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Rebooting an Old Script by New Means: Teledildonics—The Technological Return to the 'Coital Imperative'

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Abstract Teledildonics, a form of digital-mediated sexual interaction, opens new possibilities for the understanding of sexual activity. At first glance, it disrupts conventional preconditions and assumptions about sexual interaction, by allowing the dimension of touch despite the physical distance between partners and, ultimately, promoting a sexual dimension definitely disconnected from the reproductive model of sexuality. However, by scrutinizing the design and functionality of the devices, as well as the discourses presented by three commercial companies—LovePalz, Lovense and Kiiroo—I suggest that this technology reinforces the 'coital imperative', by equating sexual interaction with penetration of the vagina by the penis. Although permitting other formulations, specifically for non-heterosexual couples, the penetrative act remains a presupposition. In spite of structurally disrupting the reproductive model of sex, teledildonics promotes its strongest corollary.

Keywords Teledildonics · Coital imperative · Sexual interaction · Sex toys · Digital technology

Introduction

Teledildonics

Teledildonics, or cyberdildonics, may still sound like a wicked concept. However, its popularization dates to 1991, with the publication of Howard Rheingold's

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seminal book *Virtual Reality*.[1] The dissemination of the concept as proposed by Rheingold was, at the time, a conjectural and projective formulation that anticipated how, in a somewhat near future, the technologically mediated sexual relation would allow, in a certain way, the overcoming of physical distance.[2] Its genealogy goes even further, dating back to 1974, when Tel Nelson (who also coined the word 'hypertext') coined the word 'dildonics',[3] in reference to a technology able to convert sound into tactile sensation, although the potential erogenous effect was not primarily referenced then.

The concept of teledildonics is now stabilized (Fuller 2003; Levy 2007; Lynn 2004; Springer 1996). Several similar formulations have been proposed, all converging on the idea of sexual interaction mediated through remote control sex devices: "Computer-mediated remote control of sex toys that simulate the penis, mouth, or vagina" (Döring 2000), "computer-controlled sex devices" (Levy 2007: 263) or "long-distance sex via computer-controlled sex toys" (2015: 25). This "sexual communication device" (Stenslie 2014: 311) depends on haptic technology, "the technology of communicating tactile information" (Barss 2010: 189).

Teledildonics emerges in the context of growing intersection between sex and technology, a tendency that, Attwood (2014) argues, has increasingly transformed us into "sexual cyborgs". Although this junction is not a new one, it has reached an unprecedented scale, producing new effects and manifestations (Attwood 2010; McNair 2002; Parisi 2004; Springer 1996; Stone 1996; Waskul 2004, 2014). Remote-controlled sex gadgets fall under the banner of 'new era in sex toys', leaving behind the previous paraphernalia available on the sex market, characterized by its technical inferiority and poor marketing strategies. The latest generation of sex toys is marked by the proliferation of gadgets that are "digitally enabled, aesthetically sophisticated, high-quality consumer electronics" (Bardzell and Bardzell 2011: 1), embracing new aesthetical and technological investments.

The tactile dimension introduced by remote-controlled sex toys alters the dynamic of sexual interaction, bringing changes to earlier stages of cybersex. Different technological contexts have produced different dynamics of cybersex experience. Text cybersex has been described as "coauthored interactive erotica", since it proceeds as a "purely textual activity" (Waskul 2007: 282). The textual dialogue in real time typically involves descriptions of the bodies and actions allegedly taking place by those engaging in the erotic conversation. The dialogical experience excludes any sensorial perception, since "participants can neither see nor hear, neither smell, nor taste, nor touch each other" (Döring 2000: 865). This

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[1] A previous version of the chapter "Teledildonics and beyond" was published in Mondo 2000 magazine (Issue 2/Summer: 52–54).

[2] The first fully functional teledildonics system will be a communication device, not a sex machine. You probably will not use erotic telepresence technology in order to have sexual experiences with machines. Thirty years from now (…) most people will use them to have sexual experiences with other people, at a distance, in combinations and configurations undreamed of by precybernetic voluptuaris. Through a marriage of virtual reality technology and telecommunications networks, you will be able to reach out and touch someone—or an entire population—in ways humans have never before experienced (Rheingold 1991, p. 345).

