From cyberfeminism to technofeminism: From an essentialist perspective to social cyberfeminism in certain feminist practices in Spain

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ARTICLE INFO

SYNOPSIS

Spanish feminist praxis has, since about 1990, diversified its theoretical assumptions and objectives, proposing the use of new virtual communities in perspectives which approximate praxis to cyberfeminism as well as to technofeminism. The aim of this article is to consider and explore in depth the construction and use of new social spaces, using concrete examples from recent Spanish feminist praxis: specifically, two web portals. We will attempt to analyze the theoretical proposals put forth by the founders of two prominent feminist web portals of the 1990s and 2000s in Spain through an account of these sites' initiation, aims and the discursive production that different sections of the portals facilitate. We refer to *E-leusis*, founded by María Angustias Bertomeu, and *Mujeres en Red* (*Women Online*), founded by Montserrat Boix. Spanish feminist praxis has advanced from a position closer to that of the essentialist utopia defended by Bertomeu toward a sort of technofeminism, which Montserrat Boix has transformed into what she has termed "social cyberfeminism."

The construction and development of new utopian spaces of social interaction tends to generate expectations among those who take part in them, and to create fears about the consequences which such spaces could present. In this sense, the exploration of new possibilities – of agency and action for participants and new utopian spaces or virtual communities – became possible with the first advances of the Internet. Many pioneer theorists of the Internet, such as Leary (cited in Sheff, 1990: p. 1), put forth promises of the birth of a new era, situated in an unconquered realm, which by its mere emergence, made possible an array of quasi-mythological utopias. For example, in his pioneering theorization of virtual communities, Rheingold (2000: p.42) proposes the idea that communities constructed online could develop into physical meetings, social gatherings and material support for members of their virtual community. This is based on his own experience with WELL ("Whole Earth 'Lectronic Link," a cooperative network of computers in the San Francisco area).

Following the theoretical proposals made by Rheingold (2000, 2003), Barlow (1994: p. 40), cofounder of the libertarian Electronic Frontier Foundation, believed in the creation of a space where the planet's inhabitants can have a new type of communicative relationship. From a more academic perspective Mitchell (1996, 2004), has convincingly maintained that novel forms of online sociability, adapted to new forms of urban life and technological development, have emerged.

During the late 1990s, new theoretical conceptions of the Internet phenomenon developed in response to these utopian views, within a context where both perspectives were competing simultaneously for a way to understand sociability on the Internet. Critics warned that new technological advances could present negative consequences. These dystopian theories evolved as a counterpoint to the utopian visions: they attributed such difficulties as isolation and dysfunction of social skills (Eubanks, 1994: p. 41) to the Internet. Some media theorists, such as Robins (1996), have taken the critique of relationships established online a step further, describing these relationships as pathological, constituting a sort of abnormal response to reality. That is, Robins considers the Internet the definitive escape route from reality, wherein people construct an alternate world, transforming themselves into individuals who are isolated and disconnected from the social reality (1996: p. 21). Robins' critical position has been validated by authors such as Slouka, who have affirmed that technological advances have produced a

dehumanization of social relations, to the extent that online life appears to be an easy way to escape real life (Slouka, 1996: p. 64).

In turn, feminist criticism and other non-feminist authors (Castells, 1997; Rheingold, 2003), taking into consideration the positions described above, have approached the Internet phenomenon from two viewpoints. The first is shaped by utopian thinking (which some feminists believe is indispensable for feminist politics) and supported by metaphors highlighting the relation between woman and machine. Such a viewpoint would be based on the utopian approaches of feminists like Plant (1997), who use the flexibility and mobility of the nomadic subject exploring the Web in order to explain a sort of voyage in search of new virtual communities capable of winning new freedoms. Complementing this utopian vision, other feminists such as Wajcman (1991, 2004) turn to technofeminism as the optimal solution to barriers blocking women's access to the management of new technologies. Technofeminism would, therefore, situate cyberfeminism in a social reality that impedes women's access to new technologies: Wacjman's technofeminism would propose to reinforce the social mechanisms necessary to favor the full inclusion of women in the use of technology and in its generation and programming. Full inclusion in use, generation and programming technology would avoid the so-called "digital gap" and recover a sphere traditionally associated with the masculine for women (Faulkner & Lohan, 2004). Both perspectives, the utopian and the dystopian, developed and competed somewhat simultaneously in the mid- to late-1990s and early 2000s. Suggesting another approach, Andrews (2006: 39), in her analysis of Spanish feminist praxis, includes perspectives about social communication on the Internet that are not simply utopian or dystopian. Andrews mentions a more nuanced account of social communication on the Web that does not fit easily into one perspective. Andrews contemplates, in fact, other heterogeneous perspectives that speak of the Internet both as a space of exclusion and as a space of community development and mutual support (Saco, 2002; Streck, 1998).

