score" campaign and the business interests of Sprout Pharmaceuticals vanish from accounts of the drug's approval. Instead, the narrative provided to healthcare professionals and beneficiaries is one in which sexual interest and desire appear related to imbalanced neurotransmitter functioning. As these constructions stabilize, a shift in understanding about sexuality takes place. Sexuality is no longer hypothesized as imbalanced neurotransmission, instead this description merely articulates how it has been operating all along. This inversion, in which statements about 'objects' become the reality of objects themselves (Latour and Woolgar 1979), is evidenced by the clinical trials investigating prasterone, an intravaginal dehydroepiandrosterone (DHEA) suppository indicated to treat dyspareunia in postmenopausal women.

Prasterone: Feminine Sexuality as Vaginal Nerve Fiber Density

Prasterone is an intravaginal suppository that exerts local action to import "beneficial effects on sexual function in women without systemic action on the brain and other extravaginal tissues" (Labrie et al., 2016). Extrapolated from research in rats, prasterone is hypothesized to provide this effect by increasing the surface area of nerve fibers in the vagina. While the benefit provided by prasterone is a statistically significant increase of 2.59 units on the Female Sexual Function Index (FSFI) score, the clinical significance of this result remains contestable. In claiming prasterone improves sexual functioning without extravaginal effects, these trials reduce feminine sexuality to vaginal nerve fiber density, obscuring the lived experiences of women as sexually raced, classed, queered, and disabled. Sexual relationships do not occur in the absence of institutional

influences, and these influences impact women differently based on their sexual identity within intersections of oppressive axes. Reducing these complex relations to atrophied vaginal mucosa effaces the existence and impact of these axes, enabling the biomedical community to address sexual distress without acknowledging the underlying, structural determinants of women's sexual health. A critical feminist redeployment of this data could incorporate the complex relations of bodies, worlds, hormones, affect, sexuality, discourse, society, mucosa, and serotonin without risking the reductionist practices of biomedicine, and I explore this possibility more in my discussion on feminine materiality.

The causal links established in the clinical trials of prasterone exemplify the construction of clinical knowledge. In Labrie et al. (2016) statements like "It thus seems possible that increased favorable outputs from a healthier vaginal mucosa could influence the brain to express increased desire/interest without the need for a direct action of hormones on the brain" (p. 2409) tentatively constructs the connection between vaginal nerve fiber density and neurotransmission. But the conflation of increased vaginal nerve fibers with "healthier vaginal mucosa" is problematic given that vaginal atrophy in postmenopausal women occurs naturally and is not an issue of vaginal health, but an issue of dyspareunia – pain upon intercourse. This statement constructs a healthy vaginal mucosa as appropriately facilitating penetrative sex.

While the package insert for flibanserin concludes that the effect on neurotransmission in the role of sexual desire is unknown, Labrie et al. (2016) conclude "...DHEA (prasterone) can exert beneficial effects on all aspects of sexual function, including desire/interest, a characteristic component of brain function" (p. 2409). This leap in logic, from a postulated artifact – that serotonin and dopamine may play a role in

sexual dysfunction – to a stabilized fact – that sexual desire/interest are fundamental characteristics of brain function – illustrates the process by which medical facts become rhetorically constructed. These constructions are incorporated into our understandings of sexual pathophysiology and render the structural conditions for drug discoveries and disease etiologies undetectable (Latour & Woolgar 1979).

The pharmaceuticalization of feminine sexuality has been criticized for pathologizing normal processes and obscuring sexual experience with the introduction of pharmaceutical intervention. Biomedical approaches to explaining and remedying feminine sexual dysfunction often reinforce the structural gender hierarchy while simultaneously obscuring its existence. Rather than examining the lived experiences of women as a method to understand sexual interest and arousal disorder, the current clinical understanding of flibanserin and prasterone presents pharmaceutical remedies as abstracted from the entanglement of material bodies and worlds.

The complex phenomena of sexual being-in-the-world must include biochemistries as well as the underlying, structural etiologies of decreased desire. These new pharmaceutical agents and the diagnostic criteria for SI/AD, in their traditional biomedical deployment, do not reflect women's lived sexual experience, but instead, operate to simultaneously realize and construct knowledge of feminine sexualities. Lived sexual experience is inextricable from pharmacological action, and so biomedicine also fails to appreciate the complexity and relationality of pharmacology and corporeality despite claiming these as objects of its expertise.

In this Chapter, I reviewed the diagnostic criteria of Sexual Interest/Arousal

Disorder and the pharmaceutical construction of sexuality through the pharmacologic

agents: flibanserin and prasterone. These clinical constructions include discursive elements and are contentious within feminist discourse because it constructs normal and pathological sexuality without regard to normative social structures which impact sexual experience. These rhetorical constructions and feminist analyses undermine the current clinical approaches to treating sexual distress and compel us to develop a more comprehensive definition of pathological sexuality before we can explore the role of pharmaceutical treatment in alleviating this distress. This definition must incorporate the complexity of the lived body as a body-in-situation, or in Georges Canguilhem's terms, as an organism-in-environment.

Chapter 2:

Deconstructing Normal and Pathological

Feminine Sexuality

In *The Normal and the Pathological*, Georges Canguilhem (1991) addresses the complexity of the body and challenges straightforward conceptions of objectively-verifiable normal and pathological states. Understanding diverse phenomena such as feminine sexuality as physio-chemical disturbances alone is to inaccurately apply mechanist conceptions to the living body. He explains, "But in the living organism all functions are interdependent and their rhythms are coordinated: renal behavior can be only theoretically divorced from the behavior of the organism functioning as a whole" (p. 84). Similarly, sexuality can be only theoretically divorced from the behavior of the organism functioning as a whole. And this whole includes systemic structures as well as biochemistries which impact women's sexual intentionalities. In this chapter, I utilize the work of Georges Canguilhem to move toward a definition of pathological feminine

sexuality that incorporates the relationality of the lived body as a body-in-situation – as an organism-in-environment.

Sexuality enacted at the level of the organism is operating in accordance with the environment and socially accepted modes of living. According to Canguilhem (1991), norms cannot be defined as a physiochemical mechanism coupled with an environment. Instead, norms also depend on the work which organisms wish to accomplish. He explains, "In short, in order to define the normal, we must refer to concepts of equilibrium and adaptability, and bear in mind the external environment, and the work which the organism or its parts must accomplish," and that "In dealing with human norms we acknowledge that they are determined as an organism's possibilities for action in a social situation rather than as an organism's functions envisaged as a mechanism coupled with the physical environment" (269). Sexuality is inextricable from our social situation and this situation includes a multifarious network of oppressive powers. In order to define normal or pathological sexuality, we need to take into account an organism's functions as well as their physical environment and their social situation.

Canguilhem (1991) helps us understand that there is no fact which is normal or pathological in itself. He explains that in order to consider a bodily modality normal or pathological, we first need to consider the environment in which the organism is operating along with the totality of the organism's living experience. He provides the example of drosophila and butterflies to illustrate this point. Drosophila with and without wings are normative in different environments. Drosophila without wings thrive in a seashore environment where flying and winged-ness would render them vulnerable as prey. Drosophila without wings are therefore more likely to propagate their species in a

seashore environment. If these drosophila became winged or left the seashore for an alternative environment, their reproduction and normative capacity could become compromised. Similarly, gray butterflies, which can camouflage with birch trees, are normative in a wooded environment whereas black butterflies, unable to camouflage successfully against the pale bark, are less likely to propagate; they have a pathological relation to the wooded environment. If this environment changes, however, and black butterflies enter the industrial landscape, they may camouflage more successfully. Their living becomes normal.

Simply put, it is only in this relationship that we can conceive of existence as normal or pathological. Canguilhem explains, "A living being is normal in any given environment insofar as it is the morphological and functional solution found by life as a response to the demands of the environment" (144). The wingless drosophila is the morphological and functional solution to the demands of a seashore environment.

Canguilhem explains, "An environment is normal because a living being lives out its life better there, maintains its own norm better there. An environment can be called normal with reference to the living species using it to its advantage. It is normal only in terms of a morphological and functional norm" (142). The industrial landscape, as the morphological and functional solution to the demands of the black butterfly, is normal insofar as it better enables black butterflies to live out their lives and maintain their own norm.

