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"Drawing the shape of your pleasure": The Intersection of Sex Toys with Politics, the Market, and Bodies in the Case of a Japanese Sex Toy Female Brand

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Abstract

This paper explores how sex toys designed by iroha, a Japanese female sex toy brand, intersect with politics, the market, and bodies in Japanese society. Conducting eight semi-structured narrative interviews (with four designers and four users of iroha) and document analysis of the contents on iroha's official website, I investigated how the value of iroha's sex toys is relationally shaped by the intersection between feminist political views, market strategies, and the enactment of multiple bodies.

Despite diverse discussion of sex toys from feminist cultural studies to STS, sex toy studies are still underdeveloped when it comes to collecting qualitative data and comparing cultural differences, especially between the West and others. To fill this research gap, this paper examines the position of sex toys in Japanese society by conducting qualitative data. My research target is iroha, one of the biggest female sex toy providers in Japan, and its products are globally famous for sophisticated design.

The discussion proceeds in three steps. First, I focus on how iroha's sex toys are valued from different perspectives. Drawing on the notion of registers of valuing, my analysis identifies four registers: feminist, design, market, and health registers. Second, I seek how and in what sense iroha's employees understand the company's practices as feminist actions. Drawing on the notion of boundary work, my analysis shows communication strategies that demarcate iroha's feminist actions from the existing angry feminists. Third, I explore what types of bodies are (not) valued through the interaction with sex toys. Drawing on the notion of body multiplicity, the last part of the findings chapter discusses five different bodies that are described by both designers and users.

This paper contributes to academic discussion in three fields. First, my findings bring insight into sex toy studies by enriching qualitative data outside of the West. Second, my analysis has the potential to broaden an STS focus on sex toys by showing the multiple values inscribed in one object. Finally, I also expect to contribute to political philosophy by providing a new image of consumer-citizen.

Zusammenfassung

Diese Arbeit untersucht, wie die von iroha, einer japanischen Marke für weibliche Sexspielzeuge, entworfenen Produkte mit Politik, Markt und Körpern in der japanischen Gesellschaft interagieren. Durch die Durchführung von acht halbstrukturierten narrativen Interviews (mit vier Designerinnen und vier Nutzerinnen von iroha) sowie einer Dokumentenanalyse der Inhalte auf der offiziellen iroha-Website habe ich untersucht, wie der Wert der Sexspielzeuge von iroha relational durch das Zusammenspiel feministischer politischer Ansichten, Marktstrategien und die Performanz multipler Körper geformt wird.

Trotz vielfältiger Diskussionen über Sexspielzeuge in den feministischen Kulturwissenschaften und den Science and Technology Studies (STS) sind Studien zu Sexspielzeugen noch unterentwickelt, insbesondere wenn es darum geht, qualitative Daten zu erheben und kulturelle Unterschiede – vor allem zwischen dem Westen und anderen Regionen – zu vergleichen. Um diese Forschungslücke zu schließen, untersucht diese Arbeit die Stellung von Sexspielzeugen in der japanischen Gesellschaft durch qualitative Daten. Mein Forschungsschwerpunkt liegt auf iroha, einem der größten Anbieter von Sexspielzeugen für Frauen in Japan, dessen Produkte weltweit für ihr anspruchsvolles Design bekannt sind.

Die Diskussion erfolgt in drei Schritten. Erstens konzentriere ich mich darauf, wie die Sexspielzeuge von iroha aus unterschiedlichen Perspektiven bewertet werden. Angelehnt an das Konzept der Registers of Valuing (Bewertungsregister) identifiziere ich vier Register: das feministische, das Design-, das Markt- und das Gesundheitsregister. Zweitens untersuche ich, inwiefern und in welchem Sinne die Mitarbeiterinnen von iroha die Praktiken des Unternehmens als feministische Handlungen verstehen. Mithilfe des Konzepts der Boundary Work (Grenzarbeit) zeigt meine Analyse Kommunikationsstrategien auf, die irohas feministische Positionierung von der bestehenden Vorstellung der „wütenden Feministinnen“ abgrenzen. Drittens erforsche ich, welche Arten von Körpern durch die Interaktion mit Sexspielzeugen (nicht) wertgeschätzt werden. Aufbauend auf dem Konzept der Body Multiplicity (Körper-Multipizität) werden im letzten Abschnitt des Ergebniskapitels fünf verschiedene Körpertypen diskutiert, die sowohl von Designerinnen als auch Nutzerinnen beschrieben werden.

Diese Arbeit leistet einen Beitrag zur akademischen Diskussion in drei Forschungsfeldern. Erstens liefert meine Untersuchung neue Erkenntnisse für die Forschung zu Sexspielzeugen, indem sie qualitative Daten außerhalb des westlichen Kontexts erweitert. Zweitens bietet meine Analyse die Möglichkeit, den STS-Fokus auf Sexspielzeuge zu erweitern, indem sie die Vielschichtigkeit der in einem Objekt eingeschriebenen Werte aufzeigt. Drittens trägt diese Arbeit auch zur politischen Philosophie bei, indem sie ein neues Bild des consumer-citizen (Konsument-Bürger) entwirft.

1. Introduction

One of the biggest culture shocks between Japan and Vienna was found when I wandered on Mariahilfer Straße which is a famous shopping street in Vienna. A pink light behind the entrance drew my attention. It was a sex toy shop. It naturally blended together with other shops on the street such as fashion, pharmacy, and grocery stores. Going through the entrance out of my curiosity, I enjoyed window shopping. I found a male sex toy designed by a Japanese brand, TENGA. TENGA is the most famous sex toy company in Japan and sells sex toys for men. If you go to a sex toy shop in Japan, you will find TENGA products on the main floor. Masturbation aids for men are popular in the market of Japanese sex industries. On the other hand, the sex toy shop in Vienna showed me an interesting contrast. The shop space was allocated mostly for sex toys for women. The variety of sex toys for women was larger than that for men. This difference simply surprised me and fostered my interest in cultural conditions of sexuality. I wondered why cultural differences appeared in the acceptance of sex toys.

I also found the cultural difference in people's reactions to talking about sex toys. When I talked about my research on sex toys in Vienna, people showed their interest without any bias most of the time. The discussion with female friends about the role of sex toys was insightful and influenced my research direction. On the contrary, my Japanese friends tended to avoid talking about sex toys. Rather, they did not have empirical resources to discuss it since they never used sex toys. I faced the strongest reaction when I talked about my research with my family. My mother suggested I change the topic, and asked me to hide my name if I kept researching women's sex toys. These different reactions are also interesting. Sex toys are not embedded in a part of life for my Japanese female friends and family. They are not included in the shopping options in the same way as fashion, medicines, and groceries. I felt sex toys were not as socially accepted for women in Japan as those in Vienna.

These episodes are merely my personal impressions about the cultural differences in sex toys between Japan and Vienna. Nevertheless, they provide a small glimpse into different cultural conditions where sex toys are situated. As feminist researchers argue (Lieberman, 2017; Fahs, 2014; Attwood, 2005), sex toys have historically intersected with women's sexual liberation in Europe and the US. Some feminists insist that sex toys render women from passive sexual objects to sexual agents. Women can please themselves instead of serving male partners, which promotes women's sexual independence. On the other hand, Japanese feminists have not foregrounded sexual pleasure as a core topic compared to Europe and the US (Motohashi, 2018). They tend to focus on gender inequality in the social system, and the discussion about personal fields such as sexuality is less developed. In sum, the cultures of both feminism and sex toy use are different between Japan and Europe/the US.

Considering the different feminist histories and cultural relationships with sex toys, research on sex toys needs to explore different perspectives by balancing the European and American feminist discourses of sex toys. In this sense, I seriously take into account postfeminists' critique of sex toys. Postfeminists question whether sex toys really bring women's sexual emancipation (e.g. Waskul and Anklan, 2020). While sex toys certainly played a role in women's sexual emancipation in the 1970s, postfeminists point out that the cultural meaning of sex toys has changed in the contemporary world where consumer cultures have developed. This social change raises a critical question of whether sex toys are still political symbols for women's sexual liberation, merely commodities circulated in the neoliberal economy or boundary objects that overarch political and economic fields. Accordingly, the research on sex toys needs to take into account the entanglement with politics and economy as well as the cultural differences.

My research target *iroha*, a Japanese sex toy brand for women, is selected to narrow down the contemporary position of sex toys in a specific cultural context. In 2013, *iroha* was launched as the female brand of TENGA. Among many manufacturers that produce sex toys for women, *iroha* is specifically interesting because *iroha* tries to enhance product value beyond the niche of the sex industry. For example, *iroha* has received the Red Dot Design Award four times. The Red Dot Design Award is an international competition to select “aesthetically appealing, functional, sustainable or innovative” (Red Dot Award Website) products and industrial designs. Thus, *iroha*'s success in the Red Dot Design Award shows that *iroha*'s sex toys are valued as cultural artworks rather than sexual objects. More importantly, *iroha* intervenes in a cultural understanding of sex toys in Japan. In particular, *iroha* is the first pleasure item brand that opened a pop-up shop in a Japanese department store. This collaboration with the department store is important not just because it brought more profits but because it had the potential to alter the position of sex toys in Japanese society. In Japan, sex toys are mostly segregated into the R18 areas that restrict the accessibility of people under the age of 18. Namely, sex toys are regarded as objects to be hidden. However, department stores are shopping places that people can access as free consumers. Accordingly, *iroha*'s pop-up shop in a department store made sex toys visible to a wider range of consumers. Between November 2019 and January 2025, *iroha* owned a regular shop in the department store, which shows *iroha*'s success in blending sex toys with ‘normal’ commodities in the common shopping space. As I will show later, *iroha* has recently expanded the business field by framing itself as a Femtech/Femcare brand and emphasizing its contribution to women's body issues such as sexual wellness. In sum, *iroha*'s practices can be analyzed from a broader perspective that intersects with economic activities, socio-cultural influences, and women's bodies.

This paper draws on the feminist discussion that highlights the intersection with sex toys, political actions, and economic activities. Looking through the case of *iroha*, I examine the position of sex toys in

contemporary Japanese society, while considering the specific cultural meanings, design aesthetics, and interactions with women's bodies. Therefore, my research question is **how iroha's designed sex toys intersect with politics, the market, and bodies in Japanese society**. As I will explain in Chapter 3, this research question is explored by three analytical approaches. First, I start investigating whether iroha has feminist views by closely looking at how my research participants describe iroha's products. Following postfeminist critiques, I do not presume buying and using sex toys straightforwardly leads women to sexual emancipation. Rather, I hypothesize that sex toys incorporate diverse values including political views, economic attempts, and design aesthetics. Having a broader analytical scope is important in sex toy studies that tend to focus on the relationship with feminism. Accordingly, my first analysis aims to identify what sorts of values people give iroha's sex toys. Through this analysis, the relationship between iroha and feminism will be clarified. Second, my focus shifts to the feminist value in iroha. Sensitizing to the sociocultural difference of feminism, I highlight a situated feminist action in Japan. In particular, I closely look at iroha's discursive practices that performatively draw the boundary between existing feminist actions. Finally, my analysis tries to overarch the feminist scholarship and iroha's intervention in users' bodies in practice. As Suchman (2007) underscores, a key argument of feminism is to explore the intersections of bodies and technologies and show an alternative enactment of bodies without reducing embodiment into medicalization and aesthetization. Thus, the final discussion seeks the potential contribution of iroha to feminism by analyzing the description of the user's embodied experiences.

The next chapter (Chapter 2) overviews the existing discussion related to sex toys, including sexuality, sexual pleasure, and embodiment. It also introduces the situatedness of Japanese feminism. Afterward, I elaborate on the research questions by narrowing them down to three sub-questions in Chapter 3. These three sub-questions are theoretically followed up by the sensitizing concepts that I present in Chapter 4. After reflecting on my positionality and ethical concerns to bridge the theory and methods parts, Chapter 5 starts diving into empirical fields by describing research methods and practical efforts to collect data. The results of my research are shown in Chapter 6, while following the sub-questions and sensitizing concepts. Finally, this thesis will be concluded with a discussion to situate my findings in broad discourses of sex toy studies, STS, and feminist political theory in Chapter 7.

2. State of the Art

2.1. A Brief Introduction of Sexuality and Sex Toys in feminism history

Sexuality is not just the feelings and activities connected with a person's sexual desires but rather a concept that intersects with politics, economy, and socio-culture (Daskalopoulou and Zanette, 2020; Ng et al., 2020; Beasley, 2008; Foucault, 1981). Butler (2007) argues from a constructionist perspective that sexuality is “an open and complex historical system of discourse and power” (p. 129). Butler’s definition refers to three important aspects of analyzing sexuality: history, discourse, and power. The social construction of sexuality exercises the power to influence the views of sexuality in society, but it is performed in different ways at a specific historical moment. While female sexuality in the mid-19th century was put under the social power of population control by mobilizing biological and medical discourses (Goestl, 2022; Kirschbaum and Peterson, 2018; McWhorter, 2017), the mid-20th-century scientific findings enabled the different formulation of female sexuality. The research by Masters and Johnson (1966) decoupled sexual activity from external social contexts by physiologically investigating human sexual responses, including female orgasm. Against male-dominate medical knowledge, feminist self-clinic practitioners developed alternative expertise of reproduction and shared sexual/reproductive experiences by collectively observing their genitalia (Murphy, 2004). These women-centered research and medical practices supported the feminist movement in the 1960s, which contributed to rewriting the social view of women’s sexuality.

The social construction of sexuality involves technology as well as scientific discourses. As Akrich (1992) argues, technology incorporates scripts inscribed by designers, which “then ‘prescribe’ how users should employ them [technological artifacts] or characterize the ways in which users may be constrained by them” (Waidzunas and Epstein, 2015, p. 194). Scripts reflect the designer’s view on the preferable future and morality and affect shaping the user’s social identity such as gender and sexuality (Wajcman, 2010; Faulkner, 2001; Ormrod, 1994). Waidzunas and Epstein (2015) highlight that the phallometric test performatively establishes “scientific conceptions of normal and abnormal sexualities” (p. 187). By combining technological scripts in STS and sexual scripts in the sociology of sexuality, Waidzunas and Epstein (2015) analyze how the technosexual scripts of the phallometric test “orchestrate arrangements of bodies, apparatuses, self-understandings, and cultural beliefs” (p190). Male sexual desire and sexuality are materialized by the phallometric test and are socially constructed with the power to distinguish ‘normal’ and ‘abnormal’.

Sex toys are one technology that historically influenced the social construction of female sexuality. In the 1960s when the invention of oral contraception engendered the opportunity for women to

pursue their sexual interests (Giambi, 2002), the second-wave feminists contested sex toys against the patriarchal sexual scripts. As the Hite report (2004) in 1976 revealed female orgasm tends to be more triggered by the stimulation of the clitoris than the vagina, pro-orgasm feminists emphasized the role of sex toys in liberating women from patriarchal systems, some of whom radically insisted that sex with men should be replaced by masturbating (Lieberman, 2017). Using sex toys meant that women gained sexual experiences without relying on male partners (Lieberman, 2017). In other words, sex toys allow women to pursue sexual satisfaction for themselves against the phallogocentric construction of sexual pleasure. In this socio-political climate, sex toys functioned as a symbol of women's sexual liberation. The second-wave feminists contested sex toys against the patriarchal sexual scripts. Sex-toy-oriented activism has been developed by feminist-owned sex toy shops (Lieberman, 2017; Fahs, 2014; Attwood, 2005). Crucially, sex toy shops also promote safe and fun ways to explore sexuality by not only selling their products but also providing accurate information and shaping support communities (Comella, 2020). Sex toy shops engage in feminist actions by formulating material and discursive practices, namely sex toys and supportive knowledge.

2.2. Perceived Effects of Sex Toys and Healthicization

Whether sex toys give women positive or negative effects in practice is investigated by some researchers (Döring et al., 2022; Döring and Pöschl, 2020; Döring and Pöschl, 2018; Fahs & Swank, 2013). Conducting a qualitative online survey in Germany, Döring and Pöschl (2020) found that "sex toy-experienced participants clearly stated that they predominantly perceived positive effects as opposed to negative effects" (2020, p. 891). Perceived positive effects of sex toys are also identified in another research that collects data from user reviews on Amazon (Döring et al., 2022). While some consumers complain about the limited quality, the positive effects of sex toy use (sexual pleasure, satisfaction and safe sex) outweigh the negative effects (Döring and Pöschl, 2018). Nevertheless, it is worth noting that sex toys bring negative psychological effects. Foregrounding orgasm as the primary form of sexual pleasure, sex toys put pressure on women (and their partners) to give orgasm as their sexual performance (Frith, 2015). Women are sometimes coerced by their male partners to use sex toys in partnered sexual practices (Fahs and Swank, 2013). Besides, sex toys also have a negative impact on men if they think their female partner uses sex toys because she is not satisfied with his virility, penis size, endurance, or sexual competence (Watson, Séguin, Milhausen, & Murray, 2016). Moreover, stigma around sex toys is also counted as a perceived negative effect of sex toys. Dubé et al. (2023) provide quantitative evidence of stigma related to erotic technology by conducting an online survey and they highlight that perceived stigma prevents people from engaging in erotic technology.

Perceived effects of sex toys are also investigated by qualitative research. By interviewing women in the US, Fahs and Swank (2013) explore the subjective feelings of sex toy users. This study revealed the different views of sex toys between heterosexual and queer women. In particular, “queer women more often constructed sex toys as subversive, fun, and free of shame while heterosexual women more often believed most women self-penetrate with sex toys, that sex toys threatened male partners, and they described more coercion involving sex toys” (Fahs and Swank, 2013, p. 666). Another interesting finding of their research is that heterosexual women describe sex toy use by referring to shame and secrecy. This point is supported by an online open-ended survey conducted by Waskul and Anklan (2020). Throughout the survey, they found a repeated theme of shame and embarrassment. Specifically, “participants report considerable angst about their desire for sexual pleasure, feelings of shame, and fears that others will know” (Waskul and Anklan, 2020, p. 872). This research shows that stigma around sex toys not only prevents women from engaging in erotic technology but also gives even sex toy users negative psychological effects.

Some researchers try to overcome the stigma around sex toys in association with sexual health. Eaglin and Bardzell (2011) point out that sex toy manufacturers often fail to understand “the needs of the consumers, especially how they appropriate and experience these artifacts in their (sex) lives” (p. 1840). Instead of foregrounding the sexual purpose of sex toys, Eaglin and Bardzell (2011) suggest that sex toys are connected with sexual wellness by separating them from graphic sexuality. Indeed, sex toy manufacturers attend to the presentation of their products. By content analysis of mainstream media texts in the US sex toy market, Wilner and Huff (2017) argue that sex toy manufacturers have emphasized the aspect of products as medical-grade materials since the 2010s. This trend is also seen in the European market. “In Europe, the sexual wellbeing market is experiencing a shift because of the further introduction of female sexual products for example, vibrators, female condoms, and dildos. All these products are gaining a lot of attraction in the market” (Naik, 2021, p. 172). In parallel, the revision of sexual rights by global institutions enhances the position of sexually pleasurable experiences in society, which contributes to legitimating the connection between sex toys and sexual health. For instance, the World Association for Sexual Health (WAS) declared sexual rights integrating sexual pleasure in 2014. The WAS declaration claims not only freedom from violence, disease, and stigmatization but also a positive and respectful approach to sexual desire and sexual relationships (WAS, 2014). Based on the recognition that “sexuality is a source of pleasure and wellbeing and contributes to overall fulfillment and satisfaction”, WAS insists that “sexual health cannot be defined, understood, or made operational without a broad understanding of sexuality”. The Global Advisory Board for Sexual Health and Wellbeing (GAB) defined sexual pleasure in 2016 by associating it with “the context of sexual rights, particularly the rights to equality and nondiscrimination, autonomy and bodily integrity, the right to the

highest attainable standard of health and freedom of expression” (GAB, 2016). Currently, sexual pleasure is revalued in the global health context with sexual rights and sexual health, which is also implemented in the Sustainable Development Goals (Ford et al., 2019; Gruskin et al., 2019). Accordingly, academic research on sex toys seeks the connection between sex toys and sexual-wellbeing (Döring and Pöschl 2020; Eaglin and Bardzell, 2011).

2.3 Discussion of Sex Toys in Postfeminism

Sex toys are controversial in postfeminist discussions. On the one hand, the consumption of sex toys is regarded as a form of empowerment. Since feminists underscore the importance of moving away from a passive sexual object, the consumption of sex toys through free choice means becoming a new, liberal, and independent agency (Mayr, 2022; Bardzell and Bardzell, 2011). As feminist media studies examine, the transition from a sexual object to a sexual subject is encouraged by commercial media, including fashion magazines, TV shows, and sex guides, through which women are motivated to be ‘sexy’ (Tappin et al., 2023; Martin, 2016; Gill, 2016; Harvey and Gill, 2011). As Wilner and Huff (2017) analyze, marketing sex toys is intertwined with media frames in the sense that sex toy manufacturers strategically advertise their products by arranging press releases, website text, blog content, and social media communications. In short, sex toys are commodities that enhance women’s sexual emancipation with sex-positive discourses. Moreover, sex toys also play a role in queer studies to deconstruct heterosexual norms. For example, the dildos subvert the binary division of male and female by LGBTQ using it (Das, 2014; Fahs and Swank, 2013). In Fahs and Swank’s qualitative research, a lesbian woman described the dildo as not “a means to assert dominance or power over her partner and instead described it as a playful diversion” (p. 678). Sex toys contribute to involving users (consumers) in a feminist action and beyond feminism, they are also used for queering practices.