The aim of this article is to consider and explore, in depth, the construction and use of new interaction spaces in certain Spanish feminist praxis. I will attempt to analyze the theoretical proposals put forth by the founders of two prominent feminist web portals launched in Spain in the 1990s. I am referring to *E-leusis*, founded by María Angustias Bertomeu, and *Mujeres en Red* (*Women Online*), founded by Montserrat Boix. The prominence of these two portals is demonstrated, among other factors, by the number of visits they receive: *Mujeres en Red* has an average of 1674 daily visits and has had 1,884,428 total visits since its inception[1]; *E-leusis* has 8,000,000 entries and 3500 subscriptions to its weekly bulletin (*Artefinal*, 2005: p. 1). These portals' prominence is also evidenced by their inclusion among the most important Spanish portals, websites and blogs of the last two decades in one of the most recent studies undertaken on activism and cyberfeminism in Spain (Cisquella, 2008). Complementing *E-leusis*'s and *Mujeres en Red*'s orientation toward cyberfeminist praxis, other important portals such as Remedios Zafra's *Habitar en punto(net)* (2008) or *Estudios online*, created by Ana Martínez-Collado (2008), are dedicated to the phenomenon of cyberfeminism, particularly the version

relating to art and technology. Cyberfeminist blogs bear mentioning, as well; in some cases, the creators of the Web portals maintain blogs, such as Montserrat Boix's own, which she defines as a blog about feminisms, free knowledge, ethical technology and networks (*Nireblog*). Many other blogs on cyberfeminism are on the web pages of major cyberfeminist activists, as in those housed on *Mujeres en Red.* On another tack, the Web page of the E-equality Center (promoted by the Spanish Ministry of Industry) reports the ratio of male to female Internet users in Spain. According to the most recently published data, in the first six months of 2007, 51.53% of men used the Internet, compared to 44.19% of women. This portal provides access to frequently-updated studies and reports on technology and society in Spain, such as *Red.Es* (2008), which work to shed light on the opportunities and challenges offered by the Internet. For the purposes of our article, we have chosen the Web portals created by Angustias Bertomeu and Montserrat Boix, as both portals serve to exemplify the transition from a difference feminism toward a social version of cyberfeminism. Spanish feminist praxis has advanced from a position closer to that of Plant's (1997) essentialist utopia (defended by Bertomeu) toward a sort of technofeminism, which Montserrat Boix has reformulated, naming it "social cyberfeminism." This "social cyberfeminism" would concern itself with debates about, and consequences of, constructing new identity online; further, it would explore approaches to feminist praxis departing from the inclusion of women in the (traditionally masculine) fields of programming, creation of networks, and even hacking (Castells & Himanen, 2004; Himanen, 2002).