[3] According to David Levy (2007), the word dildonics was combined with the prefix tele by Lee Felsenstein, in the contexto of Hacker's Conference in 1989.

leads to a discursive construction of the body and sexual activity, an experience that was conceptualized as 'outercourse', given the replacement of corporeal stimuli and responses by textual interaction (Waskul et al. 2000: 376). Differently, by adding the audio-visual dimension to the sexual interaction, webcam cybersex presents a very different dynamic and a profound shift from the previous construction of corporeality. The visual framework, the possibility of seeing and being seen, exposures the body and the social markers it carries and were previously obscured—like gender, age, ethnicity and physical appearance, among others. It follows that webcam "has everything to do with bodies—namely, seeing and being seen as sex objects" (Waskul 2007: 284) and privileges "exhibitionist and voyeurist desires" (Döring 2000: 864)". Teledildonics is a new chapter in cybersex; due to its new features and disrupting potential, the scrutiny of teledildonics is a relevant, and largely undone, assignment.

No more a thought experiment, teledildonics is already an empirical reality, commercially available. Its potential for destabilizing dominant assumptions and categories concerning sexual relations is hard to minimize. The possibility of reciprocal physical stimulation between agents, without their reciprocal presence and direct physical contact, invites interrogations concerning the definition of sex, its conditions and requirements, broadening an inquiry that was already launched by cybersex in its previous stages (Collins 2008; Eerikäinen 1999):

> Is cybersex, with such sophisticated technology, real sex or only a simulation of sex? Teledildonic sex, accompanied by visual and voice communication via two-way webcams, comes quite close to paradigmatic sex. The only thing missing is skin-to-skin contact and the exchange of body fluids, and perhaps some sensory inputs such as smell and taste. How essential are these to sex, and can they be simulated too? (Shrage and Stewart 2015: 24).

The aim of this article is to explore the representation of sexual interaction promoted by teledildonics' devices and publicity discourses, in order to detect its relation with dominant cultural conceptions concerning sexual activity (in which ways they are expressed, accepted, reproduced and/or contested).

Methods

I selected a sample of three companies commercializing teledildonics: Lovense, LovePalz and Kiiroo. In my analysis, I considered the websites of the three companies and their associated social networks: Facebook, Twitter and YouTube. I collected and analyzed the content published between January and March 2016, including all the previous publications still available online. Although the three companies presented a broader product line, I specifically focused on the teledildonics' devices—synchronized between two distant sexual partners—available for purchase.

Aiming to explore the representation of sexual interaction underpinning the promotional discourses available, I conducted feminist discourse analysis (Gavey 1989). I focused on the depictions of the sexual experience allegedly provided by

the teledildonics products as well as the descriptions of the devices. I took into account their design, morphology and functionality, as they point to a certain conception of sexual interaction and establish the technological conditions to achieve so.

My approach is theoretically grounded on a social constructionist perspective, taking feminist developments of Foucauldian legacy on power and discourse production (Gavey 1989). Discourse analysis fundamentally approaches language as producing meanings, instead of mirroring externally-established ones: it is constitutive and productive, instead of reflective (Braun and Clarke 2013, p. 204; Gill 2007). This basilar understanding will be crucial in my approach to the empirical universe considered: since we are dealing with promotional discourses that target a certain group, it could be argued or presumed that both devices and discourses are merely translating previous preferences, practices and behaviors. However, the analyzed discourses go beyond presenting commercial products, as they present (and participate in the construction of) a certain vision of what constitutes sex itself.

Lovense, LovePalz and Kiiroo

The Lovense brand was created in 2010. Lovense, a company based in Hong Kong, sells two major devices, Max and Nora, differently designed for men and women. The toys, Nora and Max, are morphologically differentiated: Nora is targeted for women and Max for men. Nora is a pink penetrative device made of silicon and a white bottom, promoted by the company as "the original Bluetooth rabbit vibrator" due to its shape and morphology, which replicates a popular vibrator model with the same name (Attwood 2005). It is shaped as a single piece of silicone structure with a little bifurcation, adding a small vibrating lateral arm for clitoral stimulation to the main penetrative device (designed for vaginal penetration) (Fig. 1).