We can begin to conceptualize how a heteronormative and white supremacist environment which values feminine sexual responsiveness to hegemonic masculinity can render living beings unable to embody this norm as pathological. Similarly, we can define as normal those living beings who are the morphological and functional solution to the demands of this environment – namely, white, cisgender women receptive to heterosexual sex. But definitions of normality are tenuous and unstable, changing as society changes. Black, transgender, and queer women struggling in this heteronormative and white supremacist environment can be said to have a pathological relationship to this environment since it limits their sexual capacity and causes social distress. This pathology, though, is also tenuous and unstable and can change as our society changes.

While the *DSM-5* outlines pathological feminine sexuality as a lack of appropriate responsiveness, thoughts, and genital sensations, Canguilhem complicates this picture by placing the lived experience of the patient in the context of their environment, including social norms. Sexual responsiveness, erotic thoughts, and genital sensations cannot be divorced from their environment nor the living being as a whole.

Phenomenologically, we can understand this context as inextricable from the living being as being-in-the-world. And this being-in-the-world becomes pathologic when feminine sexuality challenges the structures of our normal world instead of morphologically and functionally adapting to or restructuring it. This challenge comes in the diversity of embodiments and sexual pleasures which persist despite their non-normativity.

Simply put, non-normal being-in-the-(normal)-world is a pathologic condition.

This pathology can be overcome by changing the organism's relationship to their environment – the transformation of their world or an adaptive functional and morphological change of the self. But the absence of such changes coupled with subjective distress of the concrete, living patient, enable us to imagine how Canguilhem

may define pathological feminine sexuality as a maladapted response to the demands of the (heteronormative, white, cisgender, able-bodied) environment which values certain qualities and quantities of erotic thoughts and behaviors.

Average as Normal Feminine Sexuality

As we have discussed, pathology is produced by the tension between an organism, its environment, and socially acceptable modes of being-in-the-world. Otherwise, pathology cannot be defined. This relationship is qualitative – based on the quality of sexual engagement, for example – rather than quantitative – based on measurable levels of neurotransmission or vaginal nerve fiber density – and so Canguilhem also explains that normality is a value judgement rather than an objective assessment of reality. Applying Canguilhem's work to sexuality, I argue we should base understandings of sexual pathology on perceived qualitative changes in sexual experience rather than objectively measurable physiologic parameters. Pathology is not found in bodies but in the distressed relation between bodies and worlds.

Biomedicine operates in contrast to this understanding of pathology, promoting the notion of a quantifiable reality through reliance on statistical methods of calculation in differentiating between normal and pathological states. Furthermore, biomedicine utilizes statistical averages to describe socially normative ideals. Take the example of average life span which is determined by social values of life-prolonging hygienic practices or life-shortening practices of neglect. The average length of our life span is not a biological norm, then, but a socially influenced phenomena which becomes normal (Canguilhem 1991).

Statistical averages, conceived of as biomedical ideals, encourage behavioral and bodily modification to fit this ideal. For example, if the 2020 U.S. census reveals that heterosexuality is the average sexual orientation, it doesn't stand to reason that identifying differently is deviant. However, in conflating averages with ideals, biomedicine formally pathologized homosexuality until 1973 and continues to do so informally today. In promoting heterosexuality as socially normal, heterosexual beings will flourish and propagate – not through biological reproduction – but through social reproduction, the normalizing pressures of sexual orientation, and what Adrienne Rich calls compulsory heterosexuality (Rich 1980).

The average is reflective of the norm and does not warrant idealism; it is descriptive of norms rather than prescriptive. Instead of conceptualizing the average as ideal, we can reconceive of averages as representing norms that are in an unstable, dynamic equilibrium composed of adaptations temporarily enabling its success. This accounts for the explanation of normal sexualities as a relation between organisms and the environment. Cis-heterosexual organisms are in a dynamic state of equilibrium with their cis-heteronormative-promoting environment. Queer sexualities, then, may have a pathologic relation to this environment but, in another environment which offers altered potentialities for dynamic equilibrium, queer sexuality could operate as the norm.

The pharmaceuticalization of feminine sexuality typically presupposes that nonnormal sexual expression is inherently pathological rather than a result of a disequilibrium of the organism-environment relationship. This understanding of sexual pathology complicates the benefit provided by typical biomedical applications of pharmaceuticals. As Marshall (2009) argues the standardization of feminine sexual function as pharmacologic mechanisms pathologizes the diversity of sexual experiences and bodies. She explains, "As quantitative research has shown, there is no universal experience of an erection, functional or otherwise, nor is there any standard experience of arousal in women" (142). Sexual Interest/Arousal Disorder can operate to pathologize non-normal variations of sexual expression. Dubious social norms, as normalizing structures, can be internalized and embodied by women and affect their conceptions of the normality of their sexual experiences.

While the normalizing capacity of pharmaceuticals is concerning insofar as it may contribute to the construction of diverse sexualities as pathological, this same capacity can transform an organism-in-distress to an organism-in-dynamic-equilibrium. We can contest that sexuality has no quantifiable reality or ideal and that diverse sexualities are not inherently pathological, but we need to recognize that those with non-normal sexualities may experience personal distress resulting from a pathological relationship with an environment and society hostile to their sexuality. Simply put, pathological feminine sexuality can be defined as a distressed relationship between our body and our situation.

Furthermore, this pathology is not quantifiably measureable. There is no quantitative threshold for when sexuality becomes hyposexuality, nor when neurotransmission becomes unbalanced serotonin, nor when vaginal nerve fibers become pathologically sparse/diffuse. As Canguilhem (1991) explains, "There is no quantitative threshold which can be detected by objective methods of measurement. But there is nonetheless qualitative distinction and opposition in terms of the different variable cause" (p. 195). Sexual disengagement, sadness, and dyspareunia are qualitatively distinct

experiences. So while we cannot rely on biomedicine's quantitative arguments to establish a normality and pathology of SI/AD, we must consider women's qualitative differences in sexual experience and consider how treatment might manifest for a legitimized distress of sexual interest/arousal. Utilizing the work of Canguilhem, we can see how a philosophically tenable definition of pathological feminine sexuality involves a qualitative change in the relationship between an organism and her environment that results in perceivable personal distress. As we have discussed, these qualitative experiences are affected by our environment and so a consideration of feminine milieu is essential in understanding lived sexual pathology.

This chapter attempted to redefine pathology as the relationality of the lived body as a body-in-situation – as an organism-in-environment. We explored the concept of the normal and the pathological provided by Georges Canguilhem in order to examine how diverse sexualities challenge biomedical conceptions of pathology and treatment. In understanding pathology as a relation between an organism and their environment, between a body and situation, we are compelled to understand our situation in order to appropriately utilize therapeutic interventions.

In the next chapter, I will explore the feminine situation through the phenomenology of sexuality informed by Sartre, Merleau-Ponty, and Beauvoir. I will examine how diverse embodiments complicate this phenomenology of sexuality, and interrogate Sexual Interest/Arousal Disorder using a phenomenological analysis. I will conclude the chapter by imagining the remedy provided by phenomenology for the concrete, lived experiences of women with distressed sexual being-in-the-world, as well as its limitations.

Chapter 3: Toward a Phenomenology of Feminine Sexuality

If pathological feminine sexuality is defined as a distressed relationship between our body and our situation, then it becomes critical for us to understand our situation in order to appropriately utilize therapeutic interventions. Phenomenology approaches the body as a lived body, as a body-in-situation, and can therefore enrich biomedical definitions of pathology and the application of pharmacotherapeutics. This chapter explores lived sexuality using the works of classical phenomenologists as well as recent scholarship on black feminine sexuality, pregnant embodiment, sexuality in motherhood, and older women's sexuality in order to illustrate the diversity of feminine situations and complicate naïve biomedical conceptions of sexual pathology and pharmacotherapeutics.

Phenomenology seeks a primordial understanding of the world by interrogating our intentionalities and presuppositions. Phenomenology challenges us to recognize that science, including clinical and health science, does not present things in themselves, but offers us an interpretation of things in themselves. According to Husserl (1965), natural science is not rigorous enough in its study of phenomena because it fails to challenge the assumptions upon which it is founded – that the world can be reducible to objects and components of physical systems. He seeks to challenge these assumptions of science – that the world is external to us, with rigid natural laws – because phenomena are not exhausted by empirical understandings of the world. Thus, the aim of phenomenology as a rigorous science, is to rid our perceptions of presuppositions in order to reveal the underlying structures of lived experience. Applied to sexual pathology, I argue conceptions of sexuality as only neurotransmission and vaginal nerve fibers do not

address the lived body, construct problematic causal links, and cannot provide an exhaustive account of female sexuality. Sexual being-in-the-world is not divisible into anatomic aggregates, sexual and non-sexual organs, hormones in the brain, or fibers in the vagina. Rather, it is irreducible, intentional, and a complex relation with others in the world.