On the other hand, critical scholars point out that certain sexual scripts are already inscribed in sex toys (Döring et al., 2022; Das, 2014; Fahs and Swank, 2013). As Das (2014) argues, the shape of dildos represents the norms of patriarchy and heterosexuality. Sex toys shaped like a penis are criticized because “they perpetuate the “coital imperative”, that is, their design (i.e., male and female genitalia) supports the idea that the main sexual activity and source of pleasure is penetration” (Döring et al., 2022, p. 565). Fahs and Swank (2013) focus on the sex toy user’s narrative that regards self-penetration as “normal” masturbation, and they discuss that “heterosexism may enter women’s private masturbatory experiences. Perhaps women believe masturbation serves as a substitute for “real” (that is, penetrative intercourse with a male partner) sex, or it may suggest that women lack a cultural lexicon for conversing about masturbation” (Fahs and Swank, 2013, p. 680). Fahs and Swank (2013) also shed light on

heterosexual power imbalance by attending to the narratives that describe sex toys as an extension of male (misogynistic) power. Besides, researchers criticize that sex toys normalize women's orgasm capacity, which forces women to have fake orgasms in heterosexual relationships (Fahs and Swank, 2013; Jagose, 2012).

Fahs (2014) argues the need for critical attention toward definitive claims about freedom and choice for all women by exemplifying the discourses of sex toys. "While sex toys can be empowering, pleasurable, fun, and exciting, they also equate liberated sexuality with purchasing power, buying things, and (perhaps) distancing women from their bodies" (Fahs, 2014, p. 282-283). In other words, Fahs insists that critical sex toy studies should pay attention to two issues: the effect that brings about disembodiment and the entanglement with neoliberal society. The first issue is researched in depth with qualitative data. Fahs and Swank (2013) identify the sex toy user's narrative that describes the alienation from her body. This finding implies that women's sexuality cannot be defined merely by focusing on physiological sensations, but rather it involves multiple needs such as emotions. In terms of the second issue, postfeminists have actively developed a critical perspective on the intersection between sexiness and neoliberal consumer culture (Tappin et al., 2023; Waskul and Anklan, 2020; Martin, 2016; Frith, 2015; García-Favaro, 2015; Fahs, 2014; Harvey and Gill, 2011). Feminist media studies investigate how popular discourses on women's sexuality contribute to "the (re)medicalization of sex" (Gupta and Cacchioni, 2013) and sexualizing women's bodies "as bodies to be worked on, exercised, developed, known and manipulated in the pursuit of orgasmic goals" (Frith, 2015, p. 323). In a neoliberal consumer culture, women are constructed as a sexual subject in a specific way such as self-care subjects.

Sex toys as commodities also involve the construction of social subjects. As Johns and Bushnell (2023) say, sex toy is embedded in capitalist consumer culture, and thus price is an influential factor in consumer choice. Put differently, the price defines the accessibility to sex toys, which makes a social class distinction (Attwood, 2005). Through critical analysis of sex toys including the visual and description, Bardzell and Bardzell (2017) point out that a luxury sex toy draws the boundary between high- and low-class sexuality. "Such a reading suggests that the new paradigm sex toys can be read as regressive, reinforcing both a social class system and the social control of sexual life—just not for those who have the income to buy a Form 6 [an expensive sex toy]" (Bardzell and Bardzell, 2017, p. 8). Whether or not having enough economic resources to invest in stylish sex toys becomes an indicator that "dignifies the actively sexual woman as a classy and self-sufficient subject. This set of practices is therefore simultaneously a form of play, a mode of consumption and a kind of production" (Attwood, 2005, p. 400). In addition, Ronen (2021) critically investigates the continuity in the regimes of gender and moral legitimization by interviewing sex toy designers in the market. Entitling women as consumers of sex toys is

enabled by de-emphasizing women's sexual agency and framing them as purer, more sophisticated sex toy consumers." (Ronen, 2021, p. 631)

Furthermore, critical feminists problematize that the overemphasis on consumer power makes actual social problems invisible (Riley et al., 2019; Sanders, 2017; Martin, 2016; McRobbie, 2015; Gill, 2007). Equating liberated sexuality with purchasing sexual commodities has a risk of reducing women's political commitment to individual economic choices. This critical perspective raises the question of whether sex toys contribute to women's sexual emancipation or fall into boosting neo-liberalization. As Waskul and Anklan (2020) argue, women as sex toy consumers lose the motivation for sexual equity and liberation since post-feminist sexual liberation is associated with "contemporary culture as an individual consumer good and not as a basis for collective political liberation" (p. 872). Comparing dishwashers with sex toys, they point out that "the commodification of sexual pleasure is not a pathway to liberation or empowerment any more than the purchase of a dishwasher solves, or even challenges, the structures of gender inequality that unequally assign gendered responsibilities for doing those dishes in the first place, with or without that appliance—or, in this case, a "toy"" (Waskul and Anklan, 2020, p. 873).

2.4. Datafication and Embodiment

STS scholars discuss sex toys by focusing on technological innovation in sexual commodities. Specifically, critical attention is collected in teledildonics, a smart sex toy that combines sensors and continual communication with apps. While new technology is implemented in sex toys, some researchers point out that innovative sex toys still include the old sexual scripts such as heterosexual normativity. By document analysis of teledildonics designed by three sex toy companies, Faustino (2018) argues that the design and functionality of advanced sex toys reinforce the 'coital imperative' that equates sexual interaction with penetration of the vagina by the penis. Flore and Pienaar (2020) follow Faustino's findings by discussing that teledildonics implicitly degrades non-heteronormative sexual practices. Osipova et al. (2024) further investigate technosexual scripts inscribed in a Dutch sex toy manufacturer. Through an in-depth Feminist Content Analysis, Osipova et al. (2024) identify both technological scripts that encourage individuals to optimize sexual intimacy through technological solutions and sexual scripts that reduce intimacy to only heterosexual penetration. Flore and Pienaar (2020) highlight that digital technology implemented in sex toys influences sexual subjectivity as well as sexual behavior. An analysis of the marketing discourses and design features of teledildonics "explores how digital sex technologies are creating novel forms of data- and object-optimised intimacy with significant implications for sexual subjectivity and norms of 'healthy sexuality'" (Flore and Pienaar, 2020, p. 283). In particular, data

generated by teledildonics is involved in shaping the sexual subjectivity of the user, while operating the commodification of intimate data promotes the healthicisation of sex.

Datafication of sex toys is controversial. Although Flore and Pienaar (2020) foreground “the willingness of sexual subjects to submit these data for algorithmic optimisation” (p. 289), Wilson-Barnao and Collie (2018) problematize intimate digital technologies reinforce “more invasive forms of commercial surveillance and the commodification of the private body and intimate affect” (p. 733). By analyzing smart sex toys, Saunders (2023) explores “how datafication becomes inscribed into sexual culture, influencing norms and expectations of sexual behaviours and culturally dominant ways in which the body is conceptualized” (p. 120). Since smart sex toys extract data directly from the body, data provided by smart sex toys tends to be regarded as the objective and true representation of the body in sexual interaction and pleasure. Saunders (2023) criticizes the situation where smart sex toys are embedded in datafication because it causes disembodiment by conjuring sexual data as “showing the unmediated reality of bodies, and therefore as offering a superior way of experiencing and engaging with sex than can be attained through embodied knowledge and experience of the sexual self” (p. 131). Datafication of sex toys brings to the fore the issue of postfeminism that criticizes the disembodied effects of sex toys (Fahs, 2014).

On the other hand, Human-Computer Interaction (HCI) emphasizes the significance of embodied experiences in sex toy design and usage. Unlike pornography, sex toys are material objects that interact with bodies and that are designed “with the intent of improving the nature and quality of sexual experiences” (Döring & Poeschl, 2020, p. 886). Thus, designing sex toys means intervening in users’ body experiences. HCI’s underlying assumption is “the body not merely as the locus of cognition and action, but as both a medium and a directing force of human subjectivity” (Eaglin and Bardzell, 2011, p. 1838). Beyond judging whether sex toys have positive effects (e.g. giving sexual pleasure) or negative effects (e.g. dissatisfaction with the functional quality), HCI fosters the intellectual understanding of the interaction between sex toys, embodied experiences, and subjectivity. Bardzell and Bardzell (2017) analyze the description of sex toy users’ experiences and identify the moment that users feel “as if the toy is a candidate to become a part of the body” (p. 10). Sex toy users experience an alternative way of embodiment and a new sense of the self through sexual pleasure. Søndergaard (2020) designed an experimental wearable sex toy that reacts to the activity of the surrounding WiFi network. Since the experimental sex toy was designed to automatically activate under the WiFi network, the user was confronted with a situation where sex technology shapes women’s sexuality beyond their control. In other words, the sex toy designed by Søndergaard (2020) is expected to give women an alternative body perception situated in technological development. It is worth noting that embodied experiences are important for sex toy designers as well as users. By interviewing sex toy designers who reside in Hong

Kong, Canada, Sweden, China, and the US, Bardzell and Bardzell (2011) find how sex toys are designed by mobilizing designers' own experiences, emotions, and physical pleasure. Embodied experiences play a key role in shaping sexual subjectivities and product design in the field of HCI.

2.5. Designing Sex Toys in the Market for Activism

In addition to the critical analysis of sex toy shape (Döring et al., 2022; Das, 2014; Fahs and Swank, 2013), the design of sex toys is studied in relation to the market. By collecting data from an online sexual wellness retailer in the UK, Johns and Bushnell (2023) identify that "consumers show a preference for insertable sex toys that are not direct replicas of the male penis, which suggests they are not seeking a realistic partner substitute" (Johns and Bushnell, 2023, p. 1). Beyond consumers' preference, the design of sex toys has an impact on the market evolution and market legitimation (Wilner and Huff, 2017). Through content and visual analysis of the US vibrator market, Wilner and Huff (2017) underscores the role of product design that contributes to "shifting and normalising cultural meanings due to the reconstruction of its semantics" (p. 245). The design as a key factor in fostering market acceptance includes not only visual presentation (forms and color) but also functionality. Consumers value the size, noise, battery drain, power intensiveness, and way of cleaning (Eaglin and Bardzell, 2011). Materials of sex toys (e.g. plastic or silicon) also serve the popularity of sex toys, while "jelly plastics are contained a substantial amount of chemicals that are toxic" (Naik, 2021, p. 170). In short, the design of sex toys shows the interplay with consumers' preferences, market legitimation, and regulation as well as heterosexual normativity.

Meanwhile, HCI associates design practices with social activism. The interview with sex toy designers reveals that pursuing a good sexual interaction design relates to "feminist activist research, which likewise advocates for the integration of knowledge and action" (Bardzell and Bardzell, 2011, p. 264). Designers of sex toys inscribe their expectations into the design. Hua et al. (2022) identify different values inscribed in the various shapes of vibrators such as fire, rabbit, butterfly, fish, flower, hammer, neckless, octopus, and phallus. The shape of vibrators represents designers' values "to explore future aesthetic, social, and political ways of being related to female sexuality" (p403). Future is modeled and performed by design processes where technology, society, and people are mutually elaborated. More importantly, the future inscribed in the design is often expected to function as a counter-argument against the existing socio-cultural conditions. Søndergaard (2020) also places the HCI interest in sex toys within feminism and argues that critical design practices "must also reflect on issues of gender, marginalization, and oppression as foregrounded by intersectional feminism" (p5). Design functions as a medium of critique by reifying ideologies, expressing socio-cultural contingencies, and representing subjected knowledge (Yadav et al., 2023; Ng et al., 2020). Questioning "what an "improved society" is

and how to achieve it” (Bardzell, 2010, p. 1306) is significant for feminist interaction design which aims to bring about political emancipation by focusing on the agenda unique to women (Ng et al., 2020; Bardzell, 2010).

2.6. Research Gap

While sex toys increase the popularity in the market and collect intellectual interest, researchers on sex toys insist on the need for further research. "Notwithstanding their significant cultural history and continuous rising popularity, sex toys are under documented and under researched" (Johns and Bushnell, 2023, p. 2). What is missing in sex toy studies is qualitative research that focuses on women's narrative of describing sex toy usage (Fahs, 2014). Compared to quantitative research, qualitative data regarding sex toys is scarce, and sex toy studies need to make an in-depth analysis, for example of what constitutes the perceived effects of sex toys in practice (Döring and Pöschl, 2020). More importantly, several researchers on sex toys refer to the West-centered scope as the research limit (Johns and Bushnell, 2023; Döring et al., 2022; Döring and Pöschl, 2020; Wilner and Huff, 2017). For example, Döring et al. (2022) underscore their research findings rely on sociocultural contexts in Western countries, "where human sexuality is fairly liberated and openly discussed" (p. 576). As Naik (2021) points out, some countries (e.g. Thailand, Saudi Arabia, and India) illegalize sex toys, and people in those countries have less accessibility to sex toys compared to Western countries. Accordingly, sex toy studies need to "include not just the artifacts themselves but also the surrounding materials and cultural contexts to allow a holistic understanding of how these elements shape, influence, and materialize" (Osipova et al., 2024, p. 3) (the use of) sex toys. In addition to the sensibility to cultural differences, it is also important to take into account that social identities such as gender, class, race, and (dis)ability influence the experiences of sex toy usage (Fahs and Swank, 2013; Attwood, 2005). Besides, institutional dimensions are worth noting as sex toys are commodities that are situated in brand strategies (Wilner and Huff, 2017). In short, sex toy studies need to fill the research gap by collecting qualitative data and attending to diverse situatedness.

There is a huge research gap between Western and Japanese sex toy studies. Except for a few research (e.g. Dales, 2005), sex toys in Japanese contexts are under-researched. Women's masturbation has barely collected social interest. This is because Japan has a different understanding of feminism and because sociocultural norms implicitly categorize female masturbation as taboo. First, Japanese feminists have not foregrounded women's sexual pleasure compared to Western feminists. During second-wave feminism, white feminists tended to celebrate the pursuit of sexual pleasure by following sexual desires and interacting with their sexual organs (Comella, 2020; Lieberman, 2017). On the other hand, Japanese feminists hesitated to accept sexual pleasure in direct ways. This attitude to sexual pleasure was

influenced by the fact that oral contraception pills were not legally accepted until 1999 (Motohashi, 2018). Thus, Japanese feminists avoided focusing on sexual pleasure except for fashion magazines in the 1980s where women's sexual exploration was appreciated (Kitahara, 2011). Instead, sexual activity was formulated in relation to mutuality and equality in sexual practices and negotiations with partners (Tanaka, 2007). Put differently, sexual activities were de-sexualized and contextualized in communication issues. Whereas white pro-sex activists selling sex toys insisted on the importance of independent sexual pleasure, Japanese discourses regarding sexual practices take for granted the co-existence with a partner, which is reinforced by commercial media such as fashion magazines (Kitahara, 2011). Importantly, the association between sexual practices and heterosexual communication draws the boundary between normal and abnormal sexual practices (Motohashi, 2018). In particular, sex with love between heterosexual couples is regarded as a 'normal' sexual practice, while other forms of sexual practices including masturbation are seen as deviant. In sum, the Japanese sociocultural conditions around women's masturbation are relatively conservative, which would make the research gap in sex toy studies in Japan.

3. Research Question

Sex toy studies need to focus on qualitative data with the sensibility to cultural differences. While quantitative research reveals that sex toys bring both positive and negative effects, qualitative data is not enough to understand how these effects are experienced in practice. As HCI emphasizes, the experiences with sex toys affect users' sexual subjectivities and embodiment, which should be explored from diverse perspectives. Importantly, the exploration of sex toy use with qualitative data should be sensitized to cultural contexts. As Döring et al. (2022) recommend, one of the future contributions to sex toy studies is research in more conservative countries where sex toys and masturbation are still considered taboo. Since sex toy studies greatly rely on Western liberated culture, research outside of the West is valuable. In this sense, studying sex toys in Japan has the potential to diversify the discussion in sex toys studies because Japanese feminists have historically less developed the issue of women's sexual pleasure, and thus the sociocultural conditions around female sex toys are relatively conservative compared to the West. Research on sex toys in Japan makes an interesting contribution by investigating the similarities and differences in the view of sex toys between Japan and the West. Especially, I draw on the discussion in HCI and postfeminism. HCI explores the relationship between sex toy design, embodiment, and social activism. Meanwhile, postfeminism sheds light on the entanglement between sex toys and neoliberal

consumer cultures. In short, Western researchers place sex toys in the intersection between politics, the market, and bodies.

Following the Western analysis of sex toys, I examine the position of sex toys in Japanese society. In particular, I focus on *iroha*, a Japanese female sex toy brand. As I described in the introduction, *iroha* is a key economic player in the Japanese sex toy industry since *iroha* extends its business fields by changing the sociocultural image of sex toys through sophisticated product design. In other words, *iroha*'s practices are intertwined with social taboos, economic activities, and design aesthetics. Considering these characteristics of *iroha*'s sex toys, I explore **how *iroha*'s designed sex toys intersect with politics, the market, and bodies in Japanese society**. Drawing on the controversial valuation in postfeminism (a tool for sexual emancipation or a normative object), I assume sex toys incorporate multiple values that are contrasting at some point and complementing at another point. Sex toys play a political role in women's sexual emancipation, while they also contribute to increasing economic benefits. Hence, my first question aims to identify **how *iroha*'s sex toys are valued from different perspectives**. This question will be answered by analyzing the designers' and users' descriptions of *iroha*'s sex toys. In particular, I first try to identify what views the designers inscribe in sex toys and what expectations the users have toward *iroha*'s items. Besides, I focus on the practices to shape, maintain, and increase each value. Drawing on the notion of registers of valuing, my analysis also sheds light on the relationship between different value practices that make tension and/or harmony.

The second sub-question is **how and in what sense *iroha*'s employees understand the company's practices as feminist actions**. I start answering this question by attending to the difference between the institutional attitude toward feminism and the employees' individual understandings of feminism. Meanwhile, it is also important to take into account that Japan has a different history of feminism. Feminist actions are situated and need to adapt to local conditions. Accordingly, the form of *iroha*'s feminist actions is different from the West and depends on the local conditions of feminism in Japan. Drawing on the notion of boundary works, I analyze how *iroha*'s employees contextualize the company's practices in feminist actions.

Finally, I focus on the practical effects of *iroha*'s sex toys that bring to users' bodies. since sex toys are products that make intimate interactions with bodies, both designers and users value sex toys in relation to the body. Specifically, the designers assume a certain type of body as users, while users buy products with the expectation of a particular corporeal result. However, the body that each designer and user conceptualizes is not necessarily the same. In this regard, the third sub-question is **what types of bodies are (not) valued through the interaction with sex toys**. Drawing on body multiplicity, I seek the different conceptualizations of bodies that are described when designing and using sex toys. In turn, I try to connect the findings with feminism scholarship.

4. Sensitizing Concepts

This chapter introduces conceptual frameworks for the following analysis. First, I clarify the meaning of the main research question: **How do iroha's designed sex toys intersect with politics, the market, and bodies in Japanese society?** This question includes the terms politics, the market, bodies, and Japanese society whose meanings are contesting and can be defined differently. Drawing on Brown's discussion (2015), I explain how to conceptualize politics in this paper, and in turn, link my analytical scope with the Japanese tradition of social activism which intersects with economic practices. In particular, I narrow my research interest down to one type of social action, namely feminism which is intertwined with politics and the market, with a sensibility to the situatedness of Japanese society. Afterward, my focus shifts to three sub-questions. I give one sensitizing concept to each sub-question. The first sensitizing concept, *registers of valuing*, helps to answer the first sub-question: **how are iroha's sex toys valued from different perspectives?** The discussion in valuation studies sensitizes me to the practices of valuation that are performed from multiple perspectives. Related to the second sub-question which asks **how iroha's employees understand the company's practices as feminist actions**, I introduce the notion of boundary work. The notion of boundary work draws my attention to both the field of feminism for iroha's employees and the actions of feminism that iroha's employees perform. The third sensitizing concept is body multiplicities. The notion of body multiplicities enables me to explore the third sub-question: **What types of bodies are (not) valued through the interaction with sex toys?** As this question pluralizes bodies, the notion of body multiplicities gears my analysis to identify different enactments of bodies in the interaction with sex toys. Finally, I overarch the theory chapter and method chapter with the notion of situated knowledge. The notion of situated knowledge helps me reflect on my positionality and how the situatedness of my research influences research findings.

4.1. Conceptual Frameworks

This section explains how this paper deals with the general terms in the main question, including design, the market, bodies, and Japanese society, by clarifying the meaning of politics. The term politics is a broad concept and difficult to describe in a single definition. The scale of politics differs in contexts (global or national politics), and the form of participating in politics is also diverse (parliament representation by national vote, lobbying practices in institutions, activism, etc.). This paper approaches the issue of politics by drawing on Brown's conceptual frameworks (2015). Brown starts defining the

noun ‘politics’ and the adjective ‘political’. In Brown’s discussion, the noun ‘politics’ refers to particular kinds of activities, while the adjective ‘political’ describes something having origins, implications, or effects to do with politics. This understanding of politics as activities provides a key analytical question: What are people doing when people do politics? Rather than defining politics in a single definition, Brown’s discussion calls for attention to the diverse ways in which people arrange actions to achieve political goals. Accordingly, I understand politics as activities with a certain ‘political’ intention or implication. More specifically, I see the sex toy design as politics-as-activity with feminist intentions. Feminists have fought against social injustice, especially gender inequality in the public and private spheres, and organized activism to transform political systems and social climates. Thus, what I mean by feminist intentions is the will to improve gender inequality and change society. My analysis is devoted to examining what sorts of problems iroha’s designers address and how they understand the societal impacts.