Max, the male device, is a high-tech masturbator, white colored and cylinder-shaped. It is designed for penile penetration: its inside texture is presented as skin-like and its functionality mimics vaginal contractions through "air-pump" technology (Fig. 2).

The two haptic devices are interactive, responding to each partner's movement and pace (the speed of the vibrator reflects on the level of contractions and

Fig. 1 Nora, the female device commercialized by Lovense

Fig. 2 Max, the male device commercialized by Lovense

vibrations felt on the masturbator device, and the ascendant and descendent movements of the masturbator dictate how fast the vibrator moves on the other side). Lovense sex toys are able to be diversely combined: it is possible to use two Nora vibrators, as well as two Max devices.

Lovepalz (Wassom 2014: 321) is an already discontinued brand that was established in 2012 and based in Taiwan. The company sought its goal in "making interactive sex more interactive", by adding other components to interactional sexual experience on the screen and "engaging other senses than just the traditional way, thus constructing an immersive experience" (LovePalz, site). By other senses, we may deduce, the company meant the physical reaction both partners could experience simultaneously. The first set of devices launched by LovePalz followed the two-sex model presented above, commercializing devices with differentiated morphology, design and presentation. Hera was a penetrative device, also made of silicon, available in pink or purple exterior. Zeus, the device for men, was a high-tech masturbator, a penetrable device made of silicon, available in blue or black exterior. The standard combining option was Zeus–Hera, although Zeus–Zeus and Hera–Hera possibilities were also functional. The remote-controlled sex toys could be paired, allowing the partners to interact in real time. The movement, speed and pressure applied by one partner were replicated and recreated in the other partner's device. This reciprocity was again available through the so-called responsive "air pump" technology.

Thirdly, Kiiroo, the most recent of all the three companies and the first European company, based in Amsterdam, was launched in 2013. Among the three companies included in the sample, Kiiroo is the most active and prominent in social media, frequently refreshing and updating the content displayed in the website, including many articles on teledildonics. In this context, they present the concept and basic mechanism of the technology in focus:

> Teledildonic devices send and receive tactile data, which involves a whole new sense in online communication: the sense of touch. Teledildonic devices send and receive tactile data. Some of them vibrate, some compress and some stroke – each has its own way for simulating sexual movement between two people. All this technology that responds to movement and touch is called haptic technology (Kiiroo, Youtube).

Kiiroo's commercialized sex toys, Onyx and Pearl, are also differentiated for men and women, respectively. Onyx is the male masturbator, a black rectangular box with the opening on the bottom. Its internal structure, featuring "contracting and expanding rings", was designed to mimic vaginal anatomy. Pearl is the female vibrator, white colored and made of silicon. Both devices are fitted with sensors that detect the speed and pressure applied, proportionally replying the movement on the other device: "precise points on the surface of Pearl correspond to (…) contracting rings inside Onyx". This correspondence mechanism allows reciprocity in real time, since stimulating one device will cause the other to react. Both Pearl and Onyx permit different combinations: two female devices are functional, as well as two male masturbators (Fig. 3).

Analysis

Body and Interface: The Architectural Construction of Cyborg-Sexed Bodies

Since teledildonics allows interpersonal tactile connection, a dimension of physicality is added to cybersex. However, this physicality is not globally enacted, holistically across the body. The interface merely permits the tactile experience of the pre-defined sexual organs—the genitals. The design of the devices follows the same structure: penetrative gadgets for women and penetrable ones for men. Female vibrators and male masturbators work as simulators and/or extensions of one's

Fig. 3 Onyx and Pearl, respectively the male masturbator and female vibrator commercialized by Kiiroo

genitals and the respective partner's; the devices reproduce genitals, their anatomy, dimension, functionality and movements:

> Men: When you slide the masturbator onto your penis, the head of her sex toy will begin rotating. The faster you move the toy up and down, the faster her vibrator moves!
>
> Ladies: When you move your vibrator, the air pump in his sex toy will start pumping air, which mimics vaginal contractions. The speed of your movements dictate the level of contractions and vibrations he feels. (Lovense, site)
>
> We have adopted a breakthrough motion sensor which automatically senses actions for both male and female. Even more, we add extra sensation stimulations to spice up your sex life. For example, the Reverse Protuberances and Mad Tongue inside Zeus S targeted sensations to the glans penis and penile shaft (LovePalz, Facebook).