In this article, I will use the texts about cyberfeminism inserted in the different sections of the analyzed portals as the basis of my methodology. The selection criterion for these texts is the exploration of the theme of women and technology, which is articulated in the selected texts. Specifically, the following texts have been analyzed: three of Bertomeu's texts from the Cyberfeminism section of the portal *E-leusis.net*, and two of Boix's texts from the Cyberfeminism section of the portal *Mujeres en Red*. The first of the Web portals I will analyze, *E-leusis.net*, was founded at the end of the 1990s by María Angustias Bertomeu and Ana Rubio Castro. *E-leusis.net* is organized like an online magazine; its structure is based on the symbolic architecture of a virtual city. The fundamental goal of the portal is, according to its founders, to promote exchange, coexistence and civility among women. The portal's foundational metaphor of the virtual city extends to its architecture, attributing to certain of its components the characteristics of a public and virtual *agora*, which provides information in areas of interest, including health, legal counseling and employment. One of the core sections of *E-leusis.net* is dedicated to offering resources on different theoretical proposals of feminist praxis. The section on cyberfeminism, in particular, contains a series of texts relating to cyberfeminism and cyberfeminists, and links to other pages dedicated to cyberfeminism. In this way, Bertomeu establishes distribution of texts which can become a source of empowerment to other women as a clear priority of *E-leusis.net*. The texts offered on *E-leusis.net* by the portal's founders express a theoretical vision of the relationship between woman and technology similar to that of Braidotti (1994: p.11). This vision includes the possibilities the Web

offers toward the goal of situating feminist problems in a new, visible space — such as the Internet. Following Braidotti's (2006: p. 23) theoretical model of the nomadic subject, the discourses included on *E-leuisis.net* establish themselves within difference feminism, which expresses the belief that women experience and know the world in a different way than men do, and that these experiences are valid for constituting new virtual spaces of social interaction. Bertomeu's foundational text for *E-leusis.net* explains that, by means of the metaphor of the virtual city, *E-leusis* links itself to Braidotti's idea that new technologies can serve as a catalyst for approaching feminist issues from an explicitly female position:

> Again I travel the Mediterranean shores until I arrive at Attica. There awaits the city of Eleusis, left to invisibility and destruction. The rage against its goddesses and priestesses clashes against our imaginary, which recovers genealogies from oblivion. From here I invite you all to dream, to share your authority and knowledge. I ask of you the light of all you know and the warm touch of friendship in order to begin this path, which one can only travel in the company of [female] others.[2] (Bertomeu, 2000: p. 3)

In this way, María Angustias Bertomeu establishes the goals of her cyberfeminist theory within a utopian vision of the relationship between women and new technologies. Bertomeu takes the utopian position as a point of departure and progresses toward a more descriptive, less utopian, consideration of the cyberfeminist phenomenon in her texts, using the need to emphasize the embodied nature of the Internet and the supposed connections with feminine agency and modes of thinking as the nucleus of her argument. In one of the sections of the portal dedicated to cyberfeminism, Bertomeu points to the critical, historical link women have maintained with technology — as users *and* creators:

> By returning visibility to women in history, we see how they have always been linked to science and technology, as initiators of the processes as much as users and creators. The contributions of these women were not forgotten. (Bertomeu, 2001: p. 1)

Bertomeu's connection between technology and its link to women approximates the essentialist, postfeminist utopian view put forth by Plant (1997). Plant affirms women's radical sexual difference by emphasizing female qualities in an attempt to eradicate gender difference: hers would be a version of cultural feminism with an essentialist character. It is nevertheless curious that both Bertomeu and Plant insist upon a uniform construction of what it means to be a woman: yet, both turn to a vision of a fragmented "I" elaborated through hypertext — that is, in a pluralist, non-hierarchical system of information transmission online. Construction and later transmission of information in the new space of the Internet arises, according to Bertomeu, from a non-lineal structure based in hypertext. Hypertext is linked with a plural, non-centered, multidirectional articulation of information and communication, thus bringing hypertext nearer to the

universe of the senses. Yet again, Bertomeu envisions a degree of identification between the technological and the imaginative human, chiefly, the feminine:

> In the [female] user's perception, these movements continually construct more complex, non-linear information, which is created according to the variables that intervene at each moment. This information is much richer than that produced in movements that are merely summative. What's more, it permits the use of image and sound, surpassing the possibilities of plain text; this possibility brings it nearer to the realm of the senses, which [we] women always deal with in our discourse. (Bertomeu, 2001: p. 2)