Husserl built the foundation upon which Sartre, Merleau-Ponty and Beauvoir developed their own existential-phenomenological approaches, but did not himself articulate a phenomenology of sexuality. However, the phenomenology of Sartre, Merleau-Ponty and Beauvoir address the body as the fundamental locus of being-in-theworld. Together, their works are particularly helpful in examining the ways in which female sexuality has been disciplined by various institutions, including the institution of biomedicine.

The Sexual Body

We do not experience our sexual bodies as a series of dopaminergic and serotonergic synapses, nor as variations in vaginal nerve fibers. These conceptions of the sexual body have import for lived sexuality but escape our perceptive capacities. Relying singularly on biomedical understandings of women's embodied sexual being-in-the-world offers little insight into the complexities of the sexual situation.

Pharmacotherapeutic agents conceived as targeting specific synapses and mucosa fail to exhaust the possibilities of lived sexuality and its complex materiality. Sartre (1994) explains that clinical understandings of ourselves are limited because we simply do not experience ourselves as an aggregate of parts or physiologic systems. Difficulties arise when we try to understand our bodies as endocrine glands, digestive enzymes, and

biochemical elements. He explains that this is because "In fact, the body I have just described is not my body such as it is *for me*. I have never seen and shall never see my brain nor my endocrine glands" (303). A sexual body understood as an orchestration of endocrine glands, vaginal mucosa, and neurotransmission is an understanding divorced from lived experience. While our bodies become objects in the clinical encounter – touched and prodded by a healthcare provider – this is an altogether *other* being of the body. We experience the world as embodied consciousness, inextricable from our materiality and irreducible to the mind-body dualism.

We cannot fathom a sexual existence without an account of the body. Sexuality is not enacted via a detached, isolated chemical reaction of dopamine and serotonin, it is enacted through our entire bodies as a complex, entangled network of discourses, biochemistries, hormones, and societies. According to Merleau-Ponty (1962), "In this way, the body expresses total existence, not because it is an external accompaniment to that existence, but because existence realizes itself in the body" (166). We live our bodies as co-extensive with the world. Merleau-Ponty (1962) disrupts the logic of the mind-body dualism when he explains, "Erotic perception is not a *cogitation* which aims at a *cogitatum*; through one body it aims at another body, and takes place in the world, not in a consciousness" (157). Sexuality is necessarily embodied and this embodiment has varying signification for beings-in-the-world.

Sexual being-in-the-world is intentional, and these intentionalities influence and are influenced by the world in which they take place. Furthermore, these intentionalities are connected to the entirety of being – thus, "sexual" parts and actions cannot be distinguished from "nonsexual" parts and actions. According to Merleau-Ponty (1962),

"Thus sexuality is not an autonomous cycle. It has internal links with the whole active and cognitive being, these three sectors of behavior displaying but a single typical structure, and standing in a relationship to each other of reciprocal expression" (157). Isolating sexual distress from the generality of being-in-the-world is to promote a limited understanding of sexual interest and arousal since these are necessarily connected to the whole of affective and cognitive being. Instead, a phenomenology of sexuality compels us to consider the entirety of women's being-in-the-world and how this affects sexual intentionalities.

While Sartre and Merleau-Ponty posit the fundamentality of the body to being-in-the-world, they fail to conceive of this body as *gendered*. Beauvoir's phenomenology illustrates this misconception and explicates how gender impacts embodiment, limits the world accessible to white, cisgender women, and modifies her intentionalities. In *Toward a Phenomenology of Sexual Difference*, Heinämaa (2003) wonders:

The supposedly neutral descriptions that phenomenologists have offered of the experience of 'one's own' body are in fact restricted by the preconception that women's bodies, as experienced, are fundamentally similar to men's bodies and only occasionally – monthly, weekly, or perhaps daily – deviate from the scheme. But perhaps this is not the case; perhaps there is a whole region of experience that we, as philosophers, have failed to think and imagine? (75)

Beauvoir offers a critique of this presupposed neutrality and explains how their corporealities differ. How a body is seen by others affects their being-in-the-world, the signification of embodiment for-itself and for-others, and places limits on sexual intentionalities.

A woman's corporeality is acted upon by structures that other and alienate her from her body. Beauvoir (2011) explains, "But in most cases, the woman knows herself only as other: her for-others merges with her very being; love is not for her an

intermediary between self and self, because she does not find herself in subjective existence" (707). This embodied for-others affects her sexual engagement. In the absence of a subjective existence, a body is rendered object in the erotic situation. This objectification has profound consequences for our lived experiences and styles of existing our bodies. The institutions which discipline the body fundamentally affect our relations to eroticism and the world, and biomedicine is one of these institutions.

Biomedicine exemplifies the institutional disciplining of bodies in its prescriptions of appropriate embodiment through inclusion criteria in clinical trials and behavior modification in clinical guidelines and practice. These institutions operate differently for people with varying intersections of identity and construct their realities in ways that influence and restrict their engagement with their body and their world. While Beauvoir expertly addresses the specificity of feminine relations, the diversity of embodiment – as raced, classed, dis/abled – compounds the oppressions operative in the gendered, erotic situation. Additionally, this situation is not constituted by biophysical interactions alone, as biomedicine proposes, but by lived relations between corporeal existents.

Feminine Milieu and the Erotic Situation

The political, social, cultural, religious, and biomedical institutions which structure our relations with ourselves and the world inform our sexual intentionalities. The intersections of these complex phenomena converge in the erotic situation. For Sartre, projects and actions cannot be defined in the absence of situation, in the absence of the world. This is why an existent is always a being-in-the-world, sometimes for-itself and sometimes for-others. Sartre (1994) explains, "As such the body is not distinct from the situation of the for-itself since the for-itself, to exist and to be situated are one in the

same; on the other hand the body is identified with the whole word inasmuch as the world is the total situation of the for-itself and the measure of its existence," (309). Thus, embodied existence is necessarily situated in the sexual world and the entirety of this relation to the world is *the erotic situation*.

Sexuality is a diverse expression of embodied existence and is inextricable from our other relational expressions. Heinämaa (2003) explains, "Her erotic life realizes the style also manifested in her other relations, practical, theoretical, and aesthetic. The ways of caressing are intertwined with the ways of walking and resting, holding and throwing, greeting, speaking, and thinking" (67). Our style expresses our being-in-the-world and necessarily informs our sexual being-in-the-world. It follows, therefore, that our embodied sexual experiences are reflective of and reflected in our other lived actions and behaviors. Furthermore, these embodied sexual experiences are operating within systems of oppression which discipline our sexual intentionalities and impact the erotic situation. Biomedical explanations of sexuality cannot properly account for these phenomena because "The mistake of reductionist interpretations of psychoanalysis is that they assume that the interfusion [osmosis] can be understood and described in causal terms. Instead of causing other forms of behavior, sexual activity expresses them and, conversely, is expressed in them... (Heinämaa 2003, 67). Compartmentalizing distressed sexual being-in-the-world thus becomes problematic with a phenomenological understanding of sexuality. Heinämaa (2003) concludes, "So, all areas of behavior are connected with sexuality. But the connection is not external. It is internal in the sense that the connected terms cannot be understood or even identified without reference to each other. What is sexual in a person's life or in the life of a community can be seen and

understood only by studying the whole of behavior (67). This begs us to consider how our embodied sexual relations are impacted by other affective and cognitive behaviors – especially as these are influenced by racial, non-binary, pregnant, and aging embodiments, all which signify and are signified differently in our world.

Beauvoir offers us a means to articulate a phenomenology which interrogates gendered styles of engaging with the world and compels us to move beyond an assumed neutrality of the body or masculine standards of the body. Additionally, recognizing the specificity of embodiments as distinct from masculine embodiment is not reflected in the erotic situation alone. Rather, sexual being-in-the-world is inextricable from all of our engagements with the world and can only be understood in the context of these other behaviors and relations.

The erotic situation is, therefore, a gendered one; but it is also a situation impacted by intersecting embodiments as raced, queered, aged, and dis/abled. This situation is also influenced by changes in life roles and behaviors such as motherhood. Articulating a phenomenology of sexuality requires us to interrogate how these embodiments affect our sexual being-in-the-world.