The notion of politics-as-activity also sensitizes me to the contingency of politics. "The conceptual tradition of politics-as-activity ... emphasizes the temporal and contingent dimensions of politics" (Brown, 2015, p. 7). The emphasis on the temporality and contingency of politics diversifies the field and actors of politics. In other words, the notion of politics-as-activity raises another intertwined question regarding the analysis of politics: Where do you find politics? As Brown (2015) underscores, the spatial boundaries between politics and other fields are blurred in contemporary society. While the 19th-century political theory tried to make a clear distinction that separates politics from economics, law, science, and morals, most scholars nowadays “acknowledge the proliferation of ‘subpolitics’ within businesses, laboratories, households, and other diverse locations” (Brown, 2015, p. 7). The proliferation of subpolitics requires to contextualize the analysis of politics in a specific place. With the sensibility to the situatedness, I focus on the Japanese market as the place where iroha’s politics-as-activity is performed.

Moreover, Brown takes into account objects as actors in politics. "A spatial-conception appears in the notion that someone is ‘in politics’...and conversely, it appears in the claim that politics can be ‘inscribed in’ technical artifacts" (Brown, 2015, p. 7). When technical artifacts are involved in politics-as-activity, “[w]ell established artifacts may ‘have politics’” (Brown, 2015, p. 6). Paraphrasing Brown’s argument for my research, well-established sex toys may engage in the politics of gender and sexuality. Because designers inscribe their views into technical artifacts so that “morality, technology, science, and economy will evolve in particular ways” (Akrich, 1992, p208), my analysis focuses on iroha’s sex toy design practices. However, as the concept of description underscores (Akrich, 1992), the users do not always follow the designer’s intention. Users can de-scribe designers’ scripts and interact with artifacts differently beyond the designers’ expectations. In other words, artifacts may have politics, but the political consequences of artifacts are open-ended. Therefore, my analysis incorporates how the

designed objects act in the encounter with the users. Specifically, I closely look at bodies as the place where designers try to intervene and users encounter sex toys.

The notion of politics-as-activity helps my analysis in three ways. First, it allows me to see the sex toy design practices as doing of politics. By understanding politics as a certain activity with political intentions, I will analyze iroha's sex toy design practices with the sensibility of feminism. Second, the notion of politics-as-activity grounds my analysis in a specific context. Activities with political intentions are performed in a particular place. Considering the situatedness of politics-as-activity, I foster my analytical scope concerning the Japanese market. Third, the wide perspective of politics sensitizes me to objects. Since the notion of politics-as-activity highlights the interplay between objects and activities, my analysis also focuses on bodies where the designer's political intentions encounter users through artifacts in practice. In sum, this paper situates politics in three sites: design practices, the Japanese market, and bodies. The following sections follow up on how these three sites can be political more concretely.

4.1.1. Design Practices

The first site of politics-as-activity is iroha's design practices of sex toys. My underlying assumption is sex toys are designed with political implications, especially feminist intentions. As some second-wave feminists and preceding feminists claim, sex toys have a political implication for women's sexual emancipation and empowerment (Lieberman, 2017; Comella, 2020). In this sense, I share the political view of sex toy advocates, *the personal is political*. Although the sex toy activism is what Brown (2015) calls 'subpolitics' which does not directly intervene in political systems, I consider iroha's sex toy design practices as politics-as-activity that foregrounds women's personal sexual lives as political issues. As Bardzell et al. (2015) argue, designed objects contribute to social transformation by offering "a critique of the present and reveal[ing] alternative futures" (p. 2095) and by opening "a discussion of complex cultural and social norms such as gender and taboos and on how these are affected by the design of particular technologies." (p. 2100). In this sense, my analysis aims to identify the intersection between feminism and design.

4.1.2. Japanese Market

The second site is the Japanese market. Considering the Japanese situatedness of feminism, I insist on the role of the market in feminist actions. As Dales (2005) underscores, the term feminism tends to be considered as not indigenous to Japan, and it is consequently positioned "outside the boundaries of patriarchal Japanese thought and traditional notions of female identity" (p. 184). Meanwhile, Otsuka (2001) argues that feminism failed to fill the gap between what Otsuka calls 'something like feminism'

that emerged in domestic cultures. While feminism was imported to Japan in the 1970s and discussed in the academic world, there was simultaneously ‘something like feminism’ in the Japanese sub-culture in the market. For example, Japanese comics for teen girls in the 1980s expressed the anxiety triggered by the drastic social change in women’s sexuality and sought a way of accepting liberated womanness and sexuality (Otsuka, 2001). In other words, expressing women’s new sexuality in comics is politics-as-activity, although it does not have a direct impact on political systems. Through the market, some creators of Japanese girls’ comics distributed a narrative to shape women’s sexuality and worldviews in post-modern society (Otsuka, 2001). Popular and common in Japan is the quasi-feminism style which does not directly commit to political action but represents or implicates the matter of feminism through cultural and commercial practices in the market (Fanasca, 2022; Aoyagi and Yuen, 2016; Dales, 2005). For this reason, this paper understands the Japanese market as not only a competitive economic place but also a political field.

4.1.3. Bodies

The third site is bodies. Bodies are the place where the designer and user encounter one another through sex toys. As explained in the following section (4.4. Body Multiplicities), this paper explores the issue of bodies from multiple perspectives. Hence, this section focuses on the political characteristics of bodies. Postfeminists point out that women in neoliberal society are forced to work on their bodies. Feministic discourses in the neoliberal economy render women postfeminist subjects incited to “be compulsorily sexy and always ‘up for it’” (Harvey and Gill, 2011, p. 56), to view themselves as desirable (Tappin et al., 2023), and to work on “improving her sexual performance and ‘spicing up’ her sex life” (Mayr, 2022, p. 173). The entanglement with feminism and the market foregrounds the sexiness of bodies, for which women are elicited to work. Postfeminists criticize the emphasis on body sexiness because it fixes a certain beauty standard (White-middle class) and also because the issue of sexual emancipation is reduced to personal consumption of beauty items. As Gill (2007) highlights, the entanglement with feminism and the market creates tension between collective political actions and empowerment through individual consumption.

To overcome this gap, Mol (2009) insists on the role of bodies. Particularly, Mol articulates the notion of consumer-citizen by criticizing the tradition of Western political theory that places citizens and consumers in tension. According to Mol (2009), the difference between citizens and consumers is defined depending on the relationship between subjects and bodies. “In most discussions about consumers and citizens ‘the body’ stays in the background. But it is always there. And it is presumed to have *naturally given lusts*” (Mol, 2009, p. 270). Subjects can be citizens by taming lusts. It is only by overcoming individual physical desires with metaphysical rationality that people become citizens. The separation

between economic subjects and political agents is represented in how to deal with the body as lust. In other words, if individual physical pleasure can be connected with achieving the common good, the separation between economic subjects and political agents can be resolved. Mol (2009) cultivates the potential to connect consumers with political actions by analyzing the interaction between food products and bodies. Following her analysis, this paper also sees consumers' bodies as a locus that has politics.

4.2. Registers of Valuing

The underlying of this research is that sex toys are political symbols for women's sexual emancipation in feminist contexts but also commodities in the market. Accordingly, the value of sex toys differs depending on what aspects of sex toys are focused on. Because iroha is part of a company and designs sex toys with a number of employees, iroha's sex toys have different values for each employee who has a distinctive working position such as product development, marketing strategies, and brand management. The first sub-question explores multiple values inscribed in sex toys: **How are iroha's sex toys valued from different perspectives?** Following valuation studies, I see values as situated not pre-given. Rather than asking for the definition of value, valuation studies investigate how a value is shaped by looking at the process and practices of valuation. The term valuation not only refers to evaluation that judges either valuable or not, but it also includes valorization that increases the worth of things. Accordingly, I also focus on how sex toys are attributed worth by attending to the design practices and users' experiences.

The focus of valuation studies shifts from the worth itself to "the different registers of worth that actors in a specific domain draw on to inform, orient, or justify their actions" (Fochler, 2016, p. 7). The worth of things changes if people value their actions based on a different register. In other words, the notion of registers sheds light on the relationship between worth and actions. Heuts and Mol (2013) explore this relationship between worth and actions by developing the notion of registers of valuing. The shift from worth to valuing emphasizes practices involved in valuation "from assessing and appreciating, to adapting and improving" (Heuts and Mol, 2013, p. 130). Importantly, Heuts and Mol (2013) underscore that different registers of valuing are integrated or conflicted into one thing. Asking what a good tomato is, Heuts and Mol investigate different valuations performed by people who develop, grow, process, sell, cook, and eat tomatoes. Their qualitative research reveals that different registers of valuing tomatoes work together to create tension and complement each other. Registers of valuing sensitize researchers to not only different valuations performed by particular actors but also the relationship between registers.

Registers of valuing enriches my analytical scope in three ways. First, it sensitizes me to different values of iroha's sex toy because registers differently foreground a particular value of the thing. For

instance, registers of valuing make it possible to analyze multiple values of iroha's sex toys as political symbols, commodities, and other cultural functions. Second, the notion of valuing sheds light on the process and practices of valuation. Hence, my focus is also on how the value of sex toys is assessed, appreciated, improved, and valorized in different registers. Third, the notion of registers highlights the relationship between the registers. Accordingly, I also analyze how different registers overlap and conflict with each other in one thing.

4.3. Boundary Work

The second sensitizing concept is boundary work. Boundary work is a STS concept used for studying how demarcation is made. Gieryn (1999) develops the concept of boundary work by challenging the traditional idea that science is autonomous and purely objective. The key argument in Gieryn's paper is that science is socially constructed through discursive and institutional practices. The concept of boundary work refers to the performance of demarcating science from non-science. It gives an analytical scope to investigate how scientists strategically claim, contest, and increase their values. In other words, the concept of boundary work interprets scientificity as a matter of representation rather than an essential and stable property of claims, methods, or disciplines. Boundary works are performed in different ways to gain credibility. For example, practitioners in boundary work engage in "the discursive practice of differentiating—or creating a boundary—between one's own scientific knowledges, arguments or methods (portrayed as more legitimate) / and those (portrayed as less legitimate) of others" (Burchell, 2007, p. 3). They seek to legitimate their arguments by insisting on the authenticity of their truth-judging system and excluding rival epistemologies. While they try to expand their fields by associating with political and market ambitions, they also make efforts to defend their territories from external interventions. "Performativity is key to the theorizing of boundary-work" (Pereira, 2019, p. 9).

Drawing on the concept of boundary work, my analysis pays attention to discourses and social formations that demarcate one from another. Particularly, I focus on the boundary work of feminism rather than science. The concept of boundary work helps me answer the second research question to investigate **how and in what sense iroha's employees understand the company's practices as feminist actions**. It is useful to analyze how iroha formulates its feminist stance and demarcates itself from other types of feminism by arranging discourses.

4.4. Body Multiplicity

One of my research focuses is the interaction between sex toys and bodies, and I analyze what types of bodies are (not) valued in the interaction by drawing on the notion of body multiplicity. Critical

feminists discuss the matters of bodies by attending to the process of making a body. As Butler (1990) argues the process of ‘gendering’, discourses exercise power to shape a body perception in particular ways. Murphy (2006) expands Butler’s analysis from discourses to materials, which “calls attention to the physical arrangement of bodies and technologies within specific physical environments” (Waidzunus and Epstein, 2015, p. 192). In other words, the feminist discussions about bodies focus on embodiment rather than the body itself and “emphasise the importance and inescapability of embodiment as a differential and fluid construct, the site of potential, rather than as a fixed given” (Shildrick and Price, 2022, p. 3). This understanding of bodies resonates with an STS approach to exploring body multiplicity. STS, more particularly post-ANT sheds light on a particular set of activities that enact a certain type of body. For example, clinical practices multiply the body to bodies. In the activity of cutting, viewing with ultrasound, and weighing, “it is not that this same body is fleshy, opaque, or heavy - rather this is a fleshy body, now it is an opaque body, now heavy body” (Michael, 2017, p.120). Depending on how to intervene with the body, the reality of bodies is changed, and the word “this” and “now” shows the particularity of a body. Post-ANT highlights the process of making a body rather than the body as a singular entity. The difference between an article, ‘a’ and ‘the’ body is important in the sense a body refers to one form of body and leaves the possibility of alternative body formations. Considering body multiplicity relates to how to intervene in, formulate, and make sense of bodies.

Drawing on body multiplicity, Mol (2009) underscores bodies as a locus where other actors encounter and interact. The body in Mol’s discussion is mediated with others. She explains the body as a locus with the example of wine connoisseurs. They “differentiate between wines made with different grapes, coming from different regions, different vintages and different years” (Mol, 2009, p. 277). Tasting practices formulate the wine connoisseur’s body as a locus where one encounters other actors such as material objects but also special and temporal particularity. Importantly, this body is neither merely natural nor cultural. Wine connoisseurs learn and improve how to taste through training. “In the ability to taste, nature and culture are intertwined. This goes more generally for physical sensitivities: they are adaptable. Limits and extremes aside (but it is hard to draw the boundaries), sensations are historically and culturally specific” (Mol, 2009, p. 277). A physical sense of taste is culturally cultivated, which senses the historical specificity of a thing. The tasting body is a nature-culture thing.

The example of wine connoisseurs sensitizes me to three crucial points regarding body multiplicity. First, individuals sense bodies differently. As the action of tasting relies on the wine connoisseur’s learning experiences, the wine is differently tasted if other people drink it without training. The relationship between wine and bodies differs depending on the capacity of tasting people. In this sense, embodied experiences are situational and open to alternative interpretations (Skeide, 2019; Almeida et al., 2016; Keilty, 2016; Akrich and Pasveer, 2004). Second, relatedly, the difference of objects

as well as individual capacity affects the enactment of bodies. Drawing on the example of wine connoisseurs again, they experience a different body if they taste another wine made from a different place and age. Bodies are not only individually different from others but also change in themselves depending on times and situations (Malpass, 2016; Bardzell, 2010). Bodies are neither pre-given, fixed nor singular, but rather enacted, relational, and multiple.

Furthermore, beyond Mol's discussion, body multiplicity has an impact on subjectivity. If people experience their bodies differently in a particular situation, the subjective understanding of the body is never static. "Underlining how the body can be differently invested, transformed and (re)configured through the interception with the devices might contribute to perceive the boundaries of identities as unstable, changeable and non-given" (Faustino, 2018, p. 254). Flore and Pienaar (2020) explore the contingent relationship between bodies and subjectivities by focusing on the issue of sexuality. They call for attention to the entanglement between sexual subjectivities and the technological enactment of bodies. Sexual subjectivities are produced through specific sexual practices with a particular technology, in their case teledildonics. In this sense, technology "cannot be considered exterior to sexual subjectivity" (Flore and Pienaar, 2020, p. 290). Besides, it is also worth noting that scholars in HCI and New Materialism take into account subjective feelings as a component of embodiment (Del Busso et al., 2022; Fox and Bale, 2018). In particular, since intimate technology including sex toys touches social taboos, users sometimes face psychological stress, which influences the way they experience their bodies (Yadav et al., 2023). Put differently, the interaction between technology and bodies is experienced as "complex emotional and sensory processes of engagement and disengagement involving specific and concrete moments of embodying agency" (Del Busso et al., 2022, p. 1371).

Following rich discussions of body multiplicity, I analyze a certain type of body as a locus where designers and users interact with sex toys. Sex toys are a technology that sensually intervenes in users' bodies, and users make sense of their bodies by products' stimulations. User's bodies are relational objects that are enacted at a specific moment when one uses sex toys in a particular way, for example touching the body surface or inserting inside of the body. The example of wine connoisseurs implies that the body in the interaction with sex toys is differently sensed depending on the experiences that users have in advance. As the taste of wine varies depending on the connoisseurs' learning experiences, the sense of sexual pleasure is also changeable for each user. In addition, sex toy users can experience their bodies differently in a particular moment and situation. This means that one user can have multiple relationships with sex toys and sense their bodies in different ways. Furthermore, the sensitivity to sexual subjectivities draws my attention to that subjective feelings are involved in the interaction between sex toys and bodies. In this regard, my analysis attends to the perceived effects of sex toys on gender and sexuality.

4.5. Methodological Sensibility: Situated Knowledge

Last but not least, the notion of feminist objectivity/situated knowledge provides theoretical consideration but also gives methodological sensibility. Haraway (1988) conceptualizes feminist objectivity in contrast to modern objectivity. Scientific knowledge produced by modern objectivity seeks to establish a transcendent argument that is detached from social values, norms, and power relations. On the contrary, feminist objectivity foregrounds mediations that modern objectivity conceals and shifts the focus on visions that are embodied by social practices and values. It also attends to non-human actors that materially contribute to shaping visions. Feminist objectivity has the sensibility to situatedness. “Feminist objectivity means quite simply situated knowledge” (Haraway, 1988, p. 581). While situated knowledge shares the underlying assumptions with the aforementioned sensitizing concepts, my emphasis is on methodological contributions. The focus on visions sensitizes me to the social aspect of valuations. Descriptions of the values of sex toys are situated in a particular context. For instance, one vision of iroha's item is mediated through a particular social position: users, material designers, marketing specialists, and retailers. Embodied experiences with sex toys vary depending on social identities such as gender, age, class, and (dis)ability. Meanwhile, material conditions are also involved in visions: product materials, technological functionality, and body differences. The sensibility to situated knowledge draws my analytical attention to external factors that influence valuation.

5. Methods

This chapter shows how I designed and conducted my research while reflecting on my positionality and addressing problems I faced in practice. I collected data using two methods: document analysis and semi-structured narrative interviews. From content on iroha's official website to articles and books written by my interviewees, I analyzed a wide range of documents. The qualitative interviews were conducted with iroha's sex toy designers and users, which focused on the informant's personal experiences. I interviewed four people from iroha and four users of iroha's sex toys between December 2023 and August 2024. In the preparation phase of the interviews, I paid particular attention to my positionality and ethical concerns, since my research topic was highly sensitive and I was an outsider researcher against the female sex toy brand and its users. This reflection contributed to organizing the interview structure. Even so, I encountered unexpected tension with my research participants, but the interviews generally went well and provided rich data. All interviews were recorded and coded by thematic analysis.

Before narrowing down to two specific methods of document analysis and narrative interviews, I overview the relationship between the research questions and methods. In order to answer the first research question (**How are iroha's sex toys valued from different perspectives?**), I sought informants who put a certain value on iroha's items from both the design and user sides. My first interest is what kinds of values are inscribed in their products. I tried to identify the inscribed values through document analysis and qualitative interviews. Since iroha provides a lot of information online, I collected materials from the Internet including the official website and interview articles such as on the newspaper. While these documents helped me understand the brand goals and views, they were not enough to deepen the situatedness and valuing practices. Thus, I also conducted qualitative interviews to explore how individual and institutional values are inscribed and materialized in the form of sex toys. The qualitative interview was also helpful to focus on my second research question; **How and in what sense do iroha's employees understand the company's practices as feminist actions?** Through hearing about individual experiences and appreciation of feminism, I found that iroha's workers had an ambivalent attitude toward feminism, whereas iroha does not officially show a connection with feminism. Moreover, since this research aims to identify various values circulated around sex toys, I also collected users' voices. Although users' reviews on the official website gave me some inspiration, my primary source of users' opinions is qualitative interviews. Interviewing with users provided quite interesting results to compare the designer's values. They sometimes overlapped with each other but conflicted at other points. Additionally, user interviews also contributed to exploring the third research question; **What types of bodies are (not) valued through the interaction with sex toys?** This is because I found diverse body perceptions from users' descriptions when comparing them with that of designers who came from the same institution.

In the following, I describe the research process by starting the reflection on my positionality, and then explaining the detail of my research procedure.

5.1. Reflection: Positionality and Ethical Concerns

Reflecting on positionality was a key preparation for diving into actual research practices because my research topic relates to female sexuality which is usually confidential against men. In the reflection of my positionality, the notion of situated knowledge gives me methodological sensibilities. I am a cis-gender heterosexual man, and situational knowledge teaches me that social identity is inseparable from knowledge production. Butler's critical remark (2007) is striking to show a concrete issue of my positionality. Butler criticizes the "association of the body with the female works along magical relations of reciprocity whereby the female sex becomes restricted to its body, and the male body, fully disavowed,

becomes paradoxically, the incorporeal instrument of an ostensibly radical freedom” (p.12). Research regarding women’s bodies might fall into perpetuating patriarchal dichotomy by reinforcing the contrast between women’s embodiment and men’s incorporeality. Butler also adds that women’s embodiment tends to be discussed in association with sexuality and that the sexed body is often framed as the emancipated subject, but these discourses are naively accepted without critical consideration. The discussion of women’s sexual embodiment demands critical questions: Who sexualizes women’s bodies and for whom? This critical perspective is greatly important for me as a male researcher on the issues related to women, sexuality, and bodies. A reflective concern is relentlessly asking whether I arbitrarily interpret collected data from a male perspective.

Another concern about my positionality is my cultural background. I was born and raised in Japan for over 20 years. Meanwhile, I am currently studying STS in Vienna, the heart of central Europe, which taught me various cultural differences. These two different cultural experiences shape my research interests. Through touching on relatively liberal visions of gender/sexuality in Vienna, I began questioning relatively conservative norms in Japan. Between Japan and Vienna, I faced two different realities in the field of gender/sexuality. The important thing is not making a hierarchy between the two realities. Rather than judging visions of gender/sexuality in Japan from the European perspective, it is crucial to understand how people in one situation deal with reality. Keeping the situatedness in mind, I avoid projecting my arbitrary interpretation toward the findings.

