

# On the Gendered Nature of Mobile Phone Culture in Israel

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Data from surveys and personal interviews were used to analyze gendered patterns and contexts of the mobile phone use of Israelis. The findings suggest that the mobile phone has become an everyday, highly regarded, multipurpose interpersonal communication device rather than a working tool. Both men and women discussed their perceptions of the role of the mobile phone in their lives in quite a traditional gendered manner—activity and technological appropriation for men and dependency and domesticity for women. At the same time, the actual phoning habits and attitudes of users point to a pattern of domestication of the mobile phone and even feminization of its consumption.

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**KEY WORDS:** gender; mobile phone; technology; discourse; Israel.

Most communication technologies, such as computers and cameras, are usually considered part of the male-dominated public sphere and are connected to both market and political forces. The rapid worldwide adoption and use of the mobile phone challenges the traditional gender boundaries and calls our attention to the possible blurring of expectations not only of gender roles, but also of other traditional constructions of dichotomies as well: behaviors in and perceptions of the public and private spheres; work and leisure, freedom and control; old and young; technology and nature. Questions related to etiquette and values concerning the use of the mobile phone bring to the forefront changes in accepted normative behaviors in public.

## Mobile Phone Research

The study of the social implications of the mobile phone has recently accelerated worldwide; discussions have centered on the patterns of its diffusion and the descriptions of its use and meanings (see, e.g., Katz & Aakhus, 2002a, for an international collection of studies). Several researchers (e.g., Katz & Aakhus,

2002b) have pointed out the overall theoretical implications of the mobile phone in general. Others have focused on more specific issues, including the domestication of technology (Haddon, 2001); social interaction, intimacy, and the reconstruction of the concepts of time and space (Katriel, 1999; Kim, 2001; Persson, 2001). Adolescents, as a special target audience, have gained particular attention in several projects, mostly in Scandinavian countries (see, e.g., Johnsen, 2001; Kasesniemi & Rautianinen, 2002; Ling, 2001; Ling & Helmersen, 2000; Oksman & Rautianinen, 2002; Skog, 2002).

Some initial discussion of the methodology of studying mobile phone use has been raised as well (e.g., Cohen & Lemish, 2003). The discourse about the mobile phone concerns the familiar tension between assimilation and accommodation of new technologies in society. It questions whether the theoretical and practical issues of the adoption of the mobile phone comprise an extension of old questions regarding the adaptation of a new communication technology or whether it raises completely new questions regarding human communication and stimulates innovative theorizing and new concepts and concerns.

## Mobile Phone and Gender

Theories concerning the gendered nature of technology, for example, its impact on women's lives, their work, and their domestic environment

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(e.g., Cockburn, 1992; Wajcman, 1991) led us to suggest that gender differences in the use of the mobile phone could be expected. More specifically, the limited literature on the development and roles of the fixed telephone documents that sociability, i.e., using the phone for conversations with relatives and friends, was and still is the main use of the domestic phone (Fischer, 1992). Many American women, who were confined to the home in the early era of the mobile phone, used the telephone more for maintaining family and social relations than for work or service purposes (Rakow, 1988). The telephone has increased women's access to each other and to the outside world and, thus, occupies a central place for women. As Moyal (1989) suggested: "Ongoing telephone communication between female family members constitutes an important part of their support structure and contributes significantly to their sense of well-being, security, stability, and self-esteem" (p. 12).

However, within the growing body of literature on the mobile phone, little discussion has been framed within a gender perspective. One such exception is the Rakow and Navarro's (1993) study of remote-control mothering, according to which the mobile phone functions within the traditional gender division of labor. As they noted: "The cellular telephone, because it lies in that twilight area between public and private, seems to be an extension of the public world when used by men, an extension of the private world when used by women. That is, men use it to bring the public world into their personal lives. Women tend to use it to take their family lives with them wherever they go" (p. 155).