Diverse Embodiments in the Erotic Situation

The oppressive structures of racism, heterosexism, cissexism, ableism and ageism, among others, challenge neutral conceptions of embodiment. Moreover, they complicate how gendered oppression operates in the erotic situation. These structures are significant because the stresses of oppression become embodied. As Freeman (2015) explains, "...they become a part of one's daily existence in ways that manifest themselves through one's bodily existence and comportment in the world. That is, the

stresses become a part of *how* one exists in the world" (31). Freeman focuses her analysis on racial embodiment and provides a framework for us to imagine the embodied stresses of other intersecting axes of oppression. The lived experiences of women are, after all, diverse. The erotic situation is enveloped by these oppressive structures, and an examination of sexual distress is incomplete without a nuanced understanding of how marginalized embodiments impact women's sexuality. Freeman (2015) explains:

Living as a member of a racially oppressed group in a normatively white world cuts to the ontological core of what it means to exist since the experiences that constitute what it is like to exist as racially oppressed are not one-off instances but rather are manifest, penetrating, enduring, and as we have seen, they become embodied, taken up into, and constitute who one is. (36)

The experience of living as a member of an oppressed group in a normatively white, ablebodied, male, and heterosexual world are penetrating, enduring, and become embodied. Black feminine sexuality, as one of many examples of racial embodiment, has been signified as deviant, uncontrollable and hypersexual. This signification has been deployed by political, social, cultural, and medical institutions to the extent that "...black women's bodies are always already colonized. In addition, this always already colonized black female body has so much sexual potential it has none at all" (Hammonds 1999, 93). Black feminine sexuality is overdetermined by the normative world in which black women engage. This prescriptive, racialized embodiment affects sexual potential. Hammonds (1999) explains, "...by the end of the nineteenth century European experts in anthropology, public health, medicine, biology, and in psychology had concluded, with ever-increasing 'scientific' evidence, that the black female embodied the notion of uncontrolled sexuality" (95). Furthermore, this deviant sexuality was apparently validated by the biological sciences, compelling us to interrogate the conclusions of modern

medical experts regarding sexual interest and arousal and treatment with flibanserin and prasterone.

While Beauvoir offers scrutiny into the presupposition that cisgender masculine and feminine corporeality offer similar relations to the world, she fails to analyze how feminine embodiment and being-in-the-world operates at the intersections of race and other oppressive axes. This is significant because white sexual embodiment is signified differently – "White women were characterized as pure, passionless, and de-sexed, while black women were the epitome of immorality, pathology, impurity, and sex itself" (Hammonds 1999, 96). These conceptions of (middle-upper class, heterosexual) undersexed white women are consistent with their pathologization as sexually hypoactive. But what might pharmaceuticals offer the supposedly hypersexual black body?

Dangerously, pharmaceuticals may encourage a counter-pathologization, with culture emphasizing black women are too sexual and biomedicine proposing they are not sexual enough. Hammonds (1999) explains that black women have historically responded to these discourses on race and sex with silence, and that "...the most enduring and problematic aspect of this 'politics of silence' is that in choosing silence, black women have also lost the ability to articulate any conception of their sexuality (97). In the absence of such an articulation, the pathologization of black women's sexuality through the pharmacologic mechanisms of flibanserin and prasterone is all the more perilous and, quite literally, prescriptive. The results of a 'politics of silence' coupled with a pharmaceuticalization of Otherness have material consequences for the lived experiences of black feminine existence. Universalizing sexuality as an issue of neurotransmission

and vaginal nerve fiber density alone erases the historical, cultural, and clinical oppression of black sexuality and invisibilizes lived sexual experiences.

In moving towards a 'politics of articulation,' Morgan (2015) traces how black feminist scholarship began to engage with counter narratives of black women's sexuality. The alternatives offered by black feminists, however, were overwhelmingly heteronormative, "dedicating little attention to issues of pleasure, sexual agency, or queerness" (Morgan 2015, 37). Morgan's concerns are compounded by the biomedical legitimation of black women's sexuality as heterosexual and monogamous. Moreover, she argues "...the hegemonic narrative of black female sexuality which dominates black feminist thought in the United States not only erases queer and transgender subjects but also ignores black multi-ethnicity and the diverse cultural influences currently operating in the world US women occupy (39). Black feminine sexuality as able-bodied is also presupposed in these conceptions, rendering diverse identities erotically invisible not only in black feminist critiques, but in universalized biomedical approaches to sexual arousal and interest.

The structure of racial oppression in the absence of an inclusive articulation of sexuality is particularly problematic because "People who exist as racially oppressed have never experienced the world in ways in which their bodies are not made salient to them as other, deviant, fearful, or guilty. They have never experienced the world such that their future possibilities are not foreclosed on account of their bodily existence" (Freeman 2015, 37). Freeman's work echoes Hammond's claim that black feminine corporeality is always already colonized – foreclosed as sexually deviant, other, and hypersexual. This is not to negate the possibility of agency in black feminine existence

but to recognize the structures which condition this agency. Future possibilities of sexual being-in-the-world are conditioned by this pathological relationship of the gendered and raced intersections of black feminine bodily existence with this sexist and racist environment.

That feminine sexual experiences are projected as heteronormative, measured by penile-vaginal penetration or the lack thereof, disciplines sexual behaviors as phallocentric. While the erotic situation is constituted by many behaviors, "...researchers have found that the term having sex is phallocentric, in that most people do not include genital touching or oral-genital activity, let alone nongenital sexual activities, in their definition,"(Cohen and Byers 2014, 894). This construction of sex as penile penetration fails to recognize the multitude of ways women engage sexually in the world. As previously mentioned, phenomenology problematizes the distinction between sexual and non-sexual behaviors and organs since they are interconnected, irreducible, and coextensive with the world. Thus, this genital-centric conception of sexuality is also limited, not only in its dismissal of queer sexualities, but in its disregard for nongenital behaviors as sexual.

This distinction between sexual and non-sexual behaviors is also problematized by recent research on new mothers' perceptions of their sexuality. Ultimately, women's entirety of being enters the erotic situation, and this understanding compels us to examine women's other behaviors – such as caring, nurturing, and protecting – in order to adequately address lived sexual experience. Women's behaviors are influenced by their life roles, and motherhood offers a formative life role which directly affects embodied existence. In pregnancy, body parts that are culturally sexualized, become

instrumentalized for the Other. Breasts signified as erotic become breasts that feed, for example. Returning to an erotic embodiment from functional significations of the body is a difficult process for some new mothers (Montemurro and Siefken 2012, 383).

Additionally, conceptions of their body, marked and weighted by the process of giving birth, alters mothers' perceptions of their bodily comportment and affects their intentionalities as sexual beings-in-the-world.

Motherhood is also corporeally rigged by cultural tropes of asexuality. This corporeal rigging is essential in understanding women's sexuality because "Acknowledging that the dominant image in popular culture or based on experience is the asexual matron, emphasizes its power and influence on women's perceptions of how they should be" (Montemurro and Siefken, 2012, 383). This influences how women think they should be-in-the-world.

Mothers are disciplined as caring, nurturing, and protective. The motherhood role facilitates women's existential shift from for-herself to for-others. This nuance is not lost on Beauvoir (2011), and she has much to say about the effacement of women's subjecthood once she assumes the role of mother. She explains that in mothering, "As in marriage or love, she puts the care of justifying her life in the hands of another, whereas the only authentic behavior is to assume it freely herself," and that "Woman's inferiority, as we have seen, originally came from the fact that she was restricted to repeating life, while man invented reasons for living, in his eyes more essential than pure facticity of existence; confining woman to motherhood is the perpetuation of this situation. (568) For Beauvoir, motherhood perpetuates the other-orientation of a woman, and this prevents her from justifying her existence for-herself. Montemurro and Siefken's

research on new mothers' perceptions of navigating the complexities of motherhood and sexuality reinforce Beauvoir's concerns. The image of mothers as caring, nurturing, and protective also sets expectations of appropriate motherhood embodiment. They explain:

Successfully reproducing this image requires focus on caring for others before (or instead of) oneself. This can lead to frustration, stress, and fatigue, particularly among first time mothers, as they learn that their orientation must shift from self to other. These feelings may manifest in disinterest in sexual relations or a dissociation with one's own sexuality, as one assimilates to the role of mother. (Montemurro and Siefken 2012, 368)

They interviewed 50 women of whom 28 identified as middle class, 11 as working class, 10 as upper middle class and one as upper class. Sixty-two percent of the women were white, 16% were Asian, 12% were African American. Two women were Hispanic, two women were Middle Eastern, and one woman was bi-racial. In this study, single mothers reported worse time pressures than others as the primary caregivers of their children. This resulted in a compartmentalization and a shutting off of their sexual identities. The embodiment of motherhood, therefore, offers us an understanding of how women's other behaviors can operate to affect sexual being-in-the-world. As the researchers concluded, "Even the mothers who believed that there should be no difference in how a woman expresses her sexuality, mother or not, acknowledged change in their sexual expression" (Montemurro and Siefken, 385). Changes in sexual expression influence and are influenced by women's entirety of being-in-the-world.