Bertomeu goes one step further; she identifies hypertext with the principles of relation and fluidity, the very mechanisms for producing knowledge which women rely upon, as opposed to hierarchical, unidirectional movement. Presenting the Internet as a fluid, multidirectional space rooted in hypertext, as well the assumed fusion of the utopian and descriptive poles – between which, as some authors argue, feminist thinking moves without explicitly demonstrating a critical character (Castells 1997; Rheingold 2003) – affirms, in theory, the non-incarnate (that is, non-real) nature of the values of association and individual choice. These new, choice-based virtual communities (Wajcman, 2004: p. 116) present themselves in alignment with the neoliberal model that defends the values of freedom. This model does not, however, appear to take into account the seemingly homogeneous and exclusive character most virtual communities adopt, that is, a mirror-image of non-virtual communities (Mansell, 2002: p. 420). In other words, this is a view of the Internet as distinct and distanced from the problems of the social reality into which new technologies are integrated — a view which, in and of itself, has been the object of intense feminist critique in recent decades (Wajcman, 2004: p. 116). Bertomeu seems to prefer, at least in the first moment of her exposition, a vision of virtual networks that embody freedom and represent communities of voluntary choice and association – a thesis defended by Castells (1997: p. 433), among others – thus ignoring the problematic exclusion of women from the world of technology:

> Hypertext imitates the mechanism by which [we] women construct knowledge. [We] women use complex structures that we put into relation, through long roundtrip routes that always gather, add, or clarify information, with others, structures that we already possess, and we also create more elaborate data or sensations.
>
> Hypertext is a technical support that reproduces our systemic, complex form of constructing non-hierarchical thought, where all elements interact and elaborate upon information. (Bertomeu, 2001: p. 7)

Thus Bertomeu situates herself in a biologist, or essentialist position, in regard to the Internet, arguing for an embodied approach to the Internet, attributing to it characteristics which are particularly feminine, in order to transform these characteristics of the Web into an element that is substantively feminine. This discourse of Bertomeu's approaches Braidotti's

(1994) theory of the possibilities of nomadic feminism. As such, Bertomeu's discourse is informed by difference feminism, expressing her belief that women experience and know the world in ways that are different from those of men; these ways are valid, positive and worth sharing in new virtual spaces (Andrews, 2006: p. 39). Bertomeu transmogrifies technology into a soma with female qualities; she humanizes it by distancing it from its historically masculine, cryptic character. We could definitively say that Bertomeu elaborates a full theory of similarity between the functioning of the technological system and feminine structures of thought:

> Therefore, the Internet (or the Web if we prefer to name it in the feminine),[3] which seems to be something so cryptic and distanced from women, is based on the tasks that we have historically developed and on the capacities that characterize us. What's more, it is made using a technical support which functions through principles similar to the structure of women's thought, in the forms of localizing and administering information. I am referring to a new tool called hypertext. (Bertomeu, 2001: p. 6)

According to Bertomeu, cyberfeminism, and hypertext as its technical support, allow the coming together, from a utopian standpoint, of the Internet (and its processes of production) and women. Bertomeu is thus referring not just to processes of production, but also to processes of localizing, distributing, sharing and administering Internet information, which she sees as inherently feminine. In fact, according to Bertomeu, the Internet is based on tasks that women have mastered throughout history. However, as Wajcman (2004: p. 165) points out, despite cyberfeminism's having opened a possibility of agency for women online while moderating the tendency of second-wave feminism to consider women as victims, cyberfeminism can also generate a utopian discourse that is distanced from the real needs and problems of the women who create new social spaces on the Internet. Wajcman, and others who embrace her more critical positions, alert us to the risk of tending toward exaggeration of the utopian vision of cyberspace that views it as the ideal location for the development of innovative subjectivities that challenge existing categories (Sassen, 2002: p. 370).