The reflection on my positionality brought the risk of misinterpretation to the fore but also shed light on practical ethical issue to be taken into account when outsider researchers engage in sensitive topics. Reflecting on my cultural backgrounds reminded me of the relatively conservative views of sexuality in Japan. Women’s sexual desire is concealed by social taboo in Japan, and thus talking about sex toys and sexual practices is regarded as shameful behavior. Hence, I had to pay attention to the risk that my research would give emotional and psychological burdens to participants. Moreover, my positionality as a cis-gender heterosexual man also complicates interview practices. Talking about sexuality from a woman to a man demands trust that removes the fear of sexual objectification and ensures privacy protection. Additionally, interviews aim to collect data regarding women’s views on sex toys and sometimes include sensitive questions such as about private sexual experiences, through which participants might remember negative memories and sexual trauma. Following these reflections on my positionality and the risk of interviews, I prepared a specific informed consent where participants can confirm the right to reject answering, stop an interview anytime by their decision, and change the accessibility to data even after the interview. This informed consent was always checked twice both by email and before recording the interview. To reduce participants’ psychological barriers, I also attend to the way of communication that clarifies my background and genuine interest in the research topic.

The consideration of ethical concerns was also reflected in the interview structure. I tried to make an interviewee-oriented interview so that interviewees would not have psychological pressure and not feel forced to talk about their trauma and negative sexual experiences. In particular, I paid attention to both preparing open questions and creating a comfortable atmosphere so that participants could be active narrators. Open questions gains the freedom for interviewees to talk about topics that are not directly related research focus. Following Fraser's instruction of narrative interviewing (2004), I "appreciate that personal stories often contain circular, overlapping and 'slightly chaotic' utterances" (p. 185). In terms of creating a comfortable atmosphere, I take into account the emotional framing of interviews. Ezzy (2010) argues that "all interviews are emotional and embodied performances and that good interviewing is facilitated by a reflexive awareness of, and engagement with, the emotional, embodied, and performed dimensions of the interview" (Ezzy, 2010, p. 163). In other words, the emotional structure is one factor defining the quality of the interviews because it influences how participants interact with researchers and thus relates to what types of data can be collected. Since my interviews aimed to collect private and sensitive data, I tried to make participants feel secure by expressing genuine interests through non-verbal cues and structuring the procedure of interviews. Even though body language and some bodily senses tend to be omitted due to online meetings, I tried to show my genuine interest through facial expressions, nodding, and sounds. Besides, to reduce interviewees' nervousness, all interviews started by briefly introducing myself and having a casual conversation, while asking whether they had any concerns about privacy protection.

5.2. Document Analysis

I analyzed documents for two different needs. The first document analysis was the preparation for the semi-structured narrative interview. I collected documents regarding my research participants. Because iroha makes many efforts to enhance brand awareness in the market, the media relations team actively got interviews on diverse media. For my interview, I closely read two online articles written by an interviewee and two published online interviews with the interviewee, which helped me shape the interview questions. I also read two biographic books written by user interviewees, which helped me understand the participants' backgrounds. The second document analysis was conducted to collect data that supplements the interview data. The primary source of documents for the second need is iroha's official website, while the documents collected for the interview preparation also gave rich data to support research findings in the interviews.

In terms of the first need, document analysis helps outsider researchers conduct an efficient interview. For example, researching topics in advance through documents is a crucial preparation for

outsiders. Peeck (2015) emphasizes the importance of extensive research when conducting a cross-cultural interview as an outsider interviewer. Since an outsider is less relevant to the issues that the research target experiences, there is a risk that “one may spend too much time talking about general concerns that can be researched through other material” (Peeck, 2015, p.119). Thus, outsider researchers need to investigate research topics as much as possible to “be able to ask the right questions at the right time” (Peeck, 2015, p.118). Regarding the preparation of interviews, document analysis also helps researchers create interview questions. Since questions play an important role in shaping interview directions, researchers need to cautiously select the interview questions so as to fit them with research interests. In this sense, “information contained in documents can suggest some questions that need to be asked and situations that need to be observed as part of the research” (Bowen, 2009, p. 30). As I will describe in detail later, I used document analysis as a brainstorming to prepare questions. The brainstorming through documents worked well to enter an unfamiliar research field and identify my interest in the research target.

Additional document analysis was needed to strengthen my arguments. Document analysis supports overcoming less accessibility to data. The common challenge of outsider researchers is to gain the trust of a certain group and enter the inside. Especially, the more sensitive the research topic is, the more difficult it is to find research participants. On the contrary, it is relatively easier to collect material on the internet that is already open to the public. Thus, document analysis gives valuable data for outsider researchers. “Information and insights derived from documents can be valuable additions to a knowledge base” (Bowen, 2009, p. 30). In particular, I mainly analyzed documents on iroha’s official website. It includes six webpages; *Top*, *About iroha*, *Products*, *Shop*, *Support*, and *News*. I especially focused on the webpage *About iroha*, *Products*, and *Support*. The first webpage provides general information about the brand where iroha introduces the brand history and design process. On the page of *Products*, people can see the photos of all products made by iroha from sex toys to intimate care items such as lubricants and body soap. Clicking a product, you can jump to the webpage that describes product functionality with texts, photos, and a short video. The third webpage *News* posts not only new product information but also edited articles about medical information and social events. I collected materials from these three webpage and sought the description and visualization to represent iroha's values.

Document analysis of iroha’s website was more sensitized to analytical concepts than that for the interview preparation. Drawing on the notion of document tools (Asdal and Reinertsen, 2021), I attended to the performativity of documents. Documents are not neutral but performative in the sense that they can “take an active part in the emergence as well as in the shaping of issues” (Asdal and Reinertsen, 2021, p.148). Accordingly, my analysis attended to what issues are referred to in the documents and how they are contextualized in iroha's activities. In addition, the notion of document sites (Asdal and Reinertsen,

2021) is also important in my document analysis. The notion of document sites "can help us to be 'site-specific' to analyse and understand what is unique and special about this particular document, or the particular type of document of any given instance" (Asdal and Reinertsen, 2021, p. 147). Documents are interrelated with the site they are situated in. For example, the official website of iroha has eight language options, including Japanese, English, French, German, Spanish, Korean, and Chinese. Because of language differences, the website's contents are slightly different, as far as I checked both Japanese and English versions. As I see later in the findings chapter, some words in the Japanese version are not translated into English and just cut off. This difference is slight but significant because not-translated words imply cultural differences that are difficult to explain without relying on specific Japanese words. In other words, the document site-specificity reflects sociocultural specificity. In this light, I analyzed both Japanese and English versions by comparing their contents. When quoting sentences from the website, I usually use the English version, but if I need to add some Japanese contexts, I translate the Japanese version into English.

Furthermore, I conducted document analysis with a sensibility to visual ethnography. Since my research focuses on sex toys as a commodified material object, the visual presentation is also a crucial factor in increasing their value. Indeed, the official website introduces products by composing texts, photos, and videos. As Asdal and Reinertsen (2021) point out, documents also incorporate non-textual information such as numbers and accounting techniques. Following this point, I regarded visual materials as a part of documents and included them in my analysis. Specifically, I drew on Rose's analytical scope (2016) which focuses on the compositional and social modalities of visual images. The compositional modality sheds light on the content of images such as color and spatial organization. Analysis of the social modality pays attention to "the range of economic, social and political relations, institutions and practices that surround an image and through which it is seen and used" (Rose, 2016, p. 26). With the sensibility to two modalities, I closely looked at what contents are incorporated in visual images on the website and what social values are inscribed in it.

5.3 Narrative Interviews

Narrative interviews share the underlying assumption of feminist objectivity. Research with feminist objectivity focuses on situatedness rather than generalizing research results. In this regard, narrative interviews methodologically follow my theoretical sensibility because narrative researchers pay attention to narratives that are influenced by personal perspectives and depend on "cultural modes of reasoning and representation" (Fraser, 2004, p. 180). While narrative interviews are situational and thus difficult to generalize, they can collect 'good data' in a political sense. Drawing on the slogan of

second-wave feminism, *the personal is political*, intersectional feminists apply narrative interviews to “taking care to link the personal with political and understanding the effects of social problems” (Fraser and MacDougall, 2017, p. 5) without disparaging and pathologizing the marginalized people. Narrative interviews have the potential to collect and represent voices omitted from many research projects. In other words, narrative interviewing is inseparable from social justice. Fraser and Taylor (2022) argue that “(in-person) narrative interviewing has the potential to generate rapport with diverse participants that enables the production of ‘good data’, that is, data that are rich in detail but also politicised ” (p. 220). My research topic is related to personal (sexual) experiences. It is also sensitive and controversial. Considering these characteristics of my research, I selected narrative interviews with the expectation that they give me ‘good data’ to reveal the Japanese politics of sexuality. The following sections explain the procedure for interviews from sampling to coding. Through the all steps, I addressed concrete problems beyond conceptual frameworks.

5.3.1 Sampling

My sampling strategy is the snowballing method in the whole recruiting process. Snowball sampling begins “by identifying someone who meets the criteria for inclusion in your study... [and] then ask them to recommend others who they may know who also meet the criteria” (Trochim, 2006). I started by contacting one person who works in my research target, iroha. As she played a role in gate-keeping, after I gained her trust, it was relatively easier to find other participants from iroha. Nevertheless, I needed a lot of effort in the initial step to go through the gate between insiders and outsiders. The hardest part of sampling was a long e-mail negotiation with the first interviewee. She initially did not accept my interview offer because information regarding products and brand design should be confidential. Instead, she attached a few articles about iroha that she thought were potentially useful for my research. Subsequently, I e-mailed again by shifting my focus on individual experiences rather than general strategies of the brand. Additionally, drawing on the issue of self-representation (Peeck, 2015), I tried to contextualize my research in feminist scholarship. In specific, I described my understanding of feminism and tried to clarify why I chose iroha as my research target in relation to feminism. Besides, to gain her trust in me as a researcher, I read the articles about iroha that she sent and added my interpretation from STS perspective. As a result, my interview offer was accepted, and I was able to access other participants from iroha since she introduced me to them.

In contrast, the recruitment of sex toy users was more complicated and did not go straightforward. In this recruiting process, I had more opportunities to realize my position as an outsider and faced difficulties, mistrust, and conflicts. After interviewing with iroha’s staff, I tried to collect data from iroha’s users. Initially, I asked some of my female friends if they knew any person who used iroha’s products, but

I could get none in this way. Subsequently, I changed my strategy and decided to use iroha's connections. One interview with a person of iroha taught me that there was an official users' community in iroha which is named iroha-bu ('bu' means a club in Japanese). Searching online about iroha-bu, I found an article on iroha's official website in which ten iroha-bu members were introduced with short descriptions of themselves and X or Instagram account. I contacted five of them via X, excluding some members because their accounts were not accessible. The message on X briefly introduced me, outlined my research and the aim of the interview, and explained ethical concerns such as protecting privacy. To increase trust, I also referred to the fact that I already interviewed people in iroha. Afterward, three of five replied back. While two of them accepted my interview offer, the rest one person required me to show my ID and certification through which she could confirm that I am a student of the University of Vienna. At the same time, I got an email from iroha's manager that asked me to stop the ongoing recruitment and make the interview appointment via iroha. She explained that the interview offer without mediating iroha had a risk of damaging trust between iroha and iroha-bu. Indeed, she told me that some iroha-bu members suspected that my offer was a scam. Consequently, I let her take over the recruiting of iroha-bu members and I got two interviewees who accepted my original offer on X. These experiences made me realize my vulnerable outsider position but also consider the need for additional user participants. Since I felt iroha's strong control over iroha-bu, I got concerned with biased data of pro-iroha opinions. Therefore, I sampled two additional participants, one of whom was introduced by one iroha-bu member and the other of whom was an acquaintance since my bachelor's degree.

5.3.2 Preparing

To make the interviews productive and participants feel secure, I paid attention to the arrangement. First, I sent informed consent in both Japanese and English versions in advance by email so that participants could have enough time to read and consider all conditions. Besides, I informed participants about the privacy policy and also that the accessibility of data would be controllable depending on their requests. When it comes to the user interviews, I also gave the option of interview format, either face-to-face or online interview, as I planned to go back to Japan during the summer vacation. In addition, I attached to an email the presentation slides that described my research. As Peeck (2015) points out "Forms of social positioning can influence interview dynamics in different ways" (p.114), reflection on the social positioning of the interviewer is a crucial preparation for interviewing. Moreover, I also found it important to explain the reason and motivation because I am an outsider against my research topic and participants. Therefore, I added to the presentation slides my personal and educational background as well as the reflection on how and why I became interested in iroha. In practice,

the slides helped me gain the interviewees' trust and reduce the risk of spending too much time explaining my information.

Furthermore, I sent the question list in advance to allow participants to psychologically prepare. Following Peeck's advice (2015), the questions were made after extensive research. Specifically, I not only visited iroha's webpage but also read published articles and books and watched YouTube videos. For example, there were several online interviews with iroha's marketing manager in which she explained iroha's activities and her understanding of sexual wellness. Through reading, I took note of what I was interested in and wanted to know more. These materials helped me make the question list. Likewise, it is also helpful to watch YouTube videos on iroha's website to advertise their products. Additionally, extensive research also sensitized me to ethical concerns. Two user interviewees published books about their life histories that include the description of their sexual experiences. These books taught me that one interviewee experienced sexual abuse in her childhood and that the other worked to support lesbian life. While their biographies informed me of the interviewees' contexts, they were also helpful in imagining the potential danger in interviews, for example, reminding her of sexual trauma and foregrounding hetero-sexual normativity. I reduced these potential dangers by formulating interview questions. In detail, the interview questions for users focused on 'your' sexual pleasure, through which participants could describe positive experiences without being framed into any social categories such as gender and sexuality.

5.3.3 Conducting

I conducted eight interviews in total, with four iroha's employees and four iroha's users. In detail, two of iroha employees are from the marketing team, one is from the design team, and the last is a person who worked in iroha but moved to another branch of TENGA. Regarding users, two are iroha-bu members, and the others are not from iroha-bu. All are Japanese except for one who was raised in Spain (one of her parents is Japanese, so she speaks Japanese). The interviews were conducted both online and in person. Due to the geographic distance, time and cost efficiency, the main format was an online interview via Zoom, but two interviews were done in person as the participants chose. I asked the two participants to decide on the meeting points, and both in-person interviews were conducted in a different cafe in Tokyo. As some researchers discuss (Adams-Hutcheson and Longhurst, 2017; Peeck, 2015), online interviews give different experiences from those in person. On the one hand, online interviewing possibly constructs an uncomfortable atmosphere by omitting the sharing experiences of bodily senses such as touch, taste and smell. On the other hand, it can also help people feel more comforted, relaxed and safe since interviewees can stay their distance from the interviewer and quit the interview at any time. In my case, Zoom interviews worked well. I did not feel any specific awkwardness, and rather it was

surprising that participants were willing to talk about their sexuality and sexual practices. I also did not have a big technical problem aside from that one interview was delayed because the interviewee's laptop started an unpredictable update. Probably, the main drawback of online interviewing for me is missing the opportunity to collect additional data from the outside of interview. As Peeck (2015) pointed out, visiting the place where interview partners live and work is helpful to "gain insight into the heterogeneity of their living conditions and the social positions" (p. 122). For my research that aims to understand iroha's design practices, it would have been more effective if I had visited iroha's office and observed particular materials.

The interviews proceeded by following a co-becoming process in which research questions and structures were developed through interaction with research participants. For example, participants were not just research objects but one element shaping my research. Developing the notion of research events that refer to the heterogeneity of elements constituting research, Michael (2021) claims that interdisciplinarity should be considered beyond the intersection of academic disciplines as "the practical collaborations of practitioners who bring different skills, knowledges, commitments and concerns into the research event." (p. 104). In this view, interviewees are also seen as interdisciplinary research partners "who bring to the research event a multitude of epistemic and practical capabilities" (Michael, 2021, p. 122). Indeed, my interview partners played an important role in defining my research direction. Specifically, the first interview with a person in iroha helped me clarify my interest in iroha by inquiring about the issues that iroha was committing to. In other words, I expected the first interviewee to play a role as an expert and sub-supervisor for my research. As Michael (2021) underscores "Researcher and researched co-become within the research event" (p. 12), it was through the first interview that I became a researcher exploring values inscribed in sex toys and the relationship with feminism. With a sensibility to the co-becoming, I used an iterative method that introduced prior interview contents to subsequent participants. Crucially, the iterative method allowed me to have productive data and feedback, which generated interview prompts in the next interview. Fraser and Taylor (2022) explain that the iterative method has "the potential to generate rapport with participants and energise their interest in the conversation" (p. 226). In my case, the stories from the previous interview functioned as an introduction to narrowing down detailed information about iroha and to hearing private matters regarding sexuality. The questions played a role in initiating their narratives, but I posed different questions between iroha's employees and users. The interview questions for iroha's employees are expected to collect their understanding of feminism. On the other hand, I did not ask users about feminism but instead prepared the questions to hear personal stories with iroha.

After getting their consent, I started recording. In the interviews with iroha's employees, I made a simple presentation to guide the interview direction. By screen-sharing the slides that I sent in advance on

Zoom, I explained again my background and research before asking the interview questions. During the presentation, I asked a few questions relevant to my slides so that they would not get bored and I would identify the similarities and differences with them. For example, when I talked about my background, I asked where they were from and whether they had ever heard of STS. After the presentation, some asked me back about STS and life in Vienna. Although this presentation contributed to warming up the atmosphere and tuning participants to talk about themselves, I decided to delete it from the users' interviews. This is because I found the presentation spent too much time, 15 minutes, in the interviews. I concluded it was more important that participants talked about themselves as much as possible.

5.3.4 Post-processing

After conducting interviews, I started transcribing by means of the transcription software CLOVA Note. The reason I chose CLOVA Note is that it is a free online software that can produce transcriptions in Japanese. I uploaded the phone recording data to CLOVA Note, and then the full text was automatically transcribed. Subsequently, I revised the transcription while listening to the original record. Considering the process that generated a particular remark, I left the interaction between me and the interviewees such as pauses and non-lexical expressions. As I simultaneously transcribed and conducted subsequent interviews, what I found in transcription reflected in a new interview. The names of the interviewees were anonymized. I refer to the interview number (for example, interview 1) when I quote interview data in the findings chapter. Furthermore, I do not even mention the interview number when I quote sensitive stories such as sexual trauma in case the interviewee is not identified from a tiny piece of information.

5.3.5 Coding

Following Rivas (2018), I started by open coding with LiGRE, a free coding software. LiGRE makes a codification tree which is constituted of *fragments*, *leaves*, *branches*, and *roots*. Fragments are the smallest coding unit, and I generated fragments by coding sentence by sentence. I made in vivo codes by using the gerund for open codes. In the process of making fragments, I found that one interviewee repeatedly talked about similar topics. However, in order to “avoid too early interpretation which could result in misinterpretation” (Rivas, 2018, p. 883), I did not make a next coding unit, leaves, until I finished coding one interview. Instead, I wrote down my findings during the first interview in my research note, and after completing it, I made the leaf units to sort out similar fragments. I coded by following the same process in general, but when I found a new fragment that referred to a similar topic to one of the leaves, I added the fragments to the leaves even before ending one coding. The more interviews I coded, the more relevant themes I found between leaves. Accordingly, I created a larger unit, branches, to cover

several leaves. Likewise, I generated the largest coding unit, roots, when I found some branches overlapped each other.

I also used some tools to organize coding data. The first tool is a whiteboard and colored pens. Every time I finished coding one interview, I made a keyword map on a small whiteboard. This mapping practice helped me clarify what I did, identify themes, and outline the findings chapter. The maps on the whiteboard were supplemented by Miro, an online software for making brainstorming maps. While the whiteboard maps excluded some information due to the space limit, the map on Miro was useful for strengthening arguments for each theme by adding details. Moreover, I sketched out arguments by using WorkFlowy, an online outliner. WorkFlowy helped me translate the map into structural texts by making sections and bullet points based on Miro.

Theoretically, my coding followed the thematic content analysis with a sensibility to narrative analysis. First, the thematic content analysis focuses on “what a phenomenon, event or social interaction ‘looks like’ to the individuals of interest (their lived experience)” (Rivas, 2018, p. 876-878). It helped me identify how participants understand iroha's sex toys. Specifically, I paid attention to how they describe the value of sex toys. On the other hand, it is also crucial to see how participants' values are shaped. Feminist objectivity sensitizes me to the process of embodiment in which a particular view is generated through social interactions. Personal experiences play an important role in the analysis of their views. Important is to see how participants make sense of the world depending on their experiences. The underlying assumption of narrative researchers is “we make sense of our experiences and organise our memories on a fundamental level in story form” (Griffin and May, 2017, p. 1011). However, as Griffin and May (2017) highlight, thematic content analysis breaks up stories into bits in order to fit them into coding categories. This critique points out the risk of my research that might fail to grasp the role of experiences in shaping the values of iroha's sex toys.

In response, I put half of my coding efforts into understanding participants' life histories. For example, I created roots for participants' experiences in LiGRE and collected different stories in the form of leaves or branches. I also put experience data on Miro with green color frames and sought the connection between experiences and values. Besides, by tracing the personal experiences of the interviewees, I also tried to make sense of cultural conditions that affect the interpretation of experiences. Analyzing the situatedness where interviewees generate discourses is relevant to the performativity of storytelling. As storytellers “use narrative to achieve their objectives” (Griffin and May, 2017, p. 1013), it is crucial to see how narrators frame themselves and their experiences in what context. The sensibility to narratives is effective in understanding different values among interviewees. It sensitized me to the interviewees' positionality which influenced the perspective to understand the role of sex toys.