Women's sexuality is bound by considerations of reproduction. This narrows the already restricted conversations about lived sexual experience to young women in their reproductive years. The erotic situation is unavailable to the older feminine body in part because it challenges the sex-for-reproduction trope. Montemurro and Siefken (2014) explain, "As women age and this manifest function for sexual intercourse diminishes,

expression of sexual desire or the pursuit of sex for pleasure becomes more apparent. But in American society, such public sexual expression from older women is deviant," (40). This deviance is complicated by negative associations of aged embodiment as the antithesis of beauty and sexuality. These associations infiltrate the erotic situation and act as oppressive structures to affect sexual intentionalities. Montemurro and Siefken explain (2014), "Thus, older women's bodies are not solely their own, viewed and reflected on independently or individually... Women who recognize their wrinkled faces or sagging breasts, for example, as evidence of their undesirability do so because they are influenced by social constructions of desirability" (37). To apply Freeman's articulation of embodied oppressions to aged embodiment, older women experience their sexual world through conditions that signify their bodies as other, deviant, sexually undesirable, or asexual. Their sexual possibilities are foreclosed on account of their bodily existence, and this embodiment is simultaneously raced, gendered, queered, and dis/abled.

Disorders of sexual interest and arousal that may result from these oppressed intentionalities now have pharmacotherapeutic agents purported to improve sexual functioning. Flibanserin, however, is only indicated for premenopausal women, reifying youthfulness as a prerequisite for healthy sexual engagement. Prasterone, on the other hand, is indicated for post-menopausal women with dyspareunia, but its mechanism fails to address that "Women's experiences with sexuality and aging are far from uniform. The social and physical realities of aging affect women in different ways, depending on factors like generation, relationship status, sexual orientation, cultural norms, health, or partner's health" (Montemurro and Siefken, 2014, 36). Universalizing women's

sexuality as inadequate vaginal nerve fibers is problematic given this understanding of their diverse experiences of sexuality and embodiment.

Biomedical understandings of the body perpetuate this standardized and idealized notion of the feminine sexual body. As the scholarship on black feminine sexuality, pregnant embodiment, sexuality in motherhood, and post-menopausal sexuality illustrate, feminine sexual corporeality is diverse and is not reducible to biochemistry alone.

Oppressive structures condition this corporeality and treatment of distress resulting from these structures must incorporate an understanding of these social conditions.

Toward a Phenomenology of SI/AD

As discussed in Chapter 1, the diagnostic criteria for Sexual Interest/Arousal Disorder were established in response to feminist critiques that the previous diagnosis for hypoactive sexual desire disorder (HSDD) was based on hegemonic masculine standards of sexuality. In fact, these critiques were lodged by Beauvoir before hypoactive sexual desire disorder entered the DSM-IV. She warned, "We do not limit ourselves to regarding sexuality as something given. The inadequacy of this attitude is manifested by the poverty of the resulting description of the feminine libido. As I have already said, the psychoanalysts have never studied it directly, but only by taking the male libido as their point of departure" (81). And, as we have seen with the updated criteria, the opposite of male libido – receptive desire rather than spontaneous desire – is the new point of departure for biomedical conceptions of the feminine libido. Merleau-Ponty and Beauvoir offer an alternative to this biomedical presupposition and help move us toward a phenomenology of feminine sexuality.

Merleau-Ponty (1962) offers us a way to articulate a phenomenological diagnosis of sexual dysfunction. He explains sexual disorder occurs when "Perception has lost its

erotic structure, both spatially and temporally. What has disappeared from the patient is his power of projecting before himself a sexual world, of putting himself in an erotic situation, or, once such a situation is stumbled upon, of maintaining it or following it through to complete satisfaction" (155). Erotic structures, as we have seen, are influenced by institutions. The ways in which these structures become embodied and then projected in the sexual world are inextricable from our lived experiences of sexual distress.

Sexuality is an expression of affective intentionality and is connected with the behaviors and roles of the entire body. Our bodies may retreat from the sexual world, "But precisely because my body can shut itself off from the world, it is also what opens me out upon the world and places me in situation there. The momentum of existence towards others, towards the future, towards the world can be restored as a river unfreezes" (Merleau-Ponty 1962, 165). And this restoration is ultimately achieved not through a consciousness divorced from the body, but through the embodied psyche, when it opens itself up to co-extend with the world once more.

In order to diagnose SI/AD according to phenomenology, clinicians must interrogate other aspects of women's lived experiences. We need to consider how oppressive structures operate to affect patients' sexual being-in-the-world. Measuring women's responsiveness to sexual behaviors alone will not suffice. Thus, the criteria proposed by the *DSM-V*, which limits this distress to sexual activity, cannot exhaustively explain sexual dysfunction. According to Merleau-Ponty (1962), "There is an interfusion between sexuality and existence, which means that existence permeates sexuality and *vice versa*, so that it is impossible to determine, in a given decision or action, the proportion of sexual to other motivations, impossible to label a decision or act 'sexual' or

'nonsexual'" (169). Clinicians dedicated to improving women's sexual functioning should consider the entirety of their patients' lived experiences, and this includes interrogating how repressive structures take shape in the clinical encounter.

A phenomenology of sexual interest and arousal disorder compels us to abandon distinctions between cognition and physiology in order to recognize the fundamentality of lived experience. Beauvoir (1953) emphasizes, "Woman is not defined by the functions of the womb or the ovaries. Chromosomes, hormones, and reproductive organs are biological and biochemical abstractions made for the purposes of explanation and prediction; they are not elements of her concrete living body" (66-67). While I disagree with Beauvoir that our biochemical materiality is not an element of our living bodies since the functioning of chromosomes, hormones, and reproductive organs enables a particular way of being-in-the-world, I think she is correct to point out that we are not defined by this materiality and that this materiality is neither predictable nor divisible into parts. Diagnosis and treatment founded only upon anatomic and physiologic understandings of the body often fail to address the body as lived. Beauvoir (1953) further explains this limitation of biomedicine:

Woman is female, to the extent that she experiences herself as such. There are biologically essential facts that do not belong to her situation as she lives it: thus the structures of the egg is not reflected in it, but on the contrary an organ of no great biological importance, the clitoris, plays in it a part of the first rank. It is not nature that defines woman; it is she who defines herself by taking on nature in her affectivity (78).

The biomedical constructions of sexual distress as abnormal neurotransmission and inadequate vaginal nerve fibers does not belong to woman's situation as she lives it, but it impacts her affectivity insofar as she defines herself in relation to this materiality. We define our sexual being-in-the-world in relation to our materiality and so the clitoris may

belong to a feminine existent's situation as she lives it or not, and our egg production, or lack thereof, may belong to another feminine existent's lived experience, or not. I agree with Beauvoir that we define ourselves by taking on nature in our affectivity and emphasize that, for this very reason, nature has relevance for our situation as we live it.

I do not wish to eliminate flibanserin and prasterone as options for women suffering from hypoactive desire or dyspareunia but to reconceive of them, not as prescription solutions, but as symptomatic relief from structural oppressions affecting our sexual intentionalities. While neurotransmission and vaginal mucosa do not define our sexual situation, alterations in our biochemical materiality may aid in changing our relations to our environment.

Phenomenology approaches the body as a lived body, as a body-in-situation, and this chapter utilized phenomenology to examine how diverse embodiments operate in relation to our environment and how this relation informs sexual distress. This chapter explored lived sexuality using the works of Beauvoir, Sartre, and Merleau-Ponty, as well as recent scholarship on feminine sexuality in order to illustrate the diversity of feminine milieu and complicate naïve biomedical conceptions of sexual pathology and treatment.

Phenomenological accounts of the lived body do not include considerations of our bodies as living. In this next chapter, I want to explore how our materiality is inextricable from our bodies as we live them and how alterations to our material bodies may change the pathologic relation between our bodies and our milieu. This analysis does not supersede phenomenological accounts, but enriches them in incorporating an element of our facticity phenomenologists too often dismiss as only reductionist or abstract – our materiality.