As we have previously seen, a clear tension in cyberfeminist thinking exists between the descriptive and the utopian. A certain polarity manifests itself among the utopian aspirations of a feminine technology (as defended by Bertomeu): however, this technology lacks a critical perspective on existing social relations. Much like Wajcman, we believe that utopian thinking is indispensable for feminist critique. However, it is necessary to distinguish clearly between description and imagination vs. utopian fantasy so that work useful in present-day society can be developed. Metaphors of hypertext dealing with fluidity and mobility of the nomadic subject, who explores the Internet on a digital journey, could refer to a masculine imaginary (Wolff, 1995: p. 230) in which this journey is nothing more than a gender-based division of human activity, attributing more value to the male life of the mind than the combined value of women's lives of mind and confinement in real bodies. This

appears to be what Bertomeu does not state, or even take into account when she asserts that:

> But, what's more, on the Internet the medium itself creates its own space, a – metaspace – that is not then limited to accumulating information and putting where it is indicated. It generates a new, live space, without borders, difficult to control; it creates itself in the exchange produced by the people who access the Web. (Bertomeu, 2001: p. 7)

However, Bertomeu seems, very occasionally, to approach the politics of technofeminism, fusing it with the principles of cyberfeminism elaborated by Braidotti (1994: p. 148). Bertomeu (2002: p. 3) attempts, in some of her texts offered on *E-leusis.net,* to bring the use of new technologies closer to women's professional and everyday lives. This approach to a more real and descriptive vision of women's situation in regard to new technologies becomes evident, to our mind, when Bertomeu makes use of the metaphor of the Web as a public *agora*, to explain the creation of a metaspace of personal relations from the viewpoint of an embodied female subject. Her explanation of the functions of new political and public spaces resembles Wajcman's (2004: p. 120) call for a more carnal, and therefore, more real, use of technology. She cries out for a politics of technology that requires, beyond hardware and software, *wetware*, that is, physical bodies and human agency:

> A new political and public space has been created, in which it is necessary [for women] to participate as creators of different politics. Politics that proceed to sketch out other forms of doing, other ways of naming, other places to enjoy ourselves, to speak and communicate, other relationships for working, studying, or loving. (Bertomeu, 2001: p. 7).

Using the technification of social relationships as a point of departure, then confronting the dystopian posture of Internet use, Bertomeu finally encourages the users of *E-leusis.net* to question their own desires and their positions in the real and virtual worlds, taking the Web as a reference point, but without losing sight of social reality. The Internet would thus be a vehicle for action that would not eclipse the potential for agency of women; who, far from seeing themselves as subjected to a process of isolation, could make use of new spaces, of the new forum that is the Internet, for seeking and elaborating new modes of action based in desire:

> From this point is where we [women] can ask about our desires and our needs, starting with ourselves. Not to become engrossed in complacency, but indeed to break from our form of living and acting. The answers are not online, which is only where they are constructed, but rather within ourselves. I propose that you all work from your desires and needs. Let us think of what they are, so that later we can look for them; and if they are not there, create them. (Bertomeu, 2001: p. 8).

Mujeres en Red, the second of the Web portals I will analyze in my article, represents the most descriptive variant

of Spanish feminist praxis on the Internet. *Mujeres en Red* arose in Spain in August of 1997 with the objective of creating a meeting point online that would facilitate the exchange of information, strategies and contact among groups of women and feminists throughout the world. The support of *Nodo 50*, an alternative Spanish server whose priority is counter-information and the use of the Internet as a communication tool in civil society, was crucial to the development of this Spanish-speaking space conceived as one which would bring together disparate online resources dealing with feminism and gender. After years of work, *Mujeres en Red* consolidates, in one reference portal organized by themes and countries, access to practically all women's Web pages and sites on the planet. Boix asserts, from a viewpoint close to technofemin-ism – understood as social transformation by means of access to new technologies (Wajcman, 2004: p. 176) – that women should gain access to technology and actively promote their acquisition of skills to use these new media:

> Are we going to miss all the opportunities that electronic networks offer us as a tool for social transformation? Few opportunities arise such as that of this moment to begin to construct a virtual world that is less discriminatory for women. Therefore, we cannot be a minority in accessing New Technologies, we must be many, for since social cyberfeminism women's technological education appears as a priority. And in fact, the numbers on women's Internet use are rising, modifying the imbalance with respect to masculine presence in cyberspace. (Boix, 2005: p. 24)