This bifurcation and mimetic relation reproduce a binary division between male and female consumers, male and female subjects, male and female genitalia. This dualistic and disjunctive construction reflects what Wilton (1996) has called "genital identities", mirroring.

> [a] systematic distinction between those who possess testicles and who perform the gender 'masculine', a performance that includes penetrating others sexually, and those who possess ovaries and who perform the gender 'feminine', a performance that includes being available to be penetrated sexually (1996: 104).

The physical interaction promoted by teledildonics devices strategically reduces the sensorial and bodily responses to the genital core. The physicality is genital-centered: genitals are the locus of sexual pleasure (Potts 2002), limiting the scope of touch responses and mutuality. Genitals are not only privileged as the focus of physical interaction, but indeed endorsed as the only site of physical pleasure. Bodies are visually (re)presented, but the sensorial domain of touch is restricted to the genital-digital dimension. Tactility does not happen in a global, diffuse, holistic way, but allocated and reduced to genitals.[4] This hierarchical, deeply genitalized, coding of the body will be translated into the sex acts displayed by teledildonics devices and discourses.

High-Tech Hedonism: Pleasure in the Digital Age

Since teledildonics innovations are intended to facilitate remote sexual activity, the rhetoric concerning physical distance is not surprising. The goal of transgressing (or

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[4] Referring to the now-extinct Sinulator, a previous teledildonics project, Siegel (2005) wrote what can be applied to the devices considered in this article: "The technology does bridge a communicative medium unseen before, but it does lack in several ways. Since the mechanism is designed for penetration alone, it doesn't provide physical stimulation for the wide variety of other aspects involved with sex, as well as physical contact experienced within a non-sexual context" (2005, p. 2).

at least minimizing the effects) of physical separation between partners is a common discourse among the companies, with similar formulations:

> Let distance no longer [be] an issue, stay connected (LovePalz).
> If you're in a long distance relationship, maintaining intimacy can be challenging. We created Kiiroo Onyx and Pearl to facilitate intimate touch from anywhere in the world, anytime (Kiiroo, site).

The companies converge in presenting interactive sex toys as the ultimate formula of permitting or recovering intimacy. Sexual pleasure is perceived as mandatory, a truly requirement in relationships and contexts of emotional commitment:

> Everyone should have a fulfilling sex life, and adult cyber toys can help. (…) For most people, a healthy sex life is part of a healthy, happy relationship. But it's hard to have a sex life when you're separated by hours or even time zones, and video chat sessions can only go so far (Kiiroo, site).

Geographical distance between couples is presented as posing a problem, one that can be bridged by means of the teledildonics interface. Haptic technology is announced as enabling the last stage of mediated intimacy. The technological narrative is presented as a path of incremental sophistication that enables people to surpass the challenges, difficulties and limits of social life. Teledildonics is referred to by the companies as the late chapter in the evolutionary course of technology, since it brings the possibility of touch:

> Since the start of the globalization, we all have witnessed some incredible new electronic devices, each better, smaller, bigger, thinner, faster, and long-lasting than one before" (…) what if you could really feel that love connection physically with your love hundreds of miles away? Future is here! (Kiiroo, Youtube)

The future-is-now formula contextualizes teledildonics in a broader movement of progress but also in a romantic framework, mentioning a lasting struggle from lovers to resist remoteness:

> Through the centuries, lovers have used many devices to keep the flames of passion going while they were apart, from letters (…) and even smoke signals. As technology progressed, so did the devices. But there was never a product that provided actual sensation from one partner to the other – until today. (Lovense, Youtube)

The imperativeness of sexual pleasure—and a very particular idea of it, tied to genital arousal—merges with the claim of technological development: technology is conceived as empowering human relations, as providing solutions for the space and time boundaries imposed by human contingence.

From 'Outercourse' to the Digital Mediated Intercourse: The Technological Reinforcement of the 'Coital Imperative'

The core identification between sex and coitus underpins the structure of teledildonics' conception, functionality and marketing. The devices are designed to simulate the penetrative act of the vagina by the penis, conceived to enact intercourse: as Kiiroo states, "Onyx was designed to feel as much like penetration as possible" (Kiiroo, site).