Indeed, the social analysis of technology from a feminist perspective (Cockburn, 1992; Plant, 1998; Silverstone & Hirsch, 1992; Wajcman, 1991) suggests that technology is much more than hardware—it is also a process of production and consumption, a form of knowledge, a site of gender domination as well as a power struggle. Technology, as a form of control both of nature and humans, is perceived to be deeply patriarchal. Gender relations in both the private and public spheres and those relations' characteristics shape the way technologies—including communication and leisure—are adopted and used in everyday life. Women's alienation from technologies is therefore explained not in essentialist terms but as an historical and cultural construction. Throughout these discussions there is the underlining debate between the view that technology—whether the washing machine or the computer—would liberate

women in both the home and the workplace, versus the view that technologies within patriarchy are shaped and used mostly in destructive and oppressive ways for women. Both approaches advocate a technology based on women's values as well as their needs, life-styles, knowledge, and interests.

Related to the discussion of the mobile phone as a technology are the much debated theories of the nature of gendered talk (e.g., Tannen, 1990) that presume that the conversational goal of women is to maintain closeness, whereas men use language more pragmatically. Similar arguments have been recently made regarding the evolving social uses of the Internet and their interrelationships with gender identity issues (e.g., Plant, 1998; Turkle, 1995). Accordingly, the Internet is perceived to be feminine in nature as it is located within an understanding of femininity as oriented toward communication and networking. However, as has been pointed out by van Zoonen (2002), this critique is an oversimplified conceptualization of both gender and the Internet. Similarly, we argue that the gendered nature of the mobile phone, just like the Internet, is also located within and derived from the interaction between various processes of meaning and actual use of the medium, and not in the nature of the technology itself.

### **The Mobile Phone in Israel**

Israel has seen a tremendous growth of the mobile phone market both in terms of penetration rate and amount of airtime use. By the year 2002, the number of mobile phone subscribers and the expenditure for cellular telephony in Israel had already exceeded that of fixed telephone services (Schejter & Cohen, 2002). According to the International Telecommunication Union (ITU, 2004), Israel had 95.45 mobile phone subscribers for every 100 inhabitants, compared for example, with only 48.81 in the United States. Israel was even leading the Scandinavian countries, known for their high penetration of the mobile phone: Sweden had 88.89 subscribers per 100 inhabitants. Finland had 86.74, and Norway 84.36. Italy had high rates of cellular subscription with 93.87 per 100 inhabitants. Even Hong Kong lagged behind with a rate of 94.25. Taiwan was the only country worldwide to exceed the Israeli penetration rate at the time—with 106.15 subscriptions per 100 inhabitants.

The unique cultural characteristics of Israeli society may serve to explain this phenomenon. First,

it is a society typified by close familiarity and cohesive social networks that are conducive to much interpersonal contact and communication (Herzog & Ben-Rafael, 2001). Second, Israeli society has a history of intensive diffusion of and infatuation with other technological innovations, particularly in the realm of communication. For example, in the early 1960s, Israelis bought television sets even though there were no Israeli television broadcasts at the time (Caspi & Limor, 1999).

Finally, the political situation has created special security needs for both civilians and soldiers; therefore, in many families adult members (and often adolescents and children as well) own a personal mobile phone in order to be able to contact each other in the event of terrorist attacks or military activity. The mobile phone thus provides an illusion of “protection” for both parents and their children, and, in worst-case scenarios, each person knows where the other is, knowledge that creates a sense, albeit imagined, of control over an otherwise incomprehensible anxiety and unrestrained chaos (Lemish & Cohen, in press). The combination of all of the above creates quite a unique mobile phone-calling culture in Israel.

### Research Questions

In this article, we focus particular attention on tackling some of the gender-related issues raised above as part of a comprehensive research project on attitudes toward and use of the mobile phone in Israel. We were particularly interested in the following questions: Are there gendered patterns and contexts of mobile phone use in Israel and habitual behaviors related to it? Do men and women hold different attitudes—social and pragmatic—toward the mobile phone? Have users developed a gendered mobile phone related etiquette? Does the mobile phone contribute to the blurring of the traditional private and public spheres?