Boix brings the utopian spaces devised by cyberfeminism closer to the social reality of women. She exploits the actual architecture of the page to benefit the content offered; the descriptive version of the cyberfeminist phenomenon prevails over the more utopian accounts. Given her stated objective, Boix proposes to include content relative to the questions that occupy Spanish feminist praxis (such as the incorporation of the experience of other women) in the new virtual commu-nities, born in different portals. Women from diverse back-grounds, candidly sharing their own real-life experiences, infuse the site with their wisdom and self-empowerment, drawing in other women via the "Join the Network" section. Boix argues, in this sense, the texts that *Mujeres en Red* publishes or hosts can – and should – constitute a common nexus that clearly shows the diversity of women's problems:

> But more than just being there, we want Web content that interests us, and thus *Mujeres en Red* hosts and publishes numerous essential texts in order to reflect on feminisms and work for the defense of women's rights with the further objective of recognizing, taking advantage of, and sharing resources. We cannot allow ourselves the luxury of rejecting or simply not knowing the thoughts and experiences of other women, who before us confronted similar situations and developed reflections or strategies which might serve us as a starting point to move forward… recovering the genealogy and recognizing other women who have contributed, over the course of history, to the path which now collectively situates us at the point – of more or less considerable advances depending on the territory – at which we now find ourselves. (Boix, 2005: p. 24)

In one of the analyzed texts, Boix (2005) affirms unity of female action is possible and practical. As her example, she uses the work of Lourdes Muñoz, a computer engineer and the head of the women's area of the Socialist Party of Catalonia, as well as the creator of the first electronic network for female politicians. Muñoz confirms that, to say the least, the virtual world contributes to change and revolution in the real world. Boix inserts Muñoz's discourse into her own to exemplify one active strategy for turning the Internet into a decisive tool of transformation. Boix (2005) cites Lourdes Muñoz, noting, with respect to the need to include women in the masculine sphere of programming and computer science:

> The Web, because of its design and its original conception, is an ideal space to be feminine *par excellence*. The Internet was conceived as an even network: all nodes are equal, there are no hierarchies, anyone can generate and disseminate information in the same way, capability depends more upon good strategy and knowledge of the network than upon the power one has in the non-virtual world. The conception of an even network makes it a space in which [we] women can act and relate to one another in a more comfortable way. (Boix, 2005: p. 25)

Following this particular line of Muñoz's argument, Boix encourages her readers to research and participate in the development of free software, as well as to collaborate outside the system in the process of technical creation of networks to foster connection and communications among women. This line of thinking corresponds to that expounded by Wajcman (2004: p.180), who insists that the power of the Web is not inherently distributive. That is, that the Web, in the hands of multinational corporations and capital markets, is liable to concentrate power in the way opposite from that which the utopian approaches of cyberfeminists, among others, would have us believe. Boix shows that she is aware of these limitations of the Web, and makes it explicit in one of the texts available on *Mujeres en Red*:

> I encourage you to research, for example, Free Software, or the possibility of changing programs so that their language is less sexist; I encourage you to participate in communities of free knowledge, sharing knowledge and developing knowledge that is less sexist (collaborating on Wikipedia and bringing women's viewpoints is extremely easy and crucial for the collective knowledge which is being molded online); I encourage you to reflect and act using the possibilities that syndication offers us to create collective spaces. (Boix, 2006: p. 2)

Boix's discourse thus connects to Wajcman's (2004: p. 182) thesis about the contradictory possibilities of the Internet. Wajcman underlines the fact that the so-called "digital gap" produces new forms of social exclusion. From technofeminism on, then, it is considered fundamental to promote politics capable of reducing the disparities in Internet access, as well as acquire the technical abilities for new technology. However, the technofeminist perspective takes a step beyond the discourse of the digital gap to point out the connections between gender and other forms of inequality apparent upon exploration of the broader political and economic bases of the networks that

underlie and develop technical systems. It can be noted that technology is codified with gendered signifiers, which mold its design and use. During the design process, the programmer or developer produces a planned use of the technical system, keeping in mind the user the designer intends. In this respect, Wajcman (2004: p. 175) again points out that the predominance of men in design processes has a notable influence on the direction of technological innovation. This masculine predominance situates women as subjects who respond to technologies that were designed without their active participation. Through *Mujeres en Red*, Boix (2006: p. 3), in complete agreement with Wajcman's arguments, urges women to make use of new feminist praxes as a powerful instrument for change; but she puts special emphasis on the effort (which for her is essential) to share knowledge, to democratize the use of technologies, and to transform women's situation starting with the process of technological development.