The rhetoric presented by the companies converge in the assumption of equivalence between sex and intercourse:

> …each contains an air pump which replicates the movement and pressure applied by the other partner to give users a "realistic representation of intercourse (LovePalz, site).

Teledildonics devices meet the dominant understanding of sexual relation as coitus (Gavey 2005; Jackson 1984; McPhillips et al. 2001): intercourse is the canon of digitally-mediated sexual interaction. The equivalence of penetration and sex leaves no room for a multiplicity of expressions in the relational dynamic: kisses, embraces and non-genital touching are dismissed from the digitally-enabled sexual interaction. Non-penetrative sex acts are physically suppressed.

This dominant representation of sexual intercourse invokes the return and reinforcement of the 'coital imperative', an expression coined to mirror the assumption that coitus is 'the real thing', thus minoring other possibilities of sexual activity as preliminary or considering them 'optional extras' (Jackson 1984: 44). The total coincidence with the idea of intercourse as 'the real thing' is explicitly drawn:

> The result is a gripping, pulling sensation as the device strokes you up and down – just like the real thing (Kiiroo; site).

The rhetoric constructions seem to rest on a teleological vision of the sex encounter: the penetration of the vagina by the penis is supposed to follow a certain trajectory that has orgasm as its final goal and logical conclusion. Orgasm is presented as the final purpose of sexual interaction, which seem to testify the persistence of the 'orgasmic imperative' (Potts 2000, 2002). Some of the discourses promote this teleological vision as ideally shared and mutual:

> Compared with general adult toys, which still bring loneliness, LovePalz is designed for sharing simultaneous orgasms with your partner. Who says that it is impossible to satisfy two desires at a same time? (LovePalz, Facebook). Come together? Yes we can! (LovePalz, Facebook)

However, the mutuality and symmetry discourse coexists with more asymmetrical, male-centered representations of orgasm and its demand:

> The first choice for man who prefer (sic) powerful orgasm, extra pleasure and sexual intimacy. (…) experience a powerful orgasm everytime (LovePalz; Facebook).

This is illustrated by the difference that lies in the definitions presented in Kiiroo's website: "masturbator" is defined as "a sexual device for people with penises, meant to bring the user to orgasm". However, the concept of "vibrator" omits the orgasmic purpose, since it is described as "a device containing a vibrator motor, usually made to stimulate erogenous zones". This might reinforce the idea that sexual interaction is directed to a goal—(male) orgasm, specifically-, thus potentially perceiving as incomplete any co-experience that does not reach this particular point as uncomplete or unfulfilling.

The generalization of sexual pleasure seems to refresh an essentialist model of sexuality, a model that postulates the naturalist status of sexuality and places intercourse as its primary expression (Abbott et al. 2005: 199). At the core of this essentialist vision lies the assumed equivalence between sex and coitus, classically justified in the context of biological approach as a biological drive meant to perpetuate species (Jackson 1987; Potts 2002; Tiefer 2004: 144). This assumption fits the 'androcentric model of sexuality' (Maines 1999: 5; Potts 2002: 34). In this model, the definition of sex as an activity "recognizes three essential steps: preparation for penetration ('foreplay'), penetration, and male orgasm", and sexual activity that does not meet at least the two last factors would be disqualified and minimized, given a less status than "the real thing" (Maines 1999: 5).

Some of the core principles that underpin the essentialist model of sexuality seem to survive and resist the detachment of sexual activity from reproduction (Giddens 1992). Namely, the "coital imperative", which Gavey found as "arguably the most robust of all contemporary of heterosexual sex" (2005: 191). The "natural model" or "biological model" has produced symbolic constructions and dominant discourses that survived the link between sex and reproduction, not ceasing when the procreative function of sex is dismissed. This is the case of the "Viagra phenomenon", which

> … reinforces and hardens the coital imperative. Not only does it potently work to re-naturalize and re-normalize the centrality of intercourse to actual heterosexual sex, but it extends its reach to areas of society that previously were able to slip it by (that is, men and women beyond middle age, and those with certain health conditions) (Gavey 2007: 123).