Throughout the coding, some similar themes appeared repeatedly. The first theme is the distance between iroha's design practices and feminism. This pattern was seen in the description of people from iroha, while some user interviewees mentioned the effects of sex toys in association with feminism. People from iroha simultaneously connected and differentiated iroha's design practices with/from the existing feminism in Japan by comparing them and sometimes criticizing Japanese feminists. Meanwhile, I also identified that interviewees focused on multiple characteristics of iroha's sex toys beyond feminist contexts. In particular, coding data showed some categories to value iroha's sex toys, for example, insisting on design aesthetics, competitiveness in the market, and health effects. By integrating these valuations as the second theme, I analyzed the relationship with one another. The third theme emerged in processing the user descriptions. Closely looking at the interview data of users, I found that the relationship between sex toys and bodies was repeatedly mentioned. Accordingly, my analysis paid attention to different patterns in which users described the enactment of their bodies through the interaction with sex toys. These three themes comprehensively cover all interview data and highlight the intersection between iroha's sex toys, feminism, the market, and bodies. The following chapter will deepen these themes with specific sensitizing concepts.

6. Findings

6.1. Registers of Valuing in Sex Toys

This section focuses on the values of sex toys by drawing on the notion of registers of valuing (Heuts and Mol, 2013). The following analysis narrows down to three steps. First, I closely look at the registers of iroha's sex toys. The notion of registers in valuation studies calls for attention to the different valuation systems in one object. Depending on different registers, interviewees value iroha's products and orient their activities such as designing and consuming sex toys. As the marketing manager underscores iroha has grown "not just because the products perform well" (Tutumi, 2023), iroha's sex toys collect popularity beyond the simple valuation of the functionality. Therefore, the first part of this section is devoted to clarifying how iroha's sex toys are described in different contexts. Since registers are situated in a specific context, the analysis of registers also plays a role in sketching out the institutional cultures of iroha and the sociocultural views of sex toys in Japan. The second part of this section focuses on the valuing activities. In valuation studies, worth is not static but constructed through a dynamic process that mobilizes discourses and material tools. Especially, the notion of valuing sensitizes me to see how the worth of sex toys is constructed, maintained, and increased. The qualitative interviews show that people

in iroha “*inscribe [their] own views and experiences into products*” (Interview 3) by discursive and material practices. By analyzing the designer’s interviews and iroha’s official website, I examine what sorts of activities are oriented, justified, and materialized in each register. While the second part separates each register, the last part of this section tries to overarch different registers. Heuts and Mol (2013) highlight the relevances and tensions between different values. Different registers include different standards of valuing that overlap on the one hand and conflict on the other hand. Therefore, with the notion of registers of valuing, I aim to not only identify different values in sex toys but also analyze how they are entangled or contested. Overall, by analyzing different values inscribed in sex toys and practices to increase each value, this section tries to answer the first research question: **How are iroha’s sex toys differently valued?**

6.1.1. Four Different Registers

The first register relevant to valuing sex toys is a *feminist* register. Three of four interviewees from iroha described their products in relation to feminism. They think iroha’s practices “*can be interpreted as something like the seeding of feminism, even if not explicitly mentioning feminism and feminists*” (Interview 1). While iroha avoids the institutional commitment to feminism, some people in iroha understand that providing a good sex toy is an action of feminism. In particular, they expect that sex toys play a role in foregrounding women’s sexual desire at the social level and allowing women to accept their feelings and bodies without being judged. Throughout all interviews with both people in iroha and users, they differently described sexual norms and taboos in Japan regarding women’s sexuality (for example, hiding sexual desire/interests and difficulty in sex communication). Women’s sexual desire is seen as “*an ominous, embarrassing, and disgusting topic*” (Interview 5). Especially, buying and having sex toys touches the taboo of women’s sexuality. It is regarded as immoral and “*as if I am the deviant just due to having sex toys*” (Interview 6). In response, iroha tries to intervene in the sociocultural conditions by designing a good sex toy that removes the shame of having sexual desire and body. One user interviewee described the value of iroha’s product in relation to her sexual desire. “*I am so glad that I don’t have to hide sex toys and I can accept my pleasure without shame and embarrassment...by the fact that there is a sex toy in my room, my sexual interest is affirmed*” (Interview 8). She values iroha’s sex toys because they foreground her sexual desire and enhance her sexual autonomy. Another interviewee, who experienced sexual abuse in her childhood, also explained the relationship between iroha’s items and sexual autonomy. She referred to the suffering that others violated her sexual right and described the first time when she found iroha as the moment that she “*was confirmed to get back the autonomy of my mind, body, and life in my hand*”. By comparing to other manufacturers, she added, “*I got startled that this was a product designed by women for women*”. Sex toys designed by iroha are valued because they support

women's sexual independence. Focusing on sexual subjectivity, an interviewee underscored iroha's contribution to feminism. *"As long as iroha supports the articulation [regarding women's sexuality] and products empower women's subjective pleasure, probably I can say iroha is contributing to feminism"* (Interview 1).

The second register is a *design* register. Most of the users placed iroha's specialty on the product design. Specifically, the irrelevance to sex toys is a key concern for both designers and users. A person in iroha pointed out that the shape irrelevant to sexual symbols reduces psychological hurdles. One user also highlighted that iroha's sex toy design allows even beginners to *"use sex toys that I think is cute without feeling guilty"* (Interview 6). In addition to the shape, the color is an important concern to separate iroha's items from other sex toys. Showing her psychological resistance to sex toys with shocking colors, a user values the color of iroha's sex toys; *"I like pastel colors. I prefer colors that are as similar to my body as possible"* (Interview 8). As she described the color *"fits well with my body"* (Interview 8), iroha's sex toy color gives users psychological closeness. The shape and color irrelevant to existing sex toys matter in the design register. Apart from that, the designer also valued the product design in relation to creativity. *"Each design is created by designers' unlimited creativity"* (Interview 4). For her, product design is the materialization of a designer's creativity. While the designer prioritized creativity in the design process, other people in iroha highlighted the user-centered design. In this valuation, product design is understood as a representation of the user's needs and opinions. For example, one iroha's item, *iroha koharu*, was designed based on users' particular needs. It addresses the problem identified by interviews that iroha conducted with the users. By hearing the users' voices referring to the pain through sexual intercourse, *iroha koharu* was designed as *"a product for people with specific issues and concerns, such as early-stage users who have no experience with penetration and would like to get used to it"* (Interview 3). Overall, the design is one of the core values for designers and users.

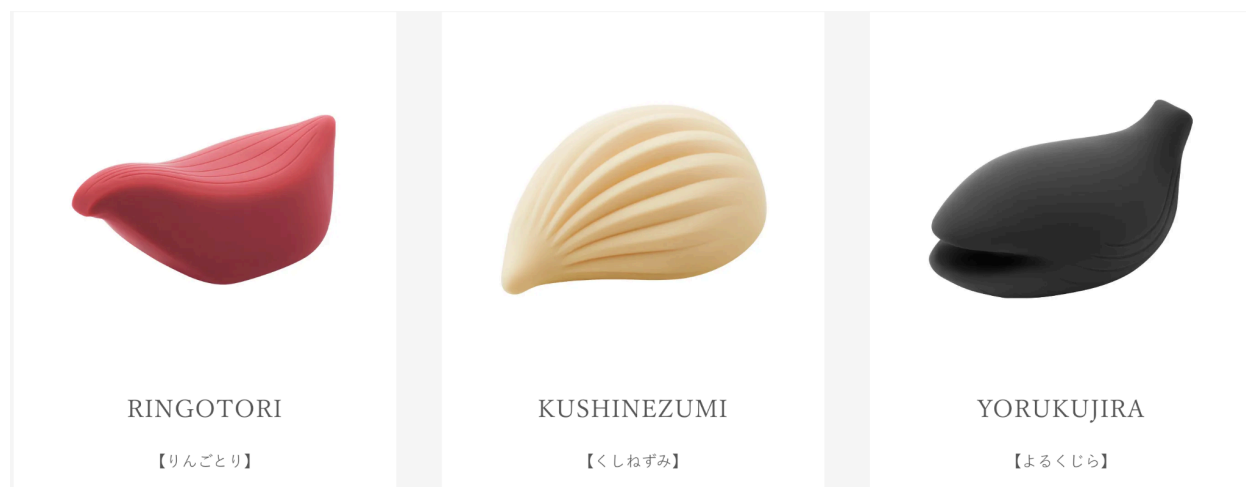


Figure 1. Examples of iroha's sex toys that have a unique design (from iroha's website)



Figure 2. iroha koharu that has a thin and flexible body for the beginners (from iroha's website)

In terms of the third register, people placed sex toys in the *market*. The market register has a relational scope that compares iroha's sex toys with other products. *"When the Japanese market becomes more competitive, especially in the area of products for women, there is a possibility that more and more products similar to iroha will be made"* (Interview 2). Hence, demarcating iroha from other products is an important market strategy, and novelty is referred to as an important characteristic. *"Personally, the best motivation is to create something that does not exist in the market. As a designer, I want to create something new. As a creator, I am not interested in making what already exists in the market."* (Interview 4). As long as sex toys are provided as a commodity, iroha needs to differentiate its product so that customers will choose iroha's items among other products in the market. Novelty is a crucial element of commodity to win the market competition. Nevertheless, it is not the only motivator. As both people in iroha and users mention, the price is also a key indicator of the product value. For instance, an interviewee in brand management said the price of *iroha koharu* is relatively reasonable as it targets beginners of sexual practices such as university students. On the other hand, a user pointed out some items of iroha are too expensive to purchase. *"The quality is good, but iroha mai [one product from iroha] made by*

Mizuhara [the image model of iroha] costs 18,000 yen [approximately 100 euro], right? I can't afford it" (Interview 7). She regarded *iroha mai* as a luxury good by comparing it to a product from other makers. The monetary value is also a crucial concern as well as competitiveness. Furthermore, trust plays a role in consumers' decision-making. In particular, the reputation of TENGA influences consumers' consideration of iroha's products. TENGA is a well-known provider of male sex toys in Japan and was established in 2005, while iroha started up as one brand of TENGA in 2013. Taking into account the market success of TENGA, one user interviewee pointed out the fact that iroha is a part of TENGA assured her to buy products; *"TENGA was well known even among women, and I felt safe to use since TENGA designed products for women"* (Interview 5). She also added that it is better to buy an intimate product from a company whose name I know rather. In sum, the important thing in the marketing register is relationally defined in comparison with other competitors when it comes to novelty, price, and reputation.

The fourth register is a *health* register. The official website frames iroha in the following: "As a Femtech and Femcare brand, we support women in their pursuit of a joyful and healthy lifestyle" (iroha website English ver). By encompassing sexual wellness with women's health issues, iroha claims that its products support women's sexual health. In another part, iroha's website insists on the importance of accepting sexual desire in the context of sexual health. "Facing it [sexual desire] may open up new options for pleasure that you are not yet aware of. Sometimes, you may also be able to notice a lack of lubrication, painful intercourse, or other discomforts". One interviewee from iroha also showed her interest in addressing sexual health problems that old-age customers face. *"I would like them to use iroha and have a 'dialogue' between themselves and their bodies. I would like them to feel changes in mind and body, for example in hormonal balance, and handle the worries after menopause"* (Interview 3). According to a user interviewee, the interest in sexual wellness is shared among users. Reflecting on the discussion in the iroha-bu meeting, she *"found that people are interested in sexual wellness more than expected"* (Interview 7). What She found through the communication with other users is that some users buy iroha's products with the expectation of solving sexual problems. Put differently, users value iroha's contributions to sexual wellness.

6.1.2. Valuing

Analyzing the interview data, I identified four registers: feminist, design, market, and health registers. These registers differently explain what a good sex toy is. The feminist register emphasizes the positive perceived effects of sex toys that remove the shame of having sexual desire and body. Against the conservative sociocultural norms that conceal women's sexuality, iroha's sex toys empower women as sexual subjects. In this sense, the feminist register associates the activities of designing and using sex toys with women's sexual independence. Meanwhile, the design register focuses on the materiality of sex toys.

A good sex toy in the design register has a shape and color that are irrelevant to sexual symbols and the existing sex toys. The de-sexualized design justifies users' consumption of sex toys. The design register also orients the designers' activities to both express the designers' creativity and respond to users' concrete needs. The market register sheds light on the sex toy aspect as a commodity. A good sex toy in the market register is a well-sold product, and thus designers are encouraged to produce more competitive items in the market. From the users' side, the market register affects their rational decision-making of consumption by comparing the price and trusting the reputations. Finally, the health register connects iroha's sex toys with women's sexual health. A good sex toy in the health register enhances the users' awareness of sexual health. The health register frames the usage of sex toys as self-communication in which users might notice their sexual preferences and problems.

This section deepens each register by focusing on the valuing practices. Registers are not pre-given but constructed by discursive and material practices that assess, valorize, and shape a distinctive value. Discursive practices reinforce values in the feminist and health registers, while the design and market registers make efforts in material presentation from product design to packaging design. The following analysis shows concrete practices in each register.

Feminist Register

The valuing practices in the feminist register foreground women's sexual desire and pleasure. A good sex toy in the feminist register is an item with which women can explore their sexuality and establish sexual subjectivities. However, as some interviewees pointed out, the conservative sociocultural norms in Japan tend to prevent women from sexual exploration. In sexual practice with a partner, women are often supposed to feel shame with feeling pleasure (Interview 1). In this light, Japanese women tend to prevent themselves from accepting sexual desire and exploring their sexual interests. *"Despite interests in sexual practices, there are many women who pretend as if they had no chance to do so by excusing that their boyfriends demand"* (Interview 6). While men are allowed to talk about their sexuality, women's sexual desire and pleasure are socially concealed (Interview 5). Put differently, there is gender inequality which excludes women from sexual pleasure. Therefore, the feminist register needs to intervene in sociocultural understandings of women's sexuality so that women are motivated to use iroha's sex toys as one way of sexual emancipation. In other words, the feminist register has to foster women's interests in sexual exploration while deconstructing social norms about women's sexuality. The valuing practices in the feminist registers arrange discourses that help women understand their sexual desire and alter the meaning of sex toy usage. Through analyzing iroha's official website and interview data about iroha's discursive practices, I explain how women are encouraged to accept their sexual desires and use iroha's items.

First, iroha's online article foregrounds women's sexual desire and pleasure. As some of my interviewees (Interview 6 and 8) described the hesitance to talk about their sexuality and sexual desire, the conservative sociocultural climate prevents them from sharing their sexual practices. Put differently, women's sexual desire tends to be concealed in Japanese society. On the contrary, iroha tries to unveil women's sexual desires and practices by collecting women's voices. For instance, one online article titled 快樂解体新書, roughly translated as *a new book on the anatomy of pleasure* (iroha, 2018), surveyed 1,200 women and reported how many percent of women who have experienced orgasm, want to have orgasm, and how they reach orgasm. By making a chart from research data, this article visualizes women's sexual desire (Figure 3). Another online article shares the diary of a user who tried to reach orgasm with an iroha item, *iroha Rin+* (iroha, 2020a). This diary closely looks at how the user enjoyed the sex toy, what she thought and felt in using it, and how she (not) reached orgasm with the insertable item. Both articles aim to foreground women's sexual desire. By revealing the socially hidden sexual desire and practices of women through the survey and diary, iroha intervenes in how women understand their sexuality. Discursive practices deconstruct conservative sociocultural norms and give women the opportunity to understand their sexuality from a different angle.

However, unveiling sexual desire is not enough to remove the shame of sexual exploration, especially masturbation. This is because women's masturbation is still regarded as a social taboo and it especially touches the issue of morality (Interview 6). The taboo of masturbation is also represented in language use. In the Japanese language, masturbation is usually translated into either Ji-Koui (自慰行為) or Onani (オナニー). Combining the Chinese characters 自 (self), 慰 (to solace), and 行為 (an action), Ji-Koui (自慰行為) means an action to solace yourself. As the word 慰 (to solace) implies, Ji-Koui takes for granted the negative mindset that needs to be solaced. Put differently, the term "masturbation" deeply connects with negativity. When it comes to the other translation, Onani (オナニー) means onanism in English. In Japan, Onani is used to refer to solo sexual practice more commonly than the term masturbation. The problem is the term onanism also includes a specific implication. As one interviewee highlighted, the term Onani "*tends to remind men as the subject of that action*" (Interview 3). In other words, the term Onani implies that men occupy the action of masturbation. Therefore, the feminist register needs to detangle women's masturbation from the existing social implications and make a new context through which women can try to use sex toys for their solo sexual pleasure.

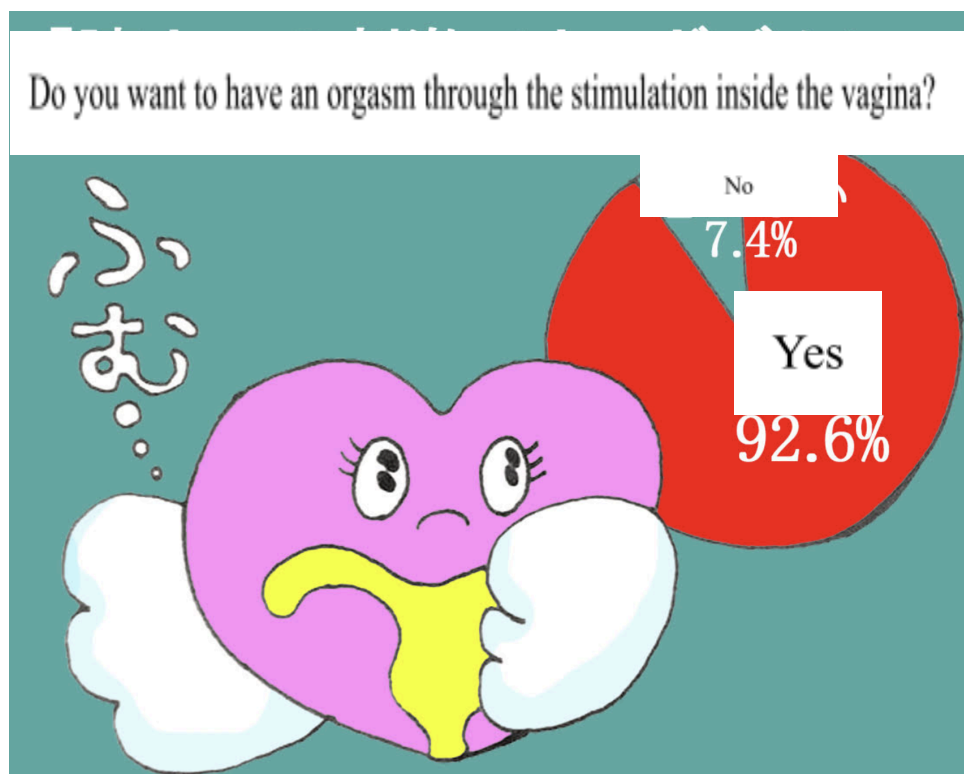


Figure 3. The pie chart indicates the result of the research. It shows the answer to the question: Do you want to have an orgasm through the stimulation inside the vagina? (from 快楽解体新書 https://iroha-tenga.com/contents/iroha_story/752/)

In this sense, introducing the term self-pleasure is a striking discursive practice. The term self-pleasure is an invention so that women can accept sexual desire while reducing social conflicts as little as possible. Looking at the official website, iroha describes itself as a brand “to help more women enjoy self-pleasure in comfort.” (iroha website English ver). Subsequently, iroha explains self-pleasure as such.

"Self-pleasure" is an important process of exploring one's own pleasure and well-being.

At iroha, the term "self-pleasure" refers to the important act of discovering joy in one's own body, rather than solely associating it with the term "masturbation." (iroha website English ver)

As self-pleasure is emphasized with quotation marks, it is used as not a mere word but a specific term to define its meaning. The definition of self-pleasure aims to differentiate it from the term “masturbation” and gives a new association with positivity such as pleasure, well-being, and joy. The emphasis on sex positivity is clear on the Japanese version website. Comparing the same part between the English and

Japanese versions, the translation is slightly different. The Japanese version explains the term self-pleasure in contrast to Ji-Koui and emphasizes pleasure rather than solace. Additionally, an interviewee in brand management also explained that “*iroha selected the term “self-pleasure” with the aim that it is easily used among women*” (Interview 3) compared to the term onanism. In short, the term self-pleasure alters the meaning of solo sexual practice from negative and male-centered to positive and degendered, which reduces social and psychological hurdles for women to engage in sexual pleasure.

Furthermore, the term self-pleasure increases the value of iroha’s sex toys by desexualizing the purpose of sex toy usage. In an article on the website, *What is self-pleasure?* (iroha, 2023), iroha explained the reason for selecting the term self-pleasure by problematizing the stereotypical image that masturbation is a practice to “release your sexual desire” (iroha, 2023). In other words, iroha points out that the term masturbation is problematic because it is already socially conceptualized as an action to achieve sexual purposes. Meanwhile, iroha insists that the term self-pleasure is relatively free from social and sexual contexts. Self-pleasure “neither has a specific purpose nor defines the kinds of pleasure” (iroha, 2023). Rather, iroha’s official website defines self-pleasure as “a vital form of self-care, enabling individuals to understand and nurture their own feelings and bodies” (iroha website English ver). Self-pleasure is regarded as equivalent to “treating oneself to a luxurious facial before bedtime or indulging in a relaxing bath” (iroha website English ver). The re-interpretation of masturbation decouples self-pleasure from sexual issues that are entangled with social taboos, and instead situates it in ordinary activity in women’s everyday lives. Coupling self-pleasure with skin care is an important discursive practice to increase the value of self-pleasure so that women can convert their sexual desire to an interest in self-care.