Finally, what Boix is attempting, in our opinion, is a strengthening of the social version of cyberfeminism through the appropriation of the most descriptive and technical aspects of technofeminism. To this end, she coins the term "social cyberfeminism," which she presents as an alternative, at least capable of attempting to offer the necessary tools to enable effective social change:

> Social cyberfeminism takes shape more and more as an interesting alternative. [We] women have succeeded in constructing our own territory on the web. It need not be an exclusive territory, but we have shown ourselves to be capable of establishing our own rules in this new medium, disputing […] virtual space with patriarchy. (Boix, 2005: p. 25)

The different approaches to the utility and use of new technologies, enabled by the new social spaces created on the Internet, offer various visions of Spanish cyberfeminist praxis. At the same time, however, we should not ignore similarities and continuities between Bertomeu's and Boix's proposals regarding difference feminism. Both proposals show themselves in concrete relation to the concept of positive experience of female difference that allows us to conceive of the Internet as a universe engaged in the construction of relationships and services for women (Bertomeu, 2000: p. 12). Nonetheless, as we have shown in this article, the visions put forth by Bertomeu and Boix oscillate between the utopian perspective – the nomadic subject in the style of Braidotti, or of Bertomeu – and the discovery of a need to redevelop the management of women's creation, use of, and access to new technologies as proposed by social cyberfeminism, based on Wajcman's technofeminism (defended by Boix). Therefore, we can conclude that there do exist points in common between the theories of Bertomeu and Boix, exemplified by the desire to construct a new, action-based territory on the Web; however, this should not overshadow the differences found between them, namely in regards to Boix's position on the strengthening of the social version of cyberfeminism and the connection to Wajcman's arguments. Finally, what cannot be doubted, as we have attempted to show in our article, is that Spanish cyberpraxis of recent decades, as demonstrated by the two portals analyzed here, reveals a persistent desire to inform the virtual world of a female agency and subjectivity,

which, in the most recent theoretical contributions (Zafra, 2005), even comes to imagine new female subjects such as the *netiana*, described as the heir of Haraway's (1991) cyborg and Braidotti's (1994, 2006) nomadic subject, as well as indebted to the idea of performativity defended by Butler (1993, 1997). Such a new creature that arises is not only desirous but also productive.

Endnotes

1 According to data from the website of *Mujeres en Red*.
2 All citations in this text were translated from Spanish by the author.
3 In Spanish, the noun "Internet" is masculine while the word for the Web, "la red," is feminine.

References

Andrews, Margaret (2006). Ethics, gender and the internet: An exploration of some Spanish feminists' praxis. *Journal of Spanish Cultural Studies, 7*, 37–49.

Artefinal (2005) http://www.artefinal.com/Curr%EDculum%20Artefinal%20Studio%202005.pdf. (consulted September, 2007).

Barlow, John Perry (1994). *Notable speeches of the information age.* Sebastopol: O'Reilly.

Bertomeu, Angustias (2000). *Eleusis: La ciudad de las mujeres. E-leusis.net.* http://www.e-leusis.net/biblioteca/biblioteca-historia.asp (consulted January, 2008).

Bertomeu, Angustias (2001). *Del tecnogénero al cibergénero. E-leusis.net.* http://www.eleusis.net/Ciberfeminismo/documentos_ciberfeminismo.asp. (consulted September, 2007).

Bertomeu, Angustias (2002). *Nuevas tecnologias, es femenino plural. E-leusis.net*, URL (consulted May, 2008): http://www.e-leusis.net/ficheros/texto/nuevas_tecnologias.pdf.

Boix, Montserrat (2006). *Ciberfeminismo Social como experiencia. Nireblog.* http://montserratboix.nireblog.com/post/2006/08/01/ciberfeminismo-social-como-experiencia. (consulted September, 2007).