I argue that teledildonics contribute to the extension of the 'coital imperative', sharing some similarities with the process previously described by Gavey (2007). Teledildonics targets individuals and situations that fail to meet the basic expectation concerning coitus and sex more broadly: specifically, the corporeal relation between partners. In this way, the phenomenon of extending coitus much further than its reproductive function is radicalized: as Gavey wrote referring to Viagra, "while the reproduction function of coitus is no longer valorized, the particular heterosexual act for reproduction is" (Gavey 2005: 196).

The parallel goes even further, since the promotional rhetoric displayed in teledildonics' companies' websites converge with some assumptions and features of Viagra's commercial phenomenon: both strategies present sexual activity as the way to restore intimacy and closeness between partners. Furthermore, they both identify distance as the causal link or potential threat to romantic failure or rupture—

regardless of this distance being literal, a geographical one, in the case of couples apart targeted by teledildonics, or a distance allegedly caused by the lack of sexual intimacy, in the case of Viagra. The *solution* envisioned in both cases is provided by technology, either in the form of digital gadgets or pharmaceutical production.

Considering the target-group of the analyzed companies, one could argue that the reproduction of dominant social norms would be expected and unsurprising. Although the reproduction of dominant views and presumed dominant behaviors by the companies may appear largely explainable from a commercial standpoint, it would be limiting to evaluate their products and promotional discourses as unproblematic commercial strategies purely responding to a target group. This process, even if in way expectable, is not neutral, just like Viagra's marketing was not: the discursive construction of intercourse as 'the real thing' enhances the cultural norm that establishes intercourse as the standard sexual practice.

It is somewhat paradoxical that the corollary of the biological model is structurally kept in the context of digitally-mediated sex. The lack of skin-to-skin intimacy promotes an environment of de-naturalization of sexual activity, which could contribute to the erosion of the essentialist model. However, the remote intimacy facilitated by teledildonics reinforces its main script: penetration of the vagina by an erectile penis, towards male orgasm.

The ubiquity of penetration is left unchallenged even outside the heterosexual (postulated as standard) model: all the alternative uses implicate the penetrative action and penetrative shaped gadgets. Pairing two female devices, such as Nora, Hera or Pearl, does not inflect the penetrative framework. Neither does the articulation of two male devices, given the fact that interaction is based on mutual movements of the penis in which both devices are applied. This genital and penetrative privilege reinforces the phallocentric character of teledildonics.

"Just Like in Real Life": Interaction and Simulation

Remote controlled sexual interaction is discursively represented as simulative, yet the most verisimilar and approximated experience to 'the real thing'. The discourses underline verisimilitude and realism, preserving the reality status to the skin-to-skin sex: "the devices' motion sensor bring virtual intimacy to a whole new level of verisimilitude", states LovePalz (Youtube). Promoting an experience "So close, so real, so 4D experience" (LovePalz, Twitter) the company promises "to create physical feelings as real as possible" (LovePalz, Twitter). Similarly, Lovense portrays teledildonics use as:

> Just like in real life: it's like being together, even if you're miles apart. (…) You'll finally get the pleasurable experience you've both been missing. They may not short on the miles keeping you apart, but when you use Lovense toys you just might not notice. (Lovense, Youtube)

Physical interaction is not challenged as paradigmatic sex:

> One thing that's important to understand is that Kiiroo doesn't aim to replace physical intimacy. We don't believe that our sex toys are "better than sex" or

"better than a partner." We aim to create a completely new sensation, similar to intercourse, and perfect for connecting with your partner on another level (Kiiroo, site).

The skin-to-skin sexual relationship is still kept as the referential, which suggests a less or alternative status to the digitally mediated sex. In this representational context, the traditional idea of penetration is allied with the conception of physical, direct, bodily contact of sexual interaction. Nevertheless, by claiming "to create a completely new sensation", even though it is presented as "similar to intercourse", Kiiroo slightly makes way for contesting a unidimensional or monolithic view on sexual interaction. By promoting remote sexual interaction as providing a new sensation rather than a substitute of sex, Kiiroo's discourse partially points to alternative sexual co-experiences and different representations of sexuality.