### METHOD

The multi-method study from which the present findings were derived was conducted in Israel during 2001 in cooperation with *Cellcom*, Israel's largest mobile phone company. It consisted of three sequential stages: (a) survey research, (b) real-time Interactive Voice Response (IVR) data, and (c) interviews.

### Participants

We decided to sample participants on the basis of quotas of gender and the empirical amount of mobile phone use. *Cellcom* provided us with four computer printouts, each of which contained a randomly generated list of several thousand private (i.e., nonbusiness) adult subscribers, based on the average amount of airtime they used in the previous 3 months. It should be noted that the lists were not separated by gender. Thus each printout represented a sample of one quartile of the company's subscribers.

Research assistants began by telephoning subscribers to invite them to participate in the study. Given the complexity of the study and the many demands made upon the potential participants (see later) the recruiting process was difficult and time consuming. Although the target was somewhat higher, the final sample consisted of 240 Jewish adults—103 women and 137 men. It should be noted that the overall quartiles were determined for the total sample, not separately for women and men. It can be safely assumed that there are no significant differences among *Cellcom* subscribers and subscribers to the other mobile phone companies in Israel, hence the basis for the current sample is an adequate representation of private mobile phone subscribers in the country. And yet, there was no way to overcome the theoretical problem of not including individuals who have access to a mobile phone provided by their employer, thus appearing as business subscribers and not included in the sample. For each willing participant, approximately five to eight calls were made to unwilling subscribers. It is interesting to note that there seemed to be a positive relationship between the amount of mobile phone use and the willingness to participate in the study, that is, high users were more willing to participate. Thus it was more difficult to recruit the quota of low users.

Most of the respondents live with their families, including at least one child (59.2% among the women and 59.7% among the men); 23.3% of the women live with a married spouse with no children compared with 28.4% among the men; nearly 5% of the women and the men live with a partner; finally, 12.6% of the women and 7.5% of the men live alone.

As for age, on average the women were slightly older than the men but the difference was not statistically significant. Overall, 14% were between 18 and 24 years of age, 31% between 25 and 34, 22% between 35 and 44, 21% between 45 and 54, 8% between 55 and 64, and 4% were 65-years old or more.

There were no statistically significant differences in the level of education of the women and the men. Overall, 29% had completed college, 21% began but did not complete college, 16% had some other post-high-school education, 26% were high school graduates, 5% had only partial high school education, and less than 2% did not attend high school.

Finally, there were no statistically significant differences in the household income of the female and male respondents. Respondents were told what the national mean for household income was. In their overall responses, 16% claimed that their household income was much below the national mean, 19% said it was below the national mean, 38% said their income was about the national mean, 25% said their income was above the national mean, and 3% said it was well above the national mean.

### The Survey

In the first stage, each participant completed a questionnaire that was sent to his/her home. It consisted of questions on several topics: (a) the participant's telephone habits both for mobile and fixed phones, including the amount of calls made, their duration, and subjective comparisons between the two types of phones; (b) the extent to which the participant speaks with various kinds of people (e.g., family members, friends, work-colleagues); (c) the extent to which the mobile phone has improved or worsened various situations and conditions (e.g., efficiency of work, quality of family ties); (d) the extent to which the participant tends to speak in various locations (e.g., home, work, street, car); (e) the perceived importance of certain functions of the mobile phone (e.g., shopping, maintaining family ties, passing time during travel); (f) privacy and etiquette related to mobile phone use; (g) attitudes toward the mobile phone (e.g., the need for children to have mobile phones, freedom provided by the mobile phone; health hazards of the mobile phone; being accessible at all times); (h) the urgency of using the mobile phone (e.g., how often is it used to get help, to provide urgent information); (i) the use of the mobile phone in particular places and situations (e.g., during a lecture, at the movies, in restaurants, when visiting friends); and (j) demographic information, including age, education, family status, and income.