Discursive practices play a key role in valuing the feminist register. Japanese women are in situations where they hesitate to engage in solo sexual practice because women’s sexual desire is socially concealed, and because the term masturbation is intertwined with negativity (Ji-Koui) and masculinity (Onani). In response, iroha’s official website provides discourses that identify women’s hidden desire for sexual pleasure, intervene in the women’s view of sexual practices, and valorize the value of self-pleasure by situating it in the context of women’s daily care practices. According to an interviewee from iroha, the association of self-pleasure with dairy care practices brings success in gaining social acceptance. “*We publish a newsletter, called Monthly TENGA, that aims to sell the article to other media. Then, we featured the relationship between beautiful skin and sex, which was sold very well*” (Interview 2). This success shows that iroha’s discursive practices enable women to face their sexual desire and sexual pleasure with the least social conflict. As the feminist register orients activities to address gender

inequality in terms of sexuality and establish women's sexual subjectivities, providing discourses for articulating women's sexuality is a crucial valuing practice.¹

Design Register

It is important for designers and users that product design is irrelevant to existing sex toys. The unique design represents a designer's creativity and gives users psychological closeness. Accordingly, valuing in the design register is designing products that do not look like sex symbols and other sex toys. In this light, the keyword is *a Japanese modern sensibility* which defines the product shape and color. An interviewee in product development mentioned the Japanese modern sensibility as the brand identity, and she described the connection between product design. For example, *iroha temari* is a product that balances the Japanese modern sensibility and the function of sex toys (Figure 4). *"I started with the idea of keeping the power and functionality of a vibrator but making it look less like that. Then, I thought about what kind of motif I could use for this shape. There is also a traditional Japanese toy, so I took inspiration from that...and the design pattern was created with this "Temari" in mind"* (Interview 4). Temari is a traditional Japanese craft that is translated into a handball, and it is a nice motif to replace the stereotypical round design that existing vibrators have. Besides, the designer also referred to the specialty of product color. *"After the shape, function, and theme are decided to a certain extent and when thinking about what color we should use, we use a traditional Japanese color tone sample. Then, we select the color from them, and sometimes a product name is also inspired by them"* (Interview 4). As I already referred to users' descriptions, the unique shapes and colors are important concerns in the design register. Thus, setting and sharing the brand identity, or Japanese modern sensibility are crucial valuing practices.

¹ In addition to discursive practices, iroha also makes efforts to form a community. For example, an official shop in a department store plays an important role in allowing women to face sexual desire. *"Some customers revealed their personal problems, such as couples' lack of sex and anxiety about their sexual desires. Some even shed tears when they realized that it was "okay to admit their sexual desires." I realized that the store is more than a space to enjoy shopping; it is a place to say what you couldn't say to others"* (iroha, 2020b). Arranging "a place to say what you couldn't say to others" is crucial because the hidden desire becomes unveiled by talking and sharing with others. In this light, a user community also supports self-acceptance. According to one interviewee from iroha, iroha-bu members appreciate the role of iroha-bu in conservative society, especially in rural areas. *"Forming a community of women who can share their sexual experiences and thoughts"* (Interview 3) is important to increase product value because consumers can take for granted their sexual interest and be motivated to have sex toys through interaction in the community. One user interviewee who is not in iroha-bu said, *"I read every article of iroha-bu and it motivates me to buy products again. The article is helpful because there are not many people around me who review sex toys and share experiences"* (Interview 6). Discursive practices and arrangement of the place and community contribute to increasing the value of sexual desire as well as products.



Figure 4. iroha temari (from the official website of iroha)

It is often seen in iroha's products that iroha increases products' values by coupling them with traditional Japanese household objects. For instance, the shape and name of *iroha zen* remind users of Sadou, a Japanese tea ceremony. Its shape looks like Chasen, a tea whisk, and the name zen (禅) means Japanese Buddhist philosophy intertwined with the Japanese tea culture. The promotional short video put iroha zen in the traditional Japanese room with tatami mats and a shoji screen where the tea ceremony is organized (Figure 5). Another example is *iroha Rin* shaped like Kanzashi, a traditional Japanese hair ornament. As the picture shows, *iroha Rin* also combines traditional Japanese items in its image (Figure 3). The important thing is that iroha selects objects such as a tea whisk and hair ornament that are used in everyday life. This is because iroha aims to reduce the psychological distance between users and sex toys by shaping them like a Japanese traditional household item. The official website says that "designs embrace a "Japanese modern" sensibility, exhibiting a serene aesthetic that seamlessly integrates into any room" (iroha website English version). The seamless integration into a room's interior promotes the psychological closeness between users and iroha's items which are designed with the Japanese modern sensibility. The interviewee in product development also emphasized that product themes should be not related to adult products so that products can be "*more accessible or more familiar to people*" (Interview 4). As such, users can find value in sex toys without feeling guilty.

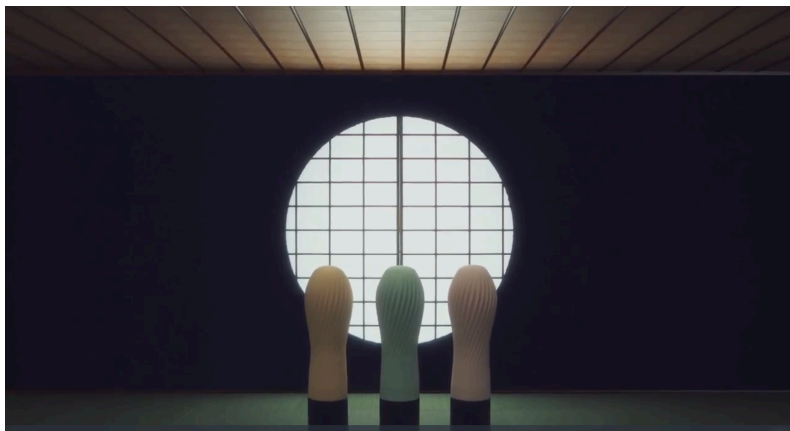


Figure 5. iroha zen (from the official website of iroha)



Figure 6. iroha Rin (from the official website of iroha)

In addition to the shape and color representing the Japanese modern sensibility, the materials of sex toys also play a role in valuing in the design register. Selecting materials is related to user-centered design and designers' creativity which are crucial concerns in the design register. For example, a user interviewee highly valued the soft material as *“the characteristic that other sex toy makers have never provided”* (Interview 7) and insisted on the expectation that iroha would keep making products with that material. In this light, one interviewee from iroha explained that the soft material was invented based on the survey that iroha conducted when it started up. According to the survey, iroha concluded that *“the sense of security is the absolute requirement for women's sexual pleasure”* (Interview 1). Compared to the typical image of male sex toys, hard, cold, and painful, iroha's special soft material is essential to remove the fear of sex toys that Japanese women have. Accordingly, iroha developed the soft material covering the surface of sex toys, which allows women to feel *“as if your own skin and the extension of your*

fingers” (Interview 1). The soft material increases the product values by inscribing users’ opinions and giving psychological closeness. On the other hand, iroha does not necessarily use this material for all products. For instance, *iroha petit* is an item that is composed of 98% water. An interviewee in product development described this item as a representation of her creativity. *“Creating from a completely new approach...is important for me. For example, what I designed for the first time is iroha petit which is made from aga-aga...I wanted to use materials that had never been used in adult products before”* (Interview 4). In this case, the selection of product material is made by her ambition to show creativity that is independent of the user’s opinion.

Furthermore, it is also worth noting that iroha arranges several systems to collect users’ opinions. For instance, some interviewees from iroha mentioned the importance of the record of in-person communication between customers and workers in physical shops. There are six shops in Japan where TENGA or iroha runs and sells their products. One of the retailers’ tasks is recording conversations with customers who visit the shop. In detail, they write down *“what customers bought, what they talked about, how old they were, how they found iroha store, how long she stayed in the shop”* (Interview 3). These records are written in a notebook by hand, the photo of which is sent to a chat group every day after closing the shops. The notebook is important for learning users’ needs and finding ideas for a new product. The collected voices from users sometimes initiate the design practices. Moreover, iroha engages more directly in participatory design practice. In particular, iroha-bu plays an important role in the interactive design process by using prototypes and giving feedback to the designers. *“There is a chance to give iroha-bu a sample, let them use it, and observe their reactions when they see a sample for the first time”* (Interview 3). Their feedback helps designers identify the points to improve and further develop. Besides, the employees of iroha also participate in the design process as interactive users. Designers elaborate on a new product by inviting many employees to use prototypes. They post the offer of testing prototypes on a chat group shared by employees, and testers are asked to give feedback on Google Forms. This hearing is repeated a few times until participants are satisfied with the quality of the products. In other words, the value of sex toys is assessed, improved, and increased by users in the design process.

Material practices play a key role in valuing the design register. A good sex toy in the design register is shaped and colored irrelevant to sexual symbols. The Japanese modern sensibility contributes to increasing the design value of iroha’s sex toys by selecting design motifs from traditional Japanese household items and a traditional Japanese color sample. The design register also places importance on balancing designers’ creativity and users’ concrete needs. Materials of sex toys give both users comfort and designers inspiration. In addition to material efforts, participatory design functions as the place where the designer’s idea and the user’s needs are compromised. The design register involves the evaluation that relies on the Japanese modern sensibility, designers’s creativity, and user participation.

Market Register

Since the value of products is relationally defined by comparing them to other makers' products, valorizing competitiveness is a key valuing practice in the market register. Crucially, competitiveness is differently imagined depending on a certain perspective. For instance, an interviewee in product development understands novelty as a core factor to increase competitiveness. She especially placed importance on designing a new sensual experience, and in her remark, the novelty was interrelated to a new pleasure. In particular, she researches the relationship between materials and stimulations and compares how different body parts feel pleasure. Her research activity materially assesses, improves, and develops the quality of sex toys. On the other hand, an interviewee working in brand management described competitiveness by pointing out a blindspot of designers. *"What do customers find attractive when they see a product on the sales floor? The design of the packaging and the product color are important. The boxes of foreign products are quite large and stand out in a shop. Many designers stay inside the company, so they don't see or know how products are put on the sales floor, or they don't listen to the opinions of the sales department"* (Interview 3). In addition to the product quality such as functionality and materiality, salespeople take into account the presentation of products in a store. The impression before using is as important as the experiences after using. Accordingly, the sales interviewee gives the photos of sales floors to designers and communicates with shop retailers to find the best way to present iroha's products among other makers' products.

One interesting characteristic of valuing practices in the market register is that it involves outsiders of iroha such as shop retailers. Also in the 'research' for a new pleasure, the designer insisted on the role of outsiders. *"We receive proposals from local manufacturers, or from other companies. For example, they introduce their products and suggest we may be able to use their products. And, unexpectedly, I sometimes find interesting combinations when I try them out. Then, I am also researching as such because they give inspiration for a new product and pleasure"* (Interview 4). For example, *iroha mai*, an insertable sex toy providing sound wave vibration, was initially designed by an innovator of haptic wave technology. The innovator made a prototype that implemented haptic wave technology into *iroha Rin* and then suggested collaborating design by presenting the prototype's potential. In this background story, the value of sex toys was assessed and improved by outsiders, and valorized by the designer's further research; *"When I touched it, I immediately recognized it was completely different from normal motors, which inspired me to develop the prototype further"* (Interview 4). Outsiders play a role in reinforcing the novelty of products. Meanwhile, iroha also relies on outsiders when it comes to reputation. In 2023, the 10th anniversary year of iroha, a Japanese famous model, Kiko Mizuhara was selected as iroha's official ambassador. An interviewee in brand management valued the role of Mizuhara in the following; *"Mizuhara was the one who raised the level of the brand itself and the company's image. So, I*

think it is important to provide a safe and secure environment for customers who are buying self-pleasure items. For the customers who buy a self-pleasure item for the first time, if Mizuhara is an ambassador, then they think iroha must be a proper company” (Interview 3). The official ambassador qualifies for the brand image by gaining transparency, which contributes to reinforcing customers’ trust in iroha.

Health Register

Contextualizing iroha in the contribution to sexual wellness is one valuing practice in the health register. In this regard, the official website plays a key role. The official website not only sells products but also functions as an information hub that women can access when they have problems and questions regarding their sexual matters. Searching articles and newsletters on the website with a specific keyword, I found 115 results regarding sexual wellness and 43 results regarding health care. These articles provide not only medical information, including pills, female hormones, pregnancy, and menopause, but also tips to enjoy sexual practices of both self-pleasure and couple intimate communication. For example, an interviewee from iroha mentioned one online article that was posted on the official website in 2020. This article is a 5-day diary of a user who tries to have an orgasm with iroha’s insertable item. Even though it does not go viral on social media, it has had the top access among all web articles. She analyzed the reason for the popularity; *“Maybe, people search for something like “cant’ cum inside” and end up finding our website”* (Interview 1). In other words, there are many people who are struggling with orgasm during penetration and would find some solutions from the article. This episode shows that iroha contributes to sexual wellness by providing information that is coupled with products. One user interviewee from iroha-bu remarked that she was asked to advertise products in the health context (Interview 7). Her task as iroha-bu was re-posting iroha’s web article with her comments on social media, through which she interpreted that iroha expected her to promote iroha’s products by coupling femtech, sexual wellness, and sexual health. These discursive practices framing as a femtech company gain the value of iroha. One interviewee from iroha underscored that many people are interested in iroha in the context of femtech. *“The fact that iroha is currently getting popular is almost because of the femtech trend”* (Interview 2).

In addition to discursive practices, iroha also reinforces the health value by actively engaging in femtech industries. Particularly, iroha joined Femtech Tokyo in 2023 and 2024 where femtech companies and innovators gather and share their products. In this event, iroha ran a booth to exhibit and sell products as femtech. On the other hand, some interviewees from iroha showed ambivalent attitudes toward femtech. This is because a social implication of the word femtech might damage the company's image. *“In Japan, everything can be femtech now, and the market is saturated with products named ‘Femtech’”* (Interview 2). The weird enthusiasm in the market gives femtech *“a negative image like spiritual”*

(Interview 3). Thus, people in iroha seek “*how to deal with so-called femtech*” (Interview 3), while they are “*proud of the fact that iroha is a 10-year player; not following the trend*” (Interview 3). As she described iroha as a 10-year player in comparison with so-called femtech, iroha understands its commitment to femtech. Meanwhile, it is important that she expressed ‘so-called’ femtech. The word ‘so-called’ implies that she tries to demarcate iroha from other femtech that recently got popular. In other words, she gives authenticity to iroha by emphasizing the longer historical connection between iroha and femtech on the one hand but differentiating its activity from others on the other hand. These demarcating practices show that valuing in the health register incorporates devaluation. By devaluing other femtech as spiritual, iroha emphasizes the brand value that authentically contributes to femtech.

6.1.3. Relations between Registers

The notion of registers refers to relations between different values. Different registers sometimes create conflicts but complementarily work in other situations. For example, design and market valuing overlap to some extent. A designer referred to fun as the root of creativity; “*We create products just for the fun of it. It is like a creativity similar to a joke. It creates something that I really want*” (Interview 4). Making something fun represents her creativity, and for her, “*creating or trying to create what has not existed in the market*” (Interview 4) is the fun part of her activity. In other words, creativity in the design register seamlessly connects with novelty in the market register.

The design and market registers are also interrelated when it comes to valuing user-centered design practices. The importance of the marketing register is demarcating iroha from other competitors and increasing its value. In this regard, one interviewee placed the specialty of iroha on the user-inclusive design while comparing it with one competitor, the Love Piece Club (LPC). LPC is a feminist-running sex toy shop in Japan² and seems to share the feminist value with iroha in the sense that both aim to empower women through the consumption of sex toys. However, one interviewee from iroha demarcated iroha from LPC by emphasizing how to sell the products. “*I think that there is [in LPC] a strong tendency to borrow products from the West and popularize them in Japan. However, we want to make our brand a base in Japan, which can be used overseas, and we also want to think about what products are currently needed by Japanese women*” (Interview 3). As she underscored, LPC does not make its own products but imports them from abroad. On the contrary, iroha designs its product to respond to Japanese users and solve the problems that real users face. In her understanding, the user-center design increases the value of iroha’s products in the market.

² “Through the promotion of sex toys, the LPC challenges the socially defined borders of feminine consumption, encouraging the incorporation of sex as an ordinary feminine (consumer) need and overturning the “traditional” sex-industry construction of men as consumers and women as consumables” (Dales, 2005, p. 194).

Furthermore, the design register also plays a complementary role in the feminist register. The feminist value in iroha foregrounds women's sexual desire against conservative sociocultural norms that force women to hide it. Through discursive practices, iroha encourages women to accept their sexual desire. The term self-pleasure contextualizes using sex toys as a part of everyday life as daily body care. This valuing is materially followed up by the product design. One of the values in the design register is shaping products irrelevant to sex symbols. Designers create products in the form of traditional Japanese daily products and select the product color from a traditional Japanese color sampling so that items can fit well in users' rooms. Users value the product design because they do not have to hide items. As sex toys become a room interior, self-pleasure becomes also a part of everyday life, which contributes to accepting their sexual desire.

One of the conflicts between registers is that between the feminist and health registers. On the one hand, sexual wellness in the health register resonates with the feminist register in the sense that both registers encourage women to enjoy sexual practices without any psychological and physical obstacles. On the other hand, one interviewee underscored that *"there is no need to connect self-pleasure with health"* (Interview 1). The goal of self-pleasure was not being healthy. In the feminist register, sex toys are expected to encourage women to accept their sexual desire and explore sexual pleasure in their own ways. Thus, if the contextualization of iroha in health care *"camouflages the desire for sexual pleasure"* (Interview 1), it disturbs the feminist value. One user interviewee also described her concern about the relationship between iroha and the femtech industries. Whereas she valued iroha's contribution to the deconstruction of women's sexuality in Japan, she was also worried that over-emphasis on femtech *"conceals the original needs"* (Interview 7). In particular, iroha addresses the problem that women ignore sexual desire, or even if they notice, tend to excuse it by using *others*. Sometimes, *others* are beauty cultures (sex makes you beautiful) and in other situations, *others* are boyfriends (I have sex because he wants). These *others* are often used to hide the original need to seek sexual pleasure because accepting sexual pleasure touches sociocultural norms. The critical remarks from two interviewees pointed out femtech and sexual wellness function as *others*. *"When I look at the record of conversations between retailers and customers in a shop, there are many customers who initially pretended to be interested in something like sexual wellness, for example, increasing female hormones, but I often end up finding that they just want sexual pleasure"* (Interview 1). The health register conceals sexual subject who seeks sexual pleasure. This is also why iroha to some extents takes distance from femtech trend and focuses on *"truly looking at women, customers, and the users"* (Interview 3) to identify what they really need.

The feminist register also conflicts with other registers. One interviewee showed her ambition of *"sending messages through products"* (Interview 3) and also described iroha's activity as a feminist action to *"cultivate the sexual field in the grassroots ways"*. She works for brand management and mainly

engages in discursive practices and communication with users. On the other hand, another interviewee who develops products in practice expressed the difficulty of balancing design practices and feminist values. This conflict is represented in an episode about a sex toy case.

There was a discussion about whether or not we should attach a case to an insertable item, and if so, whether or not the case should be transparent...For example, iroha fit [one insertable item] is sold with a black case. When I entered iroha, I had a lot of questions about whether the case needed to be black, or a lighter color, or translucent, etc. I asked colleagues about it. And they told me that Japanese women tend to think this way [want to hide sex toys]...but personally I thought the manufacturers should try to change the way of thinking and in turn, users also would change...but in reality, I found actual users' voices demanding the case to hide products. (Interview 4)

This episode shows the tension between the feminist, design, and market registers within one person. From a feminist perspective, sex toys should not be hidden because the feminist registers address the problem that women tend to hide their sexual desires. Hence, the case should be transparent to show and accept sexual desire. On the other hand, looking through the lens of the design register, the case should be black. One of the values in the design register is user-centered design, and a good product reflects users' opinions. Accordingly, as long as users want to hide their sexual desires, designers should make the black case. Comparing two registers, a designer prioritized the design register. *"In designing, what users and the market need is more important than the opinion of a designer"* (Interview 4). As she mentioned the market, she also values the market register that places importance on users' trust. Trust is established based on the sense of security toward products. Revealing sexual desire is a risk in a conservative society, and thus a transparent case gets users insecure. Therefore, the black case is selected in the market register, too. This tension was more simply seen in the difference in working positions in iroha. While three interviewees (Interview 1, 2, 3), who engage in communication strategies such as media relations and brand management, showed interest in feminism and described the connection between their work, an interviewee (Interview 4) who works for product development denies the connection between feminism and her design practices.

6.2. Boundary Work of Feminism

Through the analysis of registers of valuing, I found each value is relationally shaped. The feminist register is a counter-argument against the conservative sociocultural norms, and the design register shows that products are the outcome of the interaction with the brand identity, designers'

creativity, and users' opinions. As sex toys are commodities in the market, the product value is defined in comparison with other manufacturers, when it comes to novelty, price, reputation, and trust. While iroha contextualizes its products as femtech and femcare, the authenticity is highlighted by devaluing other femtech industries. Since the market and health registers are entangled with the competitive market, iroha performs the practices to demarcate itself from other manufacturers and increase its product values. More interestingly, the qualitative interviews with people in iroha revealed that they also performed the demarcating practices in the feminist register. As the market register demarcates iroha's product from other products, the feminist register also demarcates its feminist values from other feminists. To be sure, making a difference is a core strategy to gain awareness in the competitive business field. "*Customers choosing iroha do not merely buy products but also sympathize iroha's worldviews and corporate messages*" (Interview 3). However, what found interesting is that iroha's worldview and corporate message are intertwined with its understanding of feminism, which enhances not only the market value but also the feminist value.