Chapter 4:

From Lived to Living Feminine Sexuality

We can recognize that our sexual experiences operate as an irreducible, intentional, complex relation with others in our sexual world without dismissing the relevance of biochemistry to this complex relation. The lived body is always a body-insituation and this situation includes our materiality just as much as our relations to the world. Admittedly, pharmaceutical approaches to women's sexuality have typically been reductionist, treating the body as a sum of aggregate sexual and non-sexual parts, but a feminist deployment of pharmaceutical data need not proceed this way. This chapter seeks to lay the groundwork for a pharmakological phenomenology that recognizes the ambiguous biochemical changes induced by pharmaceuticals as having as much import for our lived experiences as the external world and as a complex entanglement irreducible to chemistry or consciousness alone. In order to make these claims, I review the pharmacokinetic data of flibanserin and prasterone, illustrate how this data can be reapplied to move beyond current, naïve understandings of pharmacological action and enhance both biomedical and phenomenological accounts of sexual pathology and treatment.

Similar to how diverse embodiments of feminine sexuality preclude the universalization of lived sexual experience, the diverse materiality of pharmaceuticals and their biochemical actions preclude us from universalizing pharmacotherapy as reductive and apolitical. Can we justifiably critique pharmaceuticalization without a nuanced understanding of the pharmacokinetic and pharmacodynamic differences between drug classes and agents? Furthermore, for Canguilhem (1993), the organization

of matter controls our experience. While I am less interested in establishing causal relations between living and lived bodies, at the very least, I want us to imagine how our materiality, our living body, conditions our lived experiences and can contribute to feminist understandings of sexual embodiment.

In her essay, "Lived Body vs. Gender: Reflections on Social Structure and Lived Experience," Iris Marion Young (2002) explains, "The lived body is a unified idea of a physical body acting and experiencing in a specific sociocultural context; it is body-insituation... The person always faces the material facts of her body and its relation to a given environment." (16). We cannot separate our lived experience from the material reality in which we are entangled. And yet, Young (2002) proceeds to explain that this concept of the lived body is distinct from biological conceptions of the body which operate as abstract and objectivist. But what if our account of the lived body included a scientific approach that did not claim to be objectivist? This is precisely the approach I want to explore in this chapter.

Scientific approaches to the body are not irrelevant to the body as lived. As Canguilhem (1993) explains, "Most scientific techniques, it can be argued, are in fact nothing more than methods for moving things around and changing the relations among objects" (319). We can utilize scientific data to enrich feminist phenomenology and explore how these techniques can change relations among selves. Pharmaceuticals offer us the potential to change the relationship between neurotransmission and sexual desire or vaginal nerve fiber density and dyspareunia, for example, and affect the ways we engage sexually in the world. The pharmaceuticalization of feminine sexuality is not

inherently problematic, then. Rather, it is a biochemical attempt to change the relations among bodies, worlds, and desires.

If the lived body is a body-in-situation, and this situation is the relation of our facticity to our projects, then we cannot appropriately speak of the lived body without understanding our facticity – our concrete material relations and our physical and social environment. Understanding the physical facts of our existence cannot result in dismissing biology as reductionist or abstract but by directly engaging with scientific data as a method of illuminating an aspect of our facticity. This is not a reductionist move; this is a recognition that in addition to our social environment and institutions, our physical reality also informs the lived body. I do not wish to establish causal relations between materiality and lived experience since they are inextricably entangled and inform each other simultaneously. I simply wish to establish relation – a relation that is multifarious and often in tension – between our living bodies and our lived bodies.

Certainly, the clinical trials of flibanserin and prasterone reveal many troubling assumptions about appropriate sexual embodiment and performance, as discussed in the previous chapters, but perhaps we can evaluate the clinical data for findings that illuminate the feminist project rather than antagonize it. Reducing women to biology is a troublesome and persistent pattern in medicine, but reactionary positions which reify women as products of cultural and historical structures are no less reductive. Elizabeth Wilson (2015) explains, "... feminist theory has developed in concert with antibiologism and that the finesse of many feminist theories draws, in a nontrivial way, on the presumption that biology is peripheral to our political interests" (33). But biological data need not be a threat to feminist theory, thought to imperil political and conceptual

progress, and can be redeployed from a critical feminist perspective which does not perpetuate reductionism, objectivism, or abstraction.

Elizabeth Wilson (2015) argues for a reevaluation of clinical data in order to enrich and challenge feminist theory in its typical anti-biological stance. She also challenges typical biomedical applications of clinical data in its acceptance of causal explanations and the compartmentalization of the body. She explains, "It is parochial to expect that sexualities circulate only in nonbiological realms, that they could be contained to cultural domains, or that they could be arrested at the cell membrane or synaptic gap" (61). She complicates the choice between the "synapse" and "society" binary that biomedical and feminist conceptions of feminine life promote, respectively. Utilizing the pharmacokinetic data of selective serotonin reuptake inhibitors (SSRIs), Wilson (2015) explains that the clinical is inextricable from the political. Her analysis focuses on SSRIs as antidepressants. My analysis begins with flibanserin, also an SSRI, but newly indicated to treat sexual interest/arousal disorder in premenopausal women.

Pharmacokinetics of Flibanserin

Pharmacokinetics is the study of how the body affects drug action and navigation. Typically this effect is understood as unilateral and is often distinguished from pharmacodynamics which is concerned with a drug's mechanism of action and its effects on the body. Pharmacokinetics is concerned with four major principles of how the body interacts with drugs: absorption, distribution, metabolism, and excretion (ADME). The process of absorption focuses on how drugs enter the body. Distribution focuses on where the drug goes once it is absorbed by the body. Metabolism focuses on how the drug is broken down by the body. Excretion focuses on how the drug leaves the body.

Through these processes, pharmacokinetics attempts to understand how drugs move through our bodies. Pharmacodynamics, on the other hand, is concerned with the biochemical and physiologic effects of drugs. Simply put, pharmacodynamics is understood as the study of how a drug affects an organism whereas pharmacokinetics is the study of how the organism affects the drug. While Wilson prevents this simple differentiation between pharmacokinetics and pharmacodynamics, I will utilize data typically understood in clinical science as "pharmacokinetic" but with a respect for the permeability of the actions and effects of drugs and bodies.

Flibanserin is classified in clinical literature as a serotonin reuptake inhibitor with postsynaptic agonist activity at the 5-HT_{1A} receptor and antagonist activity at the 5-HT_{2A} receptor. This mechanism is postulated to decrease serotonin and increase dopamine and norepinephrine in certain brain areas to improve the balance of neurotransmitters that regulate sexual desire (Flibanserin 2015). But this is to provide too simple an account of flibanserin's actions with the body.

Flibanserin is also absorbed, distributed, metabolized, and excreted according to the principles of pharmacokinetics. Flibanserin interacts with food, serum proteins, hepatic and renal function, weight, other drugs, and pharmacogenomics. Prior to acting at the synapse, flibanserin must first be swallowed, broken down into solution, and undergo first-pass metabolism via the enzymes of the gastrointestinal lumen, gut wall enzymes, bacterial enzymes, and hepatic enzymes. The remaining drug available, approximately 33%, then enters systemic circulation where 98% is bound to albumin, rendered unavailable to penetrate the blood-brain-barrier and reach its target postsynaptic receptor (Flibanserin 2015). The concentration of flibanserin circulating the body is affected by

liver and kidney function, drug interactions, and genomic differences in metabolism. An individual with cirrhosis may have higher circulating levels of flibanserin given that the liver is less able to break the drug down into inactive metabolites. Similarly, someone deficient in cytochrome P450 enzyme activity, which is responsible for metabolizing drugs in liver cells and throughout the body, will have higher systemic exposure to flibanserin.

The pharmacological data of flibanserin indicate that it works with the whole body, and its effects cannot be localized to serotonin receptors alone. Wilson (2015) explains, "These pills are not autocratic agents that operate unilaterally on body and mind; rather, they are substances that find their pharmaceutical efficacy by being trafficked, circulated, transformed, and broken down" (102). She emphasizes that the peripheral body is not merely a transport system but that it is essential to the psychological capacity of SSRIs. The pharmacokinetic processes of absorption, distribution, metabolism and excretion challenge unilateral concepts of drug-action-andeffect-at-target. If we recognize that the action of flibanserin is not relegated to other side of the blood-brain barrier and some of its sexual effects occur in the peripheral body, then we might begin to conceive of this peripheral body as sexual terrain. Indeed, we might begin to understand that the peripheral body is not peripheral at all. Our bodies do not consist of discrete, aggregate parts that can be classified as sexual or non-sexual, primary or peripheral. Similarly, drug action cannot be understood unilaterally with primary (target) effects and peripheral (side) effects. Our bodies and drugs have a relationality that forms an intense network of entanglements that complicate causal assumptions. Our bodies cannot be reliably said to be outside pharmaceutical action and pharmaceuticals

cannot be reliably said to be inside our bodies. Instead, they form a complex relation in which our bodies end neither at the skin nor at the coating of a pill (Shildrick 2015).