Remote Sex "is not a Natural Act": The Potential to Reinvent Sexual Scripts

The promotion of a "completely new sensation" represents an opportunity for broadening the discourses on sexuality, which could be further explored by the companies: instead of promoting a similar experience to intercourse, the discourses could point to the multiple ways that remote sexual interaction can lead to different (and still unexplored) bodily, sensorial and interactional experiences.

Despite the persistent reproduction of cultural norms in the analyzed platforms, teledildonics itself represents an opportunity to challenge and expand the understandings of sexuality: by forging and potentiating new experiences of sexual interaction and intimacy, teledildonics has the potential to further expand the social imaginary associated to what means having a sex life and a sexual relation. Teledildonics presents interactional sexual experiences that dismiss physical contact and the immediate presence of the subjects involved, therefore overcoming some dominant assumptions concerning the relational status and premises of sexual partnered activity. By destabilizing the association of sexual interaction with skin-on-skin contact, teledildonics represents another opportunity to recreate and diversify sexual scripts. This opportunity can be taken to promote more fluid and nuanced, rather than orgasm-focused, experiences of sexual interaction.

Teledildonics, as cybersex in general, exposes how social conditions and technological means potentiate and contextualize specific modes of sexual interaction—ultimately exposing, in Tiefer's (2004) provocative words, that "sex is not a natural act". Also, through the intertwinement of sexuality and technological devices in a whole new manner, teledildonics can be seen as potentially aligning with the cyborg imaginary (Haraway 1991). 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. The experience of a "sexual cyborg" (Attwood 2010) has the potential to rethink conventional boundaries of the self and sexual identities. In this context, the promotional discourses could move

forward a genital-based identity towards a more gender-based identity, even within the limits of sex-differentiated devices. That is a path that Kiiroo partially opens when claiming that their "vision for the future of Teledildonics is the ability for every person—regardless of their gender expression or sexual preferences—to reach out and touch their partner in a whole new way" (Kiiroo, site). Overall, there is also the potential to give more visibility to the already possible combinations, by exclusively pairing female devices or masculine devices, alternatively. Equalizing these options, instead of keeping the heterosexual standard by default, would be an easy way to embrace more plural and inclusive promotional discourses. Promoting and stressing the already available plurality of relational configurations could easily contest the heteronormative framework.

Lastly, it is worth noting that the present study focused on the representation of sexual interaction promoted by the analyzed companies; therefore, the limited scope of analysis does not support any extrapolation towards the effective practices the devices might serve. The specific uses and practices adopted by individual users, along with their subjective experiences, can contest and diverge from the dominant rhetoric promoted by the companies in several different ways. As it was found to happen regarding women's diverse experiences with vibrators (Fahs and Swank 2013), subjective experiences with remote-controlled sex toys can be plural and heterogeneous (e.g. especially if pairing two identical devices, the interactive dynamics can be radically different from the dominant script promoted; the devices can be used individually, rather than interactively; alternatively, they can be used for clitoral stimulation only; they can, otherwise, be used in interactional dynamics not oriented to male orgasm). The discursive framework can be contested by its users, the actual practices adopted and the meanings ascribed to them.

Conclusion

The (Paradoxical) Technological Return to the Biological Model of Sexuality?

Although the digital context opens possibilities and has potential to disrupt categories concerning the construction of sexual experience and gendered bodies, these potentialities seem co-opted by previous cultural norms of what constitutes an authentic sexual encounter. Anatomical conventions are reassured and transferred, reproduced and translated into the digital arena of the non-fleshy sexual meeting. "Cyborg sex" (Attwood 2010) may appear (and indeed be, in many ways) innovative, but underpinning this technological disruption remain normative conceptions concerning sexual activity. The enhancement of essentialist assumptions and by-products encapsulated in the vision of sex as penetration of the vagina by an erect penis coexists with a very de-naturalized environment. In the context of this analysis, remote-controlled sex toys offer new extensions to the coital imperative. Teledildonics sex appears as digital intercourse, rebooting an old script by new means.

The coitus-centered model is not imploded in the realm of teledildonics, regardless of the disruption of its major teleological conceptions and empirical conditions. The centrality of intercourse is not contested by the analyzed devices. Moreover, although teledildonics constitutes an obvious expression of the rupture between sex and reproduction, it is striking that it presents a strong resonance of the reproductive model.

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