Following the discussion in the last section, I closely look at one valuing practice that demarcates iroha from other feminist actions. By analyzing the narrative of feminism performed by people in iroha, this section seeks the answer to the second research question: **How do iroha's employees understand the company's practices as feminist actions?** The key notion in this section is boundary work. It is an STS notion used for studying how demarcations are made. In many cases, boundary work is introduced in the analysis of boundary-making practices between science and non-science. However, what I found through the case of iroha is discursive practices that differentiate iroha's feminism from other feminism in Japan. In other words, iroha performs the boundary work of feminism. One interviewee described iroha's practices as "*political and feministic in a sense*" (Interview 2). The description "in a sense" implicates her hesitation in contextualizing iroha in politics and feminism. Her hesitation is also shown in another description: "*[iroha's practices] is not easy to understand as political actions*". In her conclusion, she admitted, "*It can be considered feminist actions in a broad sense*". Then, the question is: what is the difference between iroha and the existing feminist political actions? Drawing on the concept of boundary work, I explore how iroha demarcates itself from other types of feminism and political actions.

6.2.1. Situatedness of Feminism in Japan

Before moving to the detailed analysis of the boundary work of feminism, it is crucial to see how iroha's employees understand other feminist political actions. First of all, iroha as an institution avoids officially allying with feminism. I found the institutional disengagement in feminism already in the pre-phase of interviews. In the email, one interviewee highlighted the sociocultural differences in feminism before conducting an interview. She pointed out that feminism was not well embedded in Japan

and many people misunderstand the meaning of feminism. Hence, iroha did not commit to feminism as a brand decision. However, the qualitative interview revealed that iroha's employees had ambivalent feelings about feminism. While they showed a personal interest in feminism, they also criticized a certain type of feminism. In particular, feminists on X (called Twifemi (ツイフェミ) after the name of Twitter) were critically mentioned in some interviews. An interviewee expressed her impression of Twifemi; *"I felt offended and want to keep a distance from Twifemi every time when I see them"* (Interview 2). This is the reason why iroha avoids officially allying with feminism. *"Because they call themselves feminists, people are afraid of feminists and feel that if I call myself a feminist, people around me think I am also aggressive as other feminists"* (Interview 1). When iroha keeps its distance from feminism, it problematized the situation of Japanese feminism where the word feminism is occupied by one type of discourse and activists.

In other words, the problem of feminism for iroha is a communication problem. Communication with anger excludes people, as one participant said, *"misandry and exaggerating critical views to men made me feel an outsider from 'feminist' community, and I could not find my position, uncomfortable to stay there"* (Interview 3). Of course, in the history of feminism, anger played a key role in organizing activism. Being angry against social injustice and gender inequity makes it possible to visualize the minority's opinions and realities. However, the problem of self-called feminists in Japan is *"being angry to satisfy themselves"* (Interview 1). Put differently, people in iroha question the reason and efficacy of anger: for whom and why are you angry? As I will see soon in the following, anger is not strategically helpful in increasing iroha's feminist values.

6.2.2. Boundary Work 1: Focusing on Joy

The first boundary work around feminism is seen in the communication style. While iroha's employees characterize other feminist actions regarding anger, they foreground joy as a primary emotion in their communication. The key difference between the two emotions is the effectiveness of activism mobilized by each emotion. From her experiences engaging in left-wing activism and journalism, one interviewee questioned if the expression of anger is effective in mobilizing people in political actions. *"Anger, as a human being, doesn't last very long, you know, you and your personality gradually become dominated by anger"* (Interview 2). As a result, she also became angry with anyone who did not share her anger. She needed just people who would rather become angry together for her, and she ended up being isolated rather than making solidarity. She highlighted *"anger is an inappropriate way and emotion to share what I want to tell"* and concluded, *"I was tired of being angry"*. The important thing here is that she does not deny being angry. Anger is an important emotion to make the first step for social transformation. What she problematized was the way she shared her issues and involved others in her

actions. In other words, her argument points out the gap between having the will to change society and changing society in practice. Being angry about social injustice is not equal to mobilizing actions to get rid of the injustice. Accordingly, the point is how feminist subjects, who become sensitized to injustice and inequity regarding women, arrange actions to bring actual social change.

In contrast to anger, iroha's employees foreground a different emotion, joy. In iroha's communication strategy, joy plays a key role in forming feminist agents and bringing social change. For example, communication with joy is effective in sensitizing women to taboo topics such as women's sexuality. Aside from producing sex toys, iroha also organizes talk events to enrich women's interests and knowledge in sexuality. The topics of the talk event are diverse from medical information to real experiences/feelings of women in sexual intercourse. Especially, one talk event was often mentioned in the interview and online articles. It is about the history of self-pleasure where people in iroha *"introduced the history in humorous and funny ways and showed that common sense in the contemporary society was not taken for granted"* (Interview 1). It is worth noting that the role of humor was emphasized as a crucial essence of the deconstruction and epistemic change regarding sexual norms. In an online article written by the TENGA marketing manager, one participant in talk events is introduced; *"I believed self-pleasure was an immoral behavior but, through answering quizzes and laughing with other participants, I got to wonder why it is immoral"* (Nishino, 2023). The woman becomes questioning the situation where women's sexual desire is degraded. In this sense, she became a feminist agent who is sensitized to social injustice to women. The article that reported the talk event finishes with the following sentences; *"Maybe by learning about this kind of background and realizing 'Huh? Self-pleasure is nothing to be ashamed of!', more people may be able to enjoy self-pleasure and think, feel, and discuss sex"* (iroha, 2019). The talk event deconstructed the taboo regarding women's sexuality and encouraged women to accept and explore their sexual desires. At the same time, it also reduced the psychological and social hurdles of talking. Communication with joy contributes to *"supporting women who make decisions on themselves with subjectivity"* (Interview 1).

Furthermore, communication with joy is narrated with the potential for social change. Communication with joy opens up the possibility of talking about sexual matters, which deconstructs sociocultural norms that degrade women's sexuality. In turn, the possibility of sex communication is opened up, which brings (small) change in micro-society, for example, a couple's sexual relationship. Through the interviews, some participants mentioned a lack of sex communication as one problem that women face in everyday life. Even in a heterosexual romantic relationship, it is difficult for women to tell a male partner about their own sexual pleasure and problems in intimacy. One interviewee referred to the disappointment when she tried communication with an ex-boyfriend (Interview 2), and the other pointed out that some women *"go to a doctor for the diagnosis of frigidity"* (Interview 3) instead of

communicating with partners. Therefore, one interviewee showed her expectation of communication with joy to change the way of communication between partners. By joining a talk event or using iroha's products, *"If people think, 'Oh, I actually liked this kind of thing' or 'Next time I'll talk about this kind of thing with my partner', I think that's also a practice of feminism, and that person can be said to be a feminist"* (Interview 1). In fact, some users underscored the change in sex communication between partners after meeting iroha; *"I think he [her boyfriend] appreciates the change more than me"* (Interview 5); *"we became mutually motivated that we let each other feel better"* (Interview 6); *"Sex toys are a communication tool for us"* (Interview 8). They feel joy in sex communication with partners and value the change as a factor in fostering social relationships. *"Communication starting with 'joy' has the potential to open up self- and mutual understandings"* (Nishino, 2023).

Importantly, iroha's employees regard communication with joy as a feminist action, while demarcating it from Twifemi, angry feminists on X. An interviewee underscored that the talk event contributed to feminism in the sense that it *"supports women's articulation about their sexuality and subjective pleasure"* (Interview 1). Meanwhile, she was also hesitated to frame the talk event as a feminist action in the Japanese context because *"the word feminism and the understanding of feminism are twisted"* (Interview 1). What she assumed here is the problem of Twifemi. She problematized that many feminists on X *"leave the initial aim of doing feminism and in turn, just seek to be angry as much as they can... That's why they are very appealing to the victimization of femininity, and their arguments contribute to reinforcing the dichotomy between men and women, and in a sense, they are spreading misandry"* (Interview 1). She criticized that doing feminism is reduced to being angry and as a result, they (re)produce misandristic arguments.³ Her ambivalent feelings toward feminism are generated by a dilemma. That is, she wants to admit communication with joy is a feminist action, but she cannot explain it with the word feminism because the image of feminism/feminists is dominated by communication with anger. Therefore, iroha's employees seek the word to describe their feminist practices without relying on the Japanese feminist contexts. *"In the company, I have often discussed that it would be better to describe the original feminism without using the word feminism"* (Interview 1). This remark implicitly excludes the angry feminists from 'the original feminism' and at the same time contextualizes communication with joy in 'the original feminism'. In other words, she engaged in boundary work by comparing two types of feminism and giving authenticity to her side.

³ Besides, it is also problematic for iroha that Japanese feminists tend to frame women as just victims. My interviews with two participants who experienced sexual abuse showed that it is not enough for victims to emphasize their damages. One had a trauma with sex toys, but when meeting iroha's product that "has a stick shape similar to the typical sex toys but actually far different", she was relieved and felt the sense of security. The other also blamed her body "that invited sexual harassment and abuse", but by using iroha and knowing her body, she overcame self-blame and got to love her own body. These two episodes imply that reinterpreting the damage is more effective for recovering victims than emphasizing it.

6.2.3. Boundary Work 2: ‘Mild’ Feminism

As the last section showed, iroha’s employees seek to connect their practices with feminism while reducing the social implication that the word feminism has. In this regard, one interview used the term ‘mild’ feminism throughout considering *“how I can be involved in feminism while keeping a distance that is neither too close nor too far”* (Interview 3). She described ‘mild’ feminism as *“not completely but a feminist in a loose way”*. Accordingly, ‘mild’ feminism shows a compromise between her interest in and avoidance of feminism. As Burchell (2007) highlights, boundary work produces both discourses of similarity and discourses of difference to emphasize contrast and clarify the boundary. Thus, the term ‘mild’ feminism can be interpreted as boundary work in the sense that it simultaneously demarcates iroha from other feminism by adding the adjective ‘mild’ and keeps connections with feminism. In other words, the term ‘mild’ feminism is an alternative word to describe iroha’s communication strategy by both drawing on the notion of feminism and demarcating angry feminists.

The adjective ‘mild’ emphasizes the difference in the effects of feminist actions. ‘Mild’ feminism was explained by comparing famous Japanese feminists whose arguments exaggeratedly criticize men. One interviewee highlighted the difference between ‘mild’ feminism and mainstream feminism by drawing on her personal experiences: *“I had a strong sense of victimhood and hated men...but when I realized that there are diverse men, some of whom put themselves in women’s shoes, and that I have the potential to be a perpetrator yourself, then I got to question what so-called feminists claim”* (Interview 3). ‘So-called feminists’ in this description referred to angry feminists who produce misandric discourses and reinforce the tension between men and women. On the other hand, ‘mild’ feminism does not assume men are enemies nor have the pre-given categories that fix women as victims and men as perpetrators. Put differently, ‘mild’ feminism blurs the boundary that angry feminists draw between men and women and opens up the possibility of solidarity regardless of gender. It is important for ‘mild’ feminism to *“have a more moderate way of solidarity and connection with men and women, without provoking or criticizing them excessively”* (Interview 3). Her explanation of ‘mild’ feminism resonates with what iroha’s marketing manager called *“communication without the intention to criticize others.”* (Woman Type, 2023). The difference between ‘mild’ feminists and angry feminists is making solidarity or conflicts.

Certainly, conflict-making is an activism strategy to strengthen the community’s solid bond. However, solidarity relying on conflicts incorporates the exclusion of someone as enemies and risks radicalizing. More problematically, the categorization of women as victims reinforces the gender dichotomy between men and women by always considering women’s victimhood against men. This consideration reduces gender diversity. On the other hand, ‘mild’ feminism removes stereotypical categorization. As the interviewee reflected on the potential that women can be perpetrators, ‘mild’ feminism does not prioritize women in the position of victims. As a result, the possibility of making

solidarity is opened to all genders. Indeed, a queer user interviewee valued “*iroha’s ‘soft’ attitude that does not exclude anyone*” (Interview 7) while comparing a famous Japanese feminist who has a transphobic view. The ‘mild’ attitude is strategically striking because it does not exclude a particular social group and gains support from a diverse population.⁴

6.2.4. Summary of Boundary Work of Feminism

Summarizing my findings in boundary works around feminism, I want to highlight the difference in communication style between iroha’s employees and angry feminists such as Twifemi. Throughout the interviews, iroha’s employees questioned the performativity of anger. Although anger can be a starting point to have a will for social transformation, iroha’s employees repeatedly pointed out that feminist actions initiated by anger reduce the scale of mobilization. In Japan, angry feminist actions not only abandon the possibility of making solidarity with men and other genders but also keep away the support from women. In short, being angry about social injustice is not equal to mobilizing actions to get rid of the injustice. Therefore, iroha’s employees explore an alternative feminist action in Japan by emphasizing the role of joy in their practices against angry feminist actions and forming a ‘mild’ approach rather than misandristic attitudes. While demarcating their practices from the existing feminism, iroha’s employees frame their practices as feminist actions. As the descriptions of ‘original’ feminism and ‘mild’ feminism show, iroha’s employees insist on the connection with feminism and in fact intervene in women’s understandings of sexuality and sex communication with a partner.

6.3. Valuing Multiple Bodies

Sex toys incorporate heterogeneous values. Drawing on the notion of registers of valuing, I showed that four registers are involved in the design practices of sex toys and that each register performs valuing practices to increase the value of sex toys in different ways. Different valuing practices are sometimes conflicting but complementary in other situations. In the last section, I focused on an interesting valuing practice for the feminist register. By demarcating iroha from other feminist actions in Japan and formulating an alternative communication style with joy and ‘mild’ feminism, iroha tries to involve users in its feminist actions.

This final section sheds light on the other interesting finding related to valuing. While my interview data revealed practices to value sex toys, it also showed another valuing practice, which is

⁴ Interestingly, the users also share a sensibility to ‘mild’ feminism. One user said that, through iroha, she “*expanded her capacity and became able to accept diverse opinions about sexuality such as open-mind and conservative*” (Interview 6). This is an interesting case in which the inclusive attitude of iroha influences one’s perspective in practice and opens up mutual understanding.

valuing the body. When describing sex toys, many interviewees also referred to the body. Both interviewees from iroha and users value their bodies through their interaction with sex toys. On the one hand, designers articulate the body in relation to sex toy functionality, and feminists in iroha expect sex toys to bring embodiment. On the other hand, users sense their bodies, find their feelings, and get a new corporal perception. In other words, sex toys help people assess the body, improve corporal perception, and increase the value of the body. More importantly, the way of valuing the body is multiple as well as the way of valuing sex toys. It is also sometimes conflicting and complementary.

The notion of body multiplicity sensitizes me to different valuations of bodies. As I explained in Chapter 4, the notion of body multiplicity draws attention to three crucial points in the analysis of bodies. First, it is different how people sense their bodies. Considering the individual differences in bodies, my analysis does not presume any type of body but rather pays attention to how each interview describes one's body differently. Second, the notion of body multiplicity also takes into account the different enactment of bodies within one person. One has a different relationship with one's body in a particular moment and situation. Focusing on the relational aspect of bodies, I also attend to how interviewees understand their bodies specifically in the interaction with sex toys. Third, the notion of body multiplicity expands the analytical scope to the field of subjectivities. Assuming that subjectivities are intertwined with the way of understanding one's body, the embodiment through sex toy usage formulates a particular type of subjectivity. In other words, the notion of body multiplicity helps to analyze not only how people sense bodies in a specific situation but also how people reflexively understand their bodies. In this sense, my analysis explores bodies as a locus where interviewees encounter their emotions and sociocultural norms such as gender and sexuality. Drawing on these sensitizing points of body multiplicity, the following section analyzes data about bodies and tries to answer the third research question: **What types of bodies are (not) valued through the interaction with sex toys?**

6.3.1 The Body for Designers

I start by seeing how designers in iroha understand the relationship between sex toys and the body. What I refer to as designers in this section are people from the design side including workers engaging in both brand management and product development in iroha. By analyzing their descriptions that refer to the relationship between sex toys and bodies, I found two types of bodies each from product development and brand management.

The first body is an entity to touch/be touched. An interviewee engaging in product development foregrounds the sense of touch which allows people to feel their own bodies. *“Pleasure is intertwined with the feeling of the skin which is, of course, differently sensed very fine depending on the part of the body. Some parts are very sensitive, such as fingertips and neck, and some parts are not so sensitive. So,*

pleasure differs depending on which part of the body you touch” (Interview 4). In the field of product development, the body is sensually analyzed. The body is fragmented into parts, which are categorized by the sensitiveness of the skin. The body is an assemblage of different senses rather than a singular entity, and sex toys sensitize users to a particular sense by touching/being touched (with) the body. Her articulation of the body resonates with the second sensitizing point of body multiplicity, which is the difference in one person. The way of feeling the body relies on the sense of skin, which varies if one touches/is touched differently. In other words, the body is situated in how and what parts of the body one touches/is touched.

The second body concerns subjectivities. While the product development interviewee focuses on the sense of bodies, workers in brand management illuminate the relationship between bodies and subjectivities. Following the notion of body multiplicity, embodiment affects self-understanding. This insight enables people to consider bodies and subjectivities simultaneously. For example, when an interviewee talked about the body effects of sex toys, she said, *“I wanted to convey the message that you will be able to face and accept yourself by adding (self-)pleasure to your life”* (Interview 3). In her articulation, considering bodies connects with a reflexive understanding of self such as facing and accepting oneself. Indeed, she also emphasized the personal experience with iroha’s sex toys through which she accepted her feminine body. Another interviewee also coupled corporeal pleasure with sexual subjectivities such as self-esteem and autonomy (Interview 1). In short, iroha’s employees in brand management emphasize embodied subjectivities, and the body is considered as a locus where a (sexual) subjectivity is established.

6.3.2 The Body for Users

Designers in iroha expect that sex toys not only give the sensual experiences to emphasize a particular body part and feeling but also, through that experiences, allow women to (re)gain embodied subjectivity. Each designer differently describes the relationship between sex toys and the body, but they do not define it in a particular way. The two understandings of the body with sex toys are what I identified through the qualitative interviews, and iroha does not institutionally share a single definition of the sex toy effect on the body. Rather, iroha reflectively multiplies the way of interaction between users and sex toys. An employee in the brand management collected people from iroha and iroha-bu and made a flowchart by reflecting on *“the change of the body and mind before, during, and after self-pleasure”* (Interview 3). Writing down the interpretation of self-pleasure on Post-it, the workshop categorized the expectations toward masturbation such as meditation, exploration, self-acceptance, and introduction to sleep. This mapping practice shows that iroha respects the multiplicity of self-pleasure where the user’s

body and mind are changed in a certain way⁵. Unfortunately, this self-pleasure map is not accessible for confidential reasons, but my qualitative interviews with users identified the multiple bodies that appear in the interaction with sex toys. I found three types of bodies: the body to explore/be explored: the body to sexualize/be sexualized: and the body to gender/be gendered. The body to explore/be explored makes a contrast against the body to sexualize/be sexualized, whereas the body to sexualize/be sexualized is intertwined with the body to gender/be gendered. Users' understandings of bodies overlap the designers' expectations of the sex toy's effect on the body to some extent.

6.3.2.1. The Body to explore/be explored

When the user is assumed to be a woman who lacks self-communication, the body is enacted as an entity to be explored. This understanding of the body is also seen in the user descriptions. Two user interviewees are interested in seeking body parts where they feel pleasure. Through self-pleasure, they knew *“the emotion of pleasure, which made me aware of the existence of body part feeling as such and motivated to know further”* (Interview 6). Interestingly, users also made a contrast between the body articulated by self-pleasure and that in sexual intimacy with a partner. One interviewee explained the difference by analyzing the effect on herself. *“While sexual intimacy with a partner gives me psychological pleasure, for example getting rid of loneliness and feeling love/being loved, using iroha focuses more on pleasure.”* (Interview 6). Both self-pleasure and sexual intimacy mobilize the body and make interactions with either sex toys or a partner. However, differences are in how one feels the body and the pleasure created by the interaction between non-humans and humans. Self-pleasure allows her to focus on her body through pleasure stimulated by sex toys. Another user also followed up on this point by comparing self-pleasure to other elements in sexual practices. *“There are many parameters to sexually please me such as mood and the relationship with a partner, but when removing the social conditions, I am currently enjoying and interested in knowing how my body reacts”* (Interview 8). For her, self-pleasure places her body outside of social contexts and prepares the condition to focus on her biological body. In other words, sex toys function as a medium to translate sexual pleasure into a particular type of body perception.

The description of the body to explore/be explored highlights the effect of ‘knowing’ the body. The body is enacted as if it is a natural object independent from other social contexts. It is an unknown object awaiting to be discovered. Sex toy users know and learn about their bodies by touch. Importantly,

⁵ It is important to be sensitized that mapping (categorizing) coincides an exclusion. An interviewee remarked on the experience in the workshop: “I felt that I was not taken into account by iroha. I felt to be outside of the underlying frame when it comes to not only the self-pleasure map but also the brand concept” (Interview 7). Making categories create the outside of categories, and she felt excluded because she could not find her personal meaning of self-pleasure on the map.

this knowing practice demands women for a particular material engagement. One user interviewee explained the expectation of self-pleasure in the comparison of sexual intimacy with a partner. “*Having sex with someone does not raise the resolution of pleasure, but through self-pleasure, I can know the inside of my body by making sense of my favorite angle and vibration*” (Interview 8). She knows her body based on her senses. Even though she expressed ‘the inside of my body’, she did not see her inner body either by opening her body to observe what was going on under her skin or translating her body into numerical and visual data such as X-rays and charts. Put differently, she knows her body subjectively rather than objectively. More crucially, her embodiment would not happen just if she touched her body with sex toys. As she described “*making sense of my favorite angle and vibration*”, she needed to make an effort. Her body is enacted through the favorite stimulation by changing sex toys' vibrations and angles. When she engages in her body in a particular way, she enhances a new sense of the body. For her, the inside of the body is recognized by finding the body's reaction to outer stimulations.

In this light, it is also interesting that she used the word “resolution” to describe the gain of her body sense. Resolution often refers to the number of pixels in an image. For example, a digital photo is an aggregate of pixels that are the smallest unit of a digital image, and raising the resolution means increasing the number of pixels. Although resolution is an index relevant to visuals, she used this word for self-pleasure that does not involve visual images. Accordingly, the word resolution in her description does not refer to visual effects but to metaphorical images where something vague acquires a clear shape by filling a new piece of the whole image. Before finding her favorite stimulation, the resolution of her body is low. For her, self-pleasure is a learning process to increase the pixel of pleasure by sensing the interaction between her body and sex toys, through which she knows the inside of her body.

The body to explore/be explored resonates with the designer understanding of the body to some extent. A designer in product development analyzes the body into a piece of body parts depending on the skin sensitiveness and sheds light on the biological aspect of the body. Meanwhile, users also focused on the materiality of the body that physiologically reacts to sex toys' stimulations. The material interaction in self-pleasure enacts a particular perception of the body. In addition, the body to explore/be explored also relates to subjectivities as iroha's brand management people emphasized. Sexual exploration with iroha's sex toys enables users to know their bodies through a particular material practice. Following feminists' discourses that insist on the significance of touching (Campo Woytuk et al., 2023; Reime et al., 2023), sex toys are a medium where women subjectively know the position of their bodies in the world. However, interestingly, this knowing practice of bodies through exploration removes other social actors and foregrounds the solo activity of self-pleasure. The actors involved in self-pleasure as the body exploration are limited to just a person and a sex toy. This point makes an interesting contrast with the next type of the body.

6.3.2.2 The Body to sexualize/be sexualized

The body to sexualize/be sexualized is contrasting to the body to explore/be explored. While the latter body focuses on a sexual activity independent from others, users also refer to the body entangled with social contexts. One user with experience of sexual abuse expressed the struggle with self-blaming of her body. *“Boys made fun of me since I had big breasts, which made me blame my body for causing sexual harassment”*. Her body is traumatized and objectified by the male gaze. It is not free from social conditions but is perceived as a sexualized body by others in society. Crucially, her sexualized experiences prevented her from sexual explorations. *“I used to avoid sex due to my psychological problems”*. This negative attitude toward sexual practices implies the difficulty in removing social elements from sexual practices. Sexual engagement in the body risks causing flashbacks of traumatized memory. Accordingly, the body is enacted as the representation of the old memory rather than the locus of a new experience. While the body to explore/be explored focuses on the process of unveiling the untouched body parts and reactions, the body to sexualize/be sexualized foregrounds the already-touched body.

When the already-touched and sexualized body meets iroha, sex toys contribute to changing the body perception. Another interviewee who also experienced sexual abuse highlighted that iroha's sex toys helped her *“regain the autonomy of my mind, body and life in my hand”*. Sex toys give an opportunity to alternatively sense the sexual body free from trauma. Even though another interviewee said therapy was the most important method to overcome sexual trauma, sex toys played a role for her in recovering her body autonomy that is capable of having sexual practices. For her, the interest in sex toys represents overcoming sexual trauma. *“I am confident in that I positively engage in sexual practices despite sexual abuse and harassment”*. Pleasing one's own body recovers the damaged body from sexual trauma and gives a new corporal perception. Put differently, sexual exploration through self-pleasure is experienced as the process of re-sexualization rather than unveiling the body's potential. This enactment of the body overlaps the designers' understanding when it comes to embodied subjectivity. By promoting the intimate interaction between sex toys and the body (self-communication), iroha tries to intervene in users' body understandings. It aims to gain sexual autonomy by allowing women to accept their sexual desires and individually satisfy themselves. In this light, the body to sexualize/be sexualized appears when women regain sexual subjectivity. It is greatly important to individually satisfy oneself in the process of re-sexualizing the body because feeling subjective pleasure redraws the memory of sexual objectification. Through this process, women give their bodies a new meaning and enhance sexual autonomy.

Re-sexualization through sex toys has an implication to the issue of postfeminism which problematizes the sexualization of women's bodies in a neoliberal economy. The critical postfeminist discussion draws our attention to postfeminist subjects who are incited to be sexy and spice up their

sexual life, mostly with a partner (Harvey and Gill; 2011; Mayr, 2022). Women's bodies become aestheticized objects, and sex toys are seen as a contributor to sexualization. Sex toys are functionally equivalent to dishwashers in the sense that both are just daily appliances that do not influence women's liberation (Waskul and Anklan, 2020). However, my interview data sheds light on a different aspect of sex toys. While postfeminism argues sexualization as aestheticization, my interviewees described re-sexualization as embodiment. They sexualize themselves through sex toys to care for their body and recover embodied subjectivity. It is a liberation from sexual trauma and sexualization to cut off the connection between bodies and the past. Sex toys are definitely different from dishwashers because they intimately intervene in the body and bring a cognitive effect. Therefore, sex toys are still a tool for sexual emancipation beyond a 'toy' when thinking of a particular interaction with bodies.

6.3.2.3 The Body to gender/be gendered

The body to sexualize/be sexualized is intertwined with gendering. Two interviewees who had sexual trauma referred to the relationship between femininity and self-pleasure. One of them replaced self-blaming with self-confidence by using iroha's sex toys that "*affirm and develop femininity*". Re-sexualizing her body is performed by finding and loving her own feminine body. Besides, one interviewee described the effect of self-pleasure in relation to femininity.

[By self-pleasure] I feel like I'm keeping some kind of feminine energy or pheromone. So, I try to do self-pressure before an important work day. I want to show my feminine charm, even though it has nothing to do with work at all. I want to increase my feminine attractiveness, which is a part of myself. I just do self-pleasure because I want to increase the figures of feminine attractiveness. (Interview 5)

It does not matter whether self-pleasure increases 'feminine energy and pheromone' in reality. Rather, the important thing is that she articulates her body connecting 'feminine charm and attractiveness' with self-pleasure. Interestingly, as she said 'increase the figures', she thinks it is possible to control her femininity by self-pleasure. This remark overlaps with the designers' understanding of the body. A person in iroha mentioned femininity as one of the things that women face through self-pleasure (Interview 3). Meanwhile, a user not only faces but also increases femininity through self-pleasure. In the user description, femininity is not a steady entity to wait to be found but a fluctuating characteristic of the body. In this sense, the body in the interaction with sex toys is situated in the process of gendering.

On the other hand, the gendering body is criticized by queer perspectives. One queer interviewee described her concern; "*My concern is iroha contributes to reinforcing the normativity of 'normal'*"

women” (Interview 7). Coupling with sexual pleasure and femininity risks excluding non-binary people who have feminine bodies but cannot define their bodies under femininity. In this regard, iroha is also reflective. For example, a person in iroha criticized the old brand statement used between 2013 to 2023, *Renewing femininity*. “*I was wondering what constitutes a woman and feeling unsatisfied with the old statement*” (Interview 3). In 2023, the 10th anniversary year, iroha changed the brand statement to *LOVE MY COLOR Feel Good in your own way* (English version: *Color Your Pleasure*⁶). In one article on the TENGA website, iroha explained the meaning of the new statement. “*With the idea of ‘finding your own sexual pleasure’ as a human being beyond the gender boundary of ‘woman’, we decided it so that women can face their sexuality in a more positive way*” (TENGA, 2023). The new statement removed femininity to include diverse genders in iroha’s project. Nevertheless, a queer participant pointed out that “*iroha actually sticks with the issue of femininity*” (Interview 7). She explained this point in the comparison with another sex-toy-distributing company.

[Another sex toy shop] talks to me about items in kind of a way like a gadget geek and gives little sense of meaning to sexuality. It doesn't say things like “Take care of your body” or “You're a woman so you should...” It does not make me conscious of being a woman.

(Interview 7)

This remark is strikingly critical because she implies that iroha’s sex toys make her conscious of being a woman by associating self-pleasure with self-care. Her gender identity is queer, and she added, “*I hate everything that socially assumes and categorizes me as a woman, while I do not feel anything wrong with my physicality*” (Interview 7). She would not say that iroha foregrounds femininity in the context of self-care but implies that it has a nuance of power to socially categorize her as a feminine woman. Unfortunately, I could not conduct additional interviews with queer users due to the accessibility. Thus, it is difficult to make her opinion generally valid. Nevertheless, it is worth noting the possibility that iroha’s gendering sex toys might exclude non-binary people.

6.3.3 Summary of Valuing Multiple Bodies

This section analyzed multiple ways of valuing bodies that I found throughout the interviews. When it comes to the product development view, the body is articulated as an entity to touch/be touched. This articulation invites multiple bodies since people feel their bodies differently depending on how and what parts of the body touch or are touched. While the interviewee in product development foregrounded

⁶ The reason iroha uses different brand statement is the Japanese statement LOVE MY COLOR might tend to remind people skin color and connect it with racism.

the physiological aspects of bodies such as the sense of skin, those who work in brand management shed light on the relationship between bodies and subjectivities. Put differently, the brand management view emphasized the outcome of sensing bodies with sex toys where users reflexively know their bodies and gain self-understanding. However, the interviews with designers did not explain how and what exactly users know about their bodies. In response, the user interviews showed three different types of bodies in practice. The first is the body to explore/be explored where users concentrate on the physiological reactions to the stimulation of sex toys. Whereas users in the body exploration regard the body as a natural entity that disassociates from social contexts, the body to sexualize/be sexualized insists on the inseparable relationships between bodies and social contexts. The body to be sexualized is intertwined with encountering others in society especially where women undergo negative sexual experiences. In this situation, self-pleasure encourages users to establish embodied subjectivities by (re)sexualizing their bodies. The third type of body emerged in the concern of gendering. From the queer perspective, iroha's sex toys tend to reduce diverse bodies into the feminine body. The body to gender/be gendered provides the opportunity to positively interpret the feminine body on the one hand, but it also risks reinforcing social norms of bodies on the other hand. In sum, bodies are articulated in multiple ways in both designing and using iroha's sex toys.

7. Discussion and Conclusion

The previous chapter answered the three sub-questions by analyzing data from document analysis and qualitative interviews. First, I identified four different registers: feminist, design, market, and health registers. These registers orient the activities around iroha's sex toy. Emphasizing iroha's contribution to women's sexual emancipation, the feminist register performs discursive practices that bring women's sexual desire and pleasure to the fore, decouple solo sexual activities from the stereotypical negative and male-dominated image, and contextualize the sex toy usage in a part of daily care practices (de-sexualization). The design register facilitates material practices for making products irrelevant to sexual symbols. With the Japanese modern sensibility and participatory design process, iroha's sex toys compromise the designers' creativity and users' concrete needs. The market register aims to gain product competitiveness in the market by using novel materials, elaborating product presentations such as the package, and incorporating outsiders actively to enhance company trust. The health register reinforces the link between iroha's sex toys and sexual wellness by posting newsletters about sexual health on the official website and participating in the Femtech market in Japan. These four registers have complementary and conflicting relationships with one another. The design register follows up the market

register in the sense that creative and user-centered product design gives iroha the specialty in the market. The feminist register shares the aim of the design register that makes sex toys irrelevant to sexual symbols and reduces the shame of consumption. Meanwhile, the feminist register also conflicts with the health register because emphasizing the health effects of self-pleasure might prevent women from accepting sexual desire and pleasure. Additionally, the feminist register is sometimes undermined when considering users' needs in the design and market register. Therefore, my answer to the first sub-question (**How are iroha's sex toys valued from different perspectives?**) is the following: Four different registers insist on, justify, and increase the values of iroha's sex toys through diverse practices including the sex toy design and usage, one another of which makes compromises and conflicts in different situations.

Second, I closely looked at the feminist register with the notion of boundary work. In order to increase the feminist value of iroha's sex toys, iroha's employees highlighted the difference between the existing feminist actions in Japan, especially Twifemi who is active on X. In short, iroha's employees drew the boundary of feminism in Japan by emphasizing a specific communication style. Considering that Japanese women tend to avoid angry feminists, iroha's employees insisted on the significance of communication with joy. Their communication strategies were not only differentiated from angry feminists but also linked with 'original' feminism. As the term 'mild' feminism shows, iroha's employees underscored the continuity of feminism with their actions and differences in angry feminism simultaneously. This boundary work of feminism reveals what iroha's employees expect as the outcome of their actions. By formulating their communication practices with joy, iroha's employees emphasized the inclusiveness of their actions and the possibility of opening up further communication with others. Sharing the issue of women's sexuality in positive ways, iroha's employees sought to deconstruct social taboos and make solidarity with a wide range of people. These findings invite me to answer the second sub-question (**How and in what sense do iroha's employees understand the company's practices as feminist actions?**). My answer is that iroha's employees shape their feminist actions with joy and 'mild' attitudes by considering the situatedness of feminism in Japan, through which they expect women to be sexual subjects free from social taboos and make solidarity with diverse people.

Third, I explored the relationship between sex toys and bodies from both the designer and user perspectives. Following my third sub-question (**What types of bodies are (not) valued through the interaction with sex toys**), I identified multiple types of bodies. First, the body to touch/be touched was referred to by a product designer who articulates the body depending on the skin's sensitiveness. Second, brand management people saw the body as a locus to establish subjectivities. The users' interviews followed up on these two types of bodies more specifically. The third type of the body is one to explore/be explored where users understand their body as a natural object and reflexively know their body capability. Fourth, the body to sexualize/ be sexualized is situated in social contexts, and users gain sexual

autonomy by re-sexualizing their bodies. Fifth, the body to gender/be gendered standardizes the feminine body, which is criticized from queer perspectives. These fifth types of bodies overlap with one another as one interviewee described her body in multiple ways.

Finally, I try to answer the main research question: **How do iroha's designed sex toys intersect with politics, the market, and bodies in Japanese society?** This paper understands politics as politic-as-activity. The notion of politics-as-activity sensitizes me to the place where iroha's sex toys perform politics, and in Chapter 4, I situated an analytical focus on three places: design practices, the Japanese market, and bodies. Following the feminist register, designers oriented their practices so that iroha's sex toys bring the perceived effects with political implications. Particularly, iroha's employees try to deconstruct social taboos about women's sexuality, empower women to be sexual subjects, and change social situations such as inequality in couples. These feminist values are distributed with commodities in the market. Considering one tradition of Japanese feminism that implicates feminist matters through cultural and commercial practices in the market (Fanasca, 2022; Aoyagi and Yuen, 2016; Dales, 2005; Otsuka, 2001), iroha's sex toys also engage in political actions through the market. In addition, iroha's employees see the user's body as a political place. When iroha's employees talked about sexual trauma and the inequality in sexuality, bodies are focused on as the place to establish sexual subjectivity and bring change in social relationships. In sum, iroha's designed sex toys intersect with politics in three places where embodied subjectivities are foregrounded for deconstructing taboos of women's sexuality and changing social relationships. However, the political values inscribed in sex toys conflict with the articulation of the market and bodies. The market register reduces the feminist values in design practices by balancing the user's needs. Since the market register emphasizes the commodity aspects of sex toys, designers' political implications are toned down in relation to the competitiveness in the market. Moreover, iroha's emphasis on women's bodies is criticized from the queer perspective. While iroha's sex toys enact multiple bodies, framing women's bodies with femininity risks reducing the diversity of bodies. In conclusion, the value of sex toys is relationally shaped by the intersection between feminist political views, market strategies, and the enactment of multiple bodies.

My study contributes to sex toy studies, first of all. Qualitative research on sex toys is less developed even ten years after Fahs and Swank (2013) point out the lack of study. The literature about sex toys has neglected to explore women's own narrative and thus less clarified how women feel about the interaction between bodies and sex toys. Besides, as Döring and Poeschl (2020) highlight, the study on sex toys lacks diverse data from different cultures. While I found research on sex toys in the US, Europe, and Australia, the research on sex toy usage in Asia including Japan is scarce. Thus, my research contributes to filling the research discrepancy. Qualitative interview data with sex toy designers and users are valuable for understanding sex toy design activity and usage in practice. My analysis of multiple

values inscribed in sex toys provides a further research approach to sex toys. While my research focuses on feminist values of sex toys, future research can shed light on other values, including design, market, and health registers, or a completely new value that I did not identify. User's descriptions of embodiment also have the potential to draw researchers' theoretical attention to sex toys. Especially, my participants showed different views of sex toys depending on cultural and sexual experiences, gender, and sexuality. Future research can deepen the epistemic difference by attending to individual identity differences. Moreover, my data contributes to understanding local differences in which sex toys are situated. My research field is Japan where social taboos of women's sexuality remain and feminism was transported from the West. While sex toys tend to be directly connected with women's sexual emancipation in the US and Europe, Japan has a distinctive history of feminism and has differently accepted sex toys. Thus, my research can provide interesting data to the academic discussion of sex toys which concentrates on the US, Europe, and Australia. Future research can also enrich the discussion of sex toys by focusing on the local findings and comparing them with the existing studies.

This paper was written as a part of the master's course of Science-Technology-Society at the University of Vienna. Accordingly, I also show my research contribution to STS. My research saw sex toys as a technology and analyzed the intersection of sex toys with politics, the market, and bodies. This analytical scope was influenced by STS which focuses on the entanglement between technoscience and society. Especially, my research tried to contribute to feminist technoscience studies. The underlying assumption of feminist technoscience studies is that science and technology produce, contest, and transform gender and sexual norms (Cipolla et al., 2017). Feminists in STS have argued how the scientific representation of women's bodies historically (re) produces gender roles in society (Schiebinger, 1989) and how reproductive technology is entangled with the policy of population control (Murphy, 2017). Sex toys have also been discussed as a technology that intertwines gender and sexuality (Saunders, 2023; Flore and Pienaar, 2020; Faustino, 2018; Wilson-Barnao and Collie, 2018). However, the discussion focuses on the datafication of bodies, and the qualitative research on sex toys from STS perspectives is still underdeveloped. On the other hand, HCI emphasizes the subjective effects of sex toys (Søndergaard, 2020; Bardzell and Bardzell, 2017; Eaglin and Bardzell, 2011). Nevertheless, sex toy studies in HCI stay in the designer's view, and the user's subjective experiences are not explored enough. In this sense, my study contributes to broadening the analytical perspective of feminist technoscience studies. As I showed, sex toys are an interesting technology that intersects with feminism, sexual health, neoliberal markets, design art, and women's embodiment. Especially since my arguments are built up mainly based on qualitative interviews with both designers and users, I believe that my findings broaden the analytical perspectives on sex toys in STS and HCI.

My empirical findings also give an insight into political philosophy. In the tradition of Western political philosophy, individual physical pleasure was excluded from the theory of political subjects. It was argued that people become citizens who engage in the common good by overcoming individual bodily desires. On the other hand, Mol (2009) explores the notion of consumer-citizen by connecting individual bodily pleasure with the common good. She asks "How to theorize pleasure? Or, more importantly, how to do so in such a way that pleasure does not appear to be inherently and self-evidently selfish and politically suspect? At this point political philosophy could do with an invention" (Mol, 2009, p. 270). Her answer is seeking the images and sources of imagination in marketing practices. By analyzing a food package, Mol shows the relationship between pleasure and health, and between pleasure and fairness. My analysis of sex toys adds a new example to Mol's ambitious project to deconstruct the tension between citizens and consumers. I focused on one economic player in Japan and analyzed the political values inscribed in its products. Document analysis and qualitative interviews discovered iroha's feminist values that are not open to the public. As the term self-pleasure shows, (sexual) pleasure is an essence of understanding iroha's feminist values. In this sense, my analysis focuses on the relationship between pleasure and feminism. The users are involved in iroha's feminist actions as consumer-citizens through pleasing themselves with products and by having fun in the talk event. They experience embodiment through sex toys and (re)gain their sexual autonomy. Besides, as iroha places the importance of its feminist actions on communication, iroha also expects users to change their way of communicating with a partner. The empowerment that iroha aims for is stimulating sex communication so that women can pursue their pleasure. Sex toys play a role in inviting a small change in micro-society such as partnership. In this regard, iroha provides a different example from sex toy consumers that postfeminists criticize as neoliberal subjects. While postfeminists problematize that free consumers reduce collective political actions into economic activities (Fahs, 2014) and become indifferent to actual social change (Waskul and Anklan, 2020), my analysis shows a certain type of consumer-citizen who is sensitized to gender inequality, has the will to make solidarity beyond gender, and strives for social change.

The limit of my research is data collection. Since my research findings are constructed from the narrative of participants, I cannot avoid the critique that points out my narrow scope. Although I tried to identify the repeated pattern that appeared among participants' descriptions, I had to largely depend on a particular participant at some points. For example, I interviewed four people from iroha, but only one interviewee worked in material product development. Thus, my understanding of iroha's material practices in which designers engage mainly relied on the interview with her. Considering that she mentioned diverse ways of designing based on each designer's creativity, my finding failed to deepen iroha's material design practices. Besides, it is not sure to what extent iroha shares feminist values with the whole brand members. One interviewee referred to the institutional tradition of hating feminism and

the institutional tension between new and old employees. Taking into account the institutional diversity, it is questionable whether feminist values can be generalized as institutional cultures of iroha. In terms of the user participants, I could not collect enough data from particular social groups. For instance, the age of my participants is between 20 and 42, and I could not find a participant after menopause. As iroha refers to menopause which iroha addresses as Femtech/Femcare brand, the age difference is an important factor to generate body multiplicity. Additionally, I could not deepen queer perspective of sex toys. Although one participant explained queer opinion of iroha, I could not access additional queer iroha users. Future research can explore these missing points by recruiting more diverse participants.

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