Drugs and their effects become embodied and inform the biochemical conditions of our lived experience.

Pharmacokinetics of Prasterone

Prasterone's pharmacokinetic profile also reinforces this relationality despite its proposed local effect. Prasterone is a vaginally administered steroid that is metabolized into androgens and estrogens aimed at relieving symptoms of dyspareunia due to vulvar and vaginal atrophy (Prasterone, 2016). While serum concentrations of circulating estrogen and progesterone are increased following administration of prasterone compared to baseline measurements, Labrie et al. (2015) insist these systemic changes are biologically insignificant. This is further evidenced by the lack of pharmacokinetic data included in the package insert, in which distribution information is entirely absent. The researchers explain, "Most importantly, these benefits are achieved by an exclusive peripheral action of DHEA limited to the vagina with no biologically significant change in the serum levels of testosterone or other steroid, which remains well within the normal post-menopausal values. (Labrie et al. 2015, 2408). They proceed to explain that "Such data indicate that DHEA, by a strictly local action, exerts important beneficial effects on sexual function in women without systemic action on the brain and other extravaginal tissues" (Labrie et al. 2015, 2408). Besides the problematic understanding of the vagina as periphery, the results of the trials indicate a systemic effect occurs through favorable increases in sexual functioning overall. That a direct causal link cannot be established

between prasterone and hormones in the brain does not preclude systemic action. They summarize:

Although the role of psychological, biological, and interpersonal factors in sexual function is a matter of debate, the present data clearly show that local intravaginal changes induced by DHEA (prasterone) can exert beneficial effects on all aspects of sexual function, including desire/interest, a characteristic component of brain function. It thus seems possible that increased outputs from a healthier vaginal mucosa could influence the brain to express increased desire/interest without the need for a direct action of hormones on the brain. (Labrie et al. 2015, 2409)

In other words, their own data contradicts their conclusions about the action of DHEA as exclusive to the vagina. While a direct causal link cannot be established, there is still improvement noted in sexual functioning in desire, arousal, lubrication, and satisfaction. This indicates there are extravaginal effects despite prasterone's proposed peripheral action. Drug action must be understood as a biochemical relationality, lacking unilateral, primary and peripheral effects. Prasterone's systemic biochemical relationality complicates our understanding of drug-body cause-and-effect and promotes the drugbody relationship as entangled and co-constitutive.

This relationality exists within and beyond the target organs as the pharmacokinetics of flibanserin and prasterone illustrate. Wilson (2015) explains how limited conceptions of serotonin reuptake inhibitors privilege the brain over the body-insituation:

It narrows the geography of mind from a diverse, overdetermined system (an asymmetrical and asynchronous mutuality of moods-objects-institutions-neurotransmitters-hormones-cognitions-economies-affects-attachments-tears-glands-images-words-gut) to a landscape within which the brain, as sovereign, presides over psychological events. This gesture does violence to the rest of the body and to other natural and social systems; importantly, it also does violence to neurology. (148)

This understanding of pharmacological action as unilateral and compartmentalized is to ignore the complex entanglement of biochemistries, discourses, politics, societies, bodies, and environments. Conceptions of the lived body that do not attend to the *situation* in which bodies are co-constituted not only does violence to the body, but it does violence to pharmacology.

While I agree with the critique that clinical sciences tend to abstract lived experience and establish problematic causal links, a feminist deployment of these sciences does not need to operate this way. Through pursuing a feminist, pharmakological phenomenology, we can enrich our understandings of pharmacology as pharmakon – as having capacity to ambiguously effect corporeal changes and relations between selves and worlds – and phenomenology as pharmakological – as concerned with our perceptions and external world as much as our biochemistries.

Toward a Pharmakological Phenomenology of Sexuality

Pharmaceuticals have the potential to diminish, restore, and enhance our lived experiences simultaneously. This ambiguity is reflected in the Greek word, *pharmakon*, which refers to drugs as remedies, poisons, and magical charms. Drugs as remedies can also be toxic. Current clinical conceptions of drugs, and the use of the unambiguous term "medicine," has constructed a pharmacomythology in which drugs produce a predictable, main effect that is positive every time in every body, and these effects are seen to be caused by the chemical compound ingested rather than as a change of the organism which is in biochemical relation with the ingested chemical compounds (Montagne, 1996). This constructs other drug experiences as "incidental, subsidiary or subordinate, in other words, a side effect" (Persson 2004, 55). As we have seen, drugs produce an array of

effects in the body, irreducible to primary and peripheral categorization, and this capacity is signified by the term pharmakon.

In her essay, "Incorporating *Pharmakon*: HIV, Medicine, and Body Shape Change," Asha Persson (2004) explores the corporeal implications of taking HIV/AIDS antiretroviral therapies (HAART). She wonders "...how are corporealities produced when medicines meet living flesh, and what kinds of meanings are invested in this biochemical encounter?" (46). She wishes, "...to pursue a kind of phenomenology of drugs as embodied processes, an approach that foregrounds the productive potential of medicines; their capacity to reconfigure bodies and diseases in multiple, unpredictable ways" (46). She focuses her analysis on HIV/AIDS which can cause visible changes and disfigurement in affected bodies. These visible changes are associated with stigmatic signs of having AIDS, corporeal signs which antiretroviral therapies (ART) have erased. In their place, ART has created new corporealities of the HIV affected person with lipodystrophy and lipoatrophy – the accumulation, redistribution, and loss of fat in certain areas of the body (Persson 2004, 47). These drugs reduce viral loads to undetectable levels while producing a body that *looks sick*. She explains, "These imprints, these arbitrary trajectories, pose a challenge to the idea of a specific, causal sequence of disease-therapy-outcome" (Persson 2004, 54). This causal sequence is also complicated by the pharmaceutical data of flibanserin and prasterone.

Flibanserin was originally investigated as an antidepressant with the defined primary target of improving mood. Data from the original trials revealed the side effect of improved libido. In its current marketing campaign, improved libido is presented as its primary effect. Similarly, prasterone is approved to reduce pain upon intercourse not to

improve sexual functioning. The clinical trials associating it with improvements in sexual functioning are shifting this beneficial side effect from the periphery to the primary.

Therapeutic efficacy, then, is not fixed and predictable but ambiguous and interpretable.

The pharmakon is not simply a sutured paradox of remedy plus harm. Remedy and harm are not discrete actions of drugs, capable of effect independent of each other, which then become stitched together in the concept of the pharmakon. As Elizabeth Wilson (2015) explains, "The semiology of pharmakon is more extensive (systemic) than this; it generates poison and cure and philter and recipe and charm," and that dividing the capacity of the pharmakon "...attempts to limit a general systematicity: to cut one or more terms off from a field of entanglements or patternment" (145). Flibanserin and prasterone, like antiretroviral therapies, are entangled in biochemical relations that are beneficial and harmful to the same person at the same time, always. Wilson (2015) explains, "The cure is always already breached, roughed up, fulfilled, replaced by harm; natural treatments must recruit artificial techniques; the external world is part of the incorporated capsule" (144). This understanding of drugs as pharmakon complicates straightforward notions of therapeutic efficacy and bodies and pills as discrete, selfcontained entities with predictable effects. Drugs, as embodied processes, include biochemical relations but also the external world.

By altering relations of an organism to the environment, drugs have capacity to affect being-in-the-world. Svenaeus (2007) explores this capacity of drugs to alter the self in his article, "Do Antidepressants Affect the Self? A Phenomenological Approach." He explains how disease can manifest as "altered embodiment and estranged engagement with the world" (156). Insofar as medications, such as SSRIs, can impact our

embodiment and engagements, they may have capacity to alter the self. Svenaeus (2007) explains, "Antidepressants alter the concentrations of neurotransmitters in the synapses of the brain; therefore, their effects at the phenomenological, everyday level can be thought of in terms of alterations of bodily resonance – alterations that make new forms of transcendence to the world possible" (162). Changing the physiology of organisms through visible and invisible corporeal transformations can change our relation to the world. Incorporating pharmaceutical data and the pharmakon into this analysis does not supersede phenomenological accounts, then, but enriches our understanding of how ambiguous biochemical relationalities are entangled with our lived experiences.