Boix, Montserrat y De Miguel, Ana (2005). *Los géneros de la red: Los ciberfeminismos. Mujeres en red.* http://www.mujeresenred.net/IMG/pdf/ciberfeminismo-demiguel-boix.pdf. (consulted September, 2007).

Braidotti, Rosi (1994). *Nomadic subjects.* New York: Columbia University Press.

Braidotti, Rosi (2006). *Transpositions: on nomadic ethics.* London: Polity Press.

Butler, Judith (1993). *Bodies that matter.* New York: Routledge.

Butler, Judith (1997). *Performative acts and gender constitution. An essay in phenomenology and feminist theory writing on the body. Female embodiment and feminist theory.* New York: Columbia University Press.

Castells, Manuel (1997). *La era de la información: Sociedad, economía y cultura.* Madrid: Alianza Editorial.

Castells, Manuel, & Himanen, Pekka (2004). *The information society and the welfare sate: The Finnish model.* New York: Oxford University Press.

Cisquella, Georgina (2008). *Mujeres en Red y ciberfeminismo. Camara Abierta.* http://www.mujeresenred.net/spip.php?article1313 (consulted January, 2008).

Eubanks, Gerard. (1994). Moving towards a Network Society. Business and Technology Magazine, March, 42–60.

Faulkner, Wendy, & Lohan, Maria (2004). Masculinities and technologies. *Men and Masculinities, 4*, 319–329.

Haraway, Donna (1991). *Simians, cyborgs and women: The reinvention of nature.* New York: Routledge.

Himanen, Petra (2002). *The hacker ethic.* New York: Random House.

Mansell, Robert (2002). Form digital divides to digital entitlements in knowledge societies. *Current Sociology, 50*, 407–426.

Martínez-Collado, Ana (2008). *Estudios online sobre arte y mujer.* http://www.estudiosonline.net/ (consulted January, 2008).

Mitchell, William (1996). *City of bits: Space, place, and the infobahn.* Cambridge: The MIT Press.

Mitchell, William (2004). *Me++: The cyborg self and the networked city.* Cambridge: The MIT Press.

Plant, Sadie (1997). *Zeroes and ones: Digital women and the new technoculture.* New York: Doubleday.

Red.Es (2008). *Observatorio.* http://observatorio.red.es/estudios/index.html (consulted, September 2007).

Rheingold, Howard (2000). *The virtual community: Homesteading on the electronic frontier.* Cambridge: The MIT Press.

Rheingold, Howard (2003). *Smart mobs: The next social revolution.* London: Basic Books.

Robins, Kevin (1996). *Into the image: Culture and politics in the field of vision.* New York: Routledge.

Saco, Diana (2002). *Cybering democracy: Public space and the internet.* Minneapolis: University of Minessota Press.

Sassen, Saskia (2002). Towards a sociology of information technology. *Current Sociology, 50*, 407–462.

Sheff, David (1990). *The virtual realities of Timothy Leary. Ars electronica, 2* http://www.aec.at/en/archives/festival_archive/festival_catalogs/festival_artikel.asp?ProjectID=8983. (consulted September, 2007).

Slouka, Mark (1996). *War of the worlds: Cyberspace and the high-tech assault on reality.* New York: Basic Books.

Streck, John M. (1998). Pulling the plug on electronic town meetings: Participatory democracy and the reality of the Usenet. In Chris Toulouse, & Timothy W. Luke (Eds.), *The politics of cyberspace* (pp. 18–47). London: Routledge.

Wajcman, Judy (1991). *Feminism confronts technology.* Pennsylvania: Pennsylvania State University Press.

Wajcman, Judy (2004). *Technofeminism.* London: Polity Press.

Wolff, Janet (1995). On the road again: Metaphors of travel in cultural criticism. *Cultural Studies, 7*, 224–239.

Zafra, Remedios (2005). *Netianas: n(h)acer mujer en Internet.* Madrid: Ediciones Lengua de Trapo.

Zafra, Remedios (2008). *Habitar en (punto) net.* http://www.2-red.net/habitar/ (consulted January, 2008).