### Real-Time Interactive Voice Response (IVR) measures

In the second stage, the participants were required to respond, using the IVR technology by pressing the appropriate keys on their mobile phone to answer questions following each incoming and outgoing call during a 5-day period (the results of this part of the study are reported elsewhere, see Cohen & Lemish, 2003).

### Interviews

The third and final stage of the study consisted of an in-depth phone interview with each participant. Within 2 days of the termination of the IVR stage, *Cellcom* provided printed logs of all the incoming and outgoing calls made by the participants during the 5-day period. A research assistant then phoned the participant and conducted an interview using a semistructured interview schedule focused on the unique characteristics of the participant's calls based on the computer log. The interview also included questions related to the original purpose for purchasing the mobile phone and the development of the user's habits, reflections about one's own and others' calling habits, and experiences with the mobile phone outside of Israel.

The interviewer took detailed notes during the interview, including many quotes verbatim. Missing parts of the interview were generally reconstructed immediately following the phone call. A thematic analysis of the interview followed, first with the main open-ended questions, and then by forming relevant categories, as is commonly done in the analysis of such transcripts (Lindlof & Taylor, 2002).

Of the original sample, 203 participants (88 women and 115 men) completed the three stages of the study, including the interviews. The survey and interview data are used here to complement each other, rather than as a form of triangulation, as they tackle different aspects related to the gendered nature of mobile phone use. What is most revealing is the juxtaposition between the gendered use of the mobile phone as well as attitudes toward it, as determined by the survey data, and the gendered discourses about it during the interviews.

**RESULTS**

**Survey Results**

To provide some notion of the actual amount of use of the mobile phone by the participants, Table I presents the means, standard deviations, and ranges for the four quartiles. The data show great variability among the four quartiles as well as differences between the men and the women.

As can be seen, the participants, women and men, in the lowest quartile spoke an average of 90 min per month (or 3.3 min per day). People in the second quartile spoke more than twice that amount, or nearly 8 min per day. The participants in the third quartile spoke on average about 17 min per day. The heaviest users of the mobile phone spoke on average just about 30 min per day, nearly double the amount of time of the people in the third quartile. Thus, it appears that the people in the high quartile—both women and men—spoke about 10 times more than those in the low quartile.

The gender differences are summarized under four subheadings: differential use of the mobile phone, identities of mobile phone call recipients, contexts of use, and attitudes toward use.

*Differential Use*

According to Table II, men make significantly more mobile phone calls per day,  $\chi^2 = 24.807$ ;  $df = 7$ ;  $p < .001$ . Thus, for example, whereas 48.6% of the women made 5 calls or fewer per day, only 25.5% of the men made so few calls. On the other hand, only 2.9% of the women made 21 calls or more per day compared with 12.5% of the men.

**Table I.** Means, Ranges, and Standard Deviations of Monthly Airtime Use (in Min) by Gender and Quartiles

	Quartile 1	Quartile 2	Quartile 3	Quartile 4	Total
<b>Women</b>					
N	33	22	22	26	103
Minimum	21	147	381	651	21
Maximum	140	351	634	1514	1514
Mean	87.8	230.0	497.2	899.3	410.5
SD	36.3	65.3	93.0	205.7	341.6
<b>Men</b>					
N	26	39	38	34	137
Minimum	24	143	379	650	24
Maximum	140	375	647	2228	2228
Mean	93.3	237.1	519.6	934.0	461.1
SD	37.2	80.1	91.8	356.7	363.8

**Table II.** Number of Mobile Phone Calls Made Per Day by Gender

	Gender (%)	
	Women	Men
Less than 3 calls	13.6	6.6
3–5 calls	35.0	16.9
6–10 calls	33.0	39.0
11–15 calls	12.6	18.4
16–20 calls	2.9	6.6
21–25 calls	—	6.6
26–30 calls	—	3.7
More than 30 calls	2.9	2.2

There was also a significant difference between women and men in terms of the proportion of calls using mobile vs. fixed phones,  $\chi^2 = 9.230$ ;  $df = 2$ ;  $p < .01$ . Thus, of all the calls made, 45.3% of those made by men were on their mobile phones compared with only 27.2% of those made by women. Furthermore, the men spent more of their time making phone calls on their mobile phones than did the women,  $\chi^2 = 12.048$ ;  $df = 4$ ;  $p < .05$ . Specifically, 41.6% of men reported that 75% or more of their total telephone time was on the mobile phone compared with only 23.5% among the women. Conversely, 35.8% of the men said they spend 25% or less of their total telephone time on the mobile phone compared with 55.9% of the women.

*Identities of the Mobile Phone Call Recipients*

Several gender differences were found with regard to the identity of people with whom mobile phone conversations were held. As shown in Table III, women talked significantly more often with their children, whereas men talked more with

**Table III.** Frequency of Speaking With Various People by Gender

	Women	Men	t	p
Children	2.49 (39)	2.10 (62)	2.29	.024
Family in army	2.33 (21)	2.39 (36)	0.21	ns
Spouse	2.73 (74)	3.04 (119)	2.65	.009
Other family members	2.59 (95)	2.48 (124)	1.66	ns
Friends	2.62 (101)	2.73 (132)	0.98	ns
Colleagues	2.26 (90)	2.64 (121)	3.59	.000
Service providers	1.79 (80)	1.76 (109)	0.27	ns
Information services	1.70 (81)	1.63 (109)	0.73	ns
Emergency services	1.30 (74)	1.25 (102)	0.68	ns

Note. Scale range: 1 = not at all; 2 = a little; 3 = quite a bit; 4 = very much.

**Table IV.** Frequency of Speaking at Various Locations by Gender

	Women	Men	<i>t</i>	<i>p</i>
At home	2.66 (101)	2.34 (133)	1.23	<i>ns</i>
At others' homes	2.84 (100)	2.76 (132)	0.804	<i>ns</i>
At work or school	2.65 (93)	2.99 (130)	3.409	.001
At entertainment or eating places	2.55 (100)	2.60 (132)	0.422	<i>ns</i>
In public buildings	2.50 (101)	2.48 (134)	0.172	<i>ns</i>
Out of doors in public places	2.77 (102)	2.95 (133)	1.867	.063
As a driver of a private vehicle	2.67 (86)	3.01 (130)	2.723	.007
As a passenger in a private vehicle	2.69 (96)	2.72 (129)	0.296	<i>ns</i>
As a passenger in public transportation	2.56 (80)	2.47 (101)	0.754	<i>ns</i>

Note. Scale ranges: 1 = *never*; 2 = *seldom*; 3 = *often*; 4 = *always*.

their spouses and colleagues. No significant differences were found regarding other family members and friends or with various service providers. In fact, most women and men did not use mobile phones at all for talking with service providers.

#### Contexts of Use

As can be seen in Table IV, significant gender differences were found only with regard to three of the nine locations examined: at work or school, out of doors in public places, and as a driver in a private vehicle. In all these cases, men were heavier users of the mobile phone than women were.

#### Attitudes Toward the Mobile Phone

Overall the respondents held very positive attitudes toward the mobile phone and indicated that it improved certain life areas or, at worst, had had no effect on them. In very few cases were negative responses reported. As for gender differences, these were found with regard to two related areas: improved efficiency of working time and improved relations at work. In both these cases the men indicated significantly greater improvement than the women did (Table V).

We also examined the time when the participants adopted the mobile phone, that is, how long they had been in possession of a mobile phone. The respondents were divided into three groups on the basis their time of adoption. The 70 participants (29.1%) who had had a mobile phone for at least 5 years were defined as early adopters; 130 participants (54.2%) had owned a phone for 2–4 years and were considered medium adopters; and 40 participants (16.7%) who had owned their mobile phone less than 2 years were considered late adopters.

As expected, gender played a role in the adoption of mobile phones; men adopted it significantly earlier than women did,  $\chi^2 = 9.781$ ;  $df = 2$ ;  $p < .01$ . Thus