This entanglement is complex and reminds us that "... the lived body is not identical with the material entity bounded by skin" (Shildrick 2015, 15). Instead, the lived body operates in a network of interrelations of discourse, society, technology, politics, and institutions. The lived body is permeable to pharmaceutical processes. The naturally self-contained body and synthetically-bound tablet is an illusion. Shildrick (2015) explains, "Indeed, the body can no longer be thought as natural, distinct, or universal, but only in terms of its permeability – the demarcation of inside and outside becomes increasingly meaningless – and of process" (20). The demarcation of drug user, tablet, adverse effect, and mechanism of action is displaced by shifting processes of lived-body-as-event and normality-as-dynamic-equilibrium. Outcomes for bodies as normal and pathological and remedies as beneficial and harmful, are never fixed. These outcomes may manifest as visible corporeal changes such as lipodystrophy, but they may also manifest as invisible corporeal changes in serotonin levels and mucosal membranes.

To address non-visible corporeality, Shildrick calls for a visceral phenomenology which "... understands changes to the interiority of the body as having as much import to being-in-the-world as our external interactions" (53). Indeed, our bodies do not end at the skin, and they do not start there either. She argues that interiority and non-visibility do not preclude changes to embodiment and the self, echoing Svenaeus' analysis of antidepressants.

Applied to flibanserin and prasterone, biochemical changes to the body may enable altered bodily resonance, making new relations to the world possible, affecting our sexual engagement in erotic situations. Building on this work, we can begin to conceive of a pharmakological phenomenology that understands pharmaceutical changes to the interiority of the body have as much import to being-in-the-world as our external interactions.

In this chapter, I reviewed the pharmacokinetic data of flibanserin and prasterone, and explored how Wilson's account of this data moves us beyond current, naïve understandings of pharmacological action that compartmentalize effects as primary (therapeutic) and peripheral (adverse) in order to enhance both biomedical and phenomenological accounts of sexual pathology and treatment. This chapter attempted to articulate a pharmakological phenomenology that recognizes sexual distress as a complex entanglement of chemistry and consciousness and that the ambiguous biochemical changes induced by pharmaceuticals have as much significance for our lived experiences as the external world.

Conclusion

Diagnosing and treating pathological sexuality cannot occur without an understanding of the relationship between bodies and situations, between organisms and their environment. This relationship is qualitative, not quantitative, and so the lived experience of the patient is essential in determining whether a relation is pathologic. Implications for treatment must be aimed at the organism or the environment in attempt to alter this relationality – and make it one which promotes reproduction and improved quality of life. The environment in which female existents engage sexually is composed of heteropatriarchal and white supremacist structures, affecting the lived experiences of non-normative sexual beings and impacting relations of pathology. For feminine bodies, our environment often overdetermines our potential through prescriptive significations according to gender and race, among other identity categories, and so utilizing feminist phenomenology can illuminate the lived experiences of diverse feminine corporeality and enrich clinical treatment of bodies.

Classical phenomenological approaches to the body are not without limitations, however, and generally only address conscious experiences. As clinical treatment with pharmaceuticals exemplifies, many of our bodily processes operate beyond the reach of consciousness. Simply because bodily processes are beyond our perception does not mean they do not impact our lived experiences. The situation of the lived body also includes our biochemistries, hormones, and neurotransmitters — our feminine materiality — as well as our milieu. Recent phenomenological scholarship has explored the implications of non-visible corporeal changes on the self and help expand the lived body to include these pharmacological processes (Sveneaus, Perrson).

Clinical approaches to the body often conceive of materiality as compartmentalized and discrete, operating as a sum of aggregate parts. Phenomenology deconstructs this understanding in its challenge of the mind-body dualism, and critical feminist approaches to pharmaceutical data, as exemplified by the work of Elizabeth Wilson, also promote this deconstruction. Wilson's work highlights how pharmaceutical data can be redeployed from a critical feminist stance to challenge dualistic and causal understandings of corporeality. She does not dismiss lived experience as entangled in this network of bodies-worlds-discourses-societies-biochemistries, but she does not privilege the lived subject in this relation.

Sexuality is one manner in which our bodies engage in the world and our engagement is impacted simultaneously by feminine milieu and materiality. Feminine milieu includes our environment and social significations and requires interrogation because it contributes to sexual pathology by preventing feminine organisms from flourishing and living better sexual lives within it. Feminine materiality includes our biochemistries and hormones and, through pharmaceutical intervention, can induce morphological and functional solutions to the demands of our environment.

Treatment of pathological sexuality must change the relation between our milieu and materiality. Flibanserin and prasterone affect this entanglement by altering our biochemical materiality – our neurotransmitters and vaginal nerve fibers, respectively – and so change our relation to our milieu. The pathological relation between a feminine organism and her environment is altered by pharmaceuticals, enabling a sexual engagement with the world otherwise prevented by distress.

Importantly, the effects of pharmakotherapy – pharmacotherapy as pharmakon – are not always predictable and cannot be compartmentalized into primary and peripheral effects. Pharmaceuticals utilized to alter pathological relationships will change an organism in ways that are beneficial and harmful simultaneously. This does not eliminate pharmaceuticals as therapeutic options for sexual distress but recognizes that their effects are complex and ambiguous rather than straightforward and inevitable. Instead of perceiving this ambiguity as a reason to reject the value of drugs like flibanserin and prasterone, we can evaluate the balance of these risks on a case-by-case basis.

Returning to our case study, we can evaluate PY's social environment for influences of sexual distress. Racist, sexist, and heteronormative social structures certainly impact PY's sexual intentionalities and contribute to her sexual distress in some way. Inextricable from these influences are her physical exam findings of decreased lubrication and thinning vaginal mucosa. Activism aimed at eradicating the structures of racism, sexism, and heterosexism could change this oppressive environment and, associatively, alter this pathological relationship. However, these changes may take years to develop and in the meantime, PY continues to suffer from sexual distress. While prasterone cannot overcome these oppressive structures, it may provide enough symptomatic relief to enable PY to engage sexually in the world in new and unforeseeable ways. And this is the goal of a feminist, phenomenological deployment of pharmakotherapy: to minimize suffering by biochemically altering the body as an attempt to alter the relationship between bodies and situations.

These bodies and situations are not fixed; they are dynamic and constantly shifting. The sexual body of today is not the sexual body of tomorrow. And a feminist

deployment of pharmakotherapy, if it is to be efficacious, must account for this dynamism and anticipate a future unbound by the current disciplining structures in which the relationship between bodies and worlds is changed, necessitating new pharmacotherapies, or eradicating the need for pharmacotherapy altogether.

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Leach C, Layson-Wolf C. Student Pharmacists' Perceptions of Transgender Health Management. The Sex and Gender Health Education Summit. Salt Lake City, UT. April 2018. Presentation anticipated April 2018.

Leach C, Layson-Wolf C. Student Pharmacists' Perceptions of Transgender Health Management. Poster presented at the American Association of Colleges of Pharmacy. Nashville, TN. July 2017.

Leach C, Layson-Wolf C. Survey of community pharmacy residents' perceptions of transgender health management. Poster presented at the University of Maryland School of Pharmacy Research Day. Baltimore, MD. April 2015.

Leach C, Layson-Wolf C. Survey of community pharmacy residents' perceptions of transgender health management. Poster presented at the American Pharmacist Association 2015 Meeting. San Diego, CA. March 2015.

PRESENTATIONS

Practice and Ethics Paper Session for individual paper: **A Phenomenological Defense of Sexual Pharmakotherapy**. International Conference for Phenomenology of Medicine and Bioethics. Stockholm, Sweden. Anticipated June 2018.

Pathological Sensibilities: Women's Sexuality in Serotonergic Landscapes. Geo-Aesthetics Conference: Narratives from the World of Sensible. Towson, MD. March 2018.

Regulating Bodies Panel for individual paper: **From the Margins to the Basement: Intersections of Biomedical Patienthood**. National Women's Studies Association Meeting. Baltimore, MD. November 2017.

Infertility, Posthumous Reproduction, and Inclusive Patient Centered Care Paper Session for individual paper: **From the Margins to the Basement: Intersections of Biomedical Patienthood**. American Society for Bioethics and Humanities Meeting. Kansas City, MO. October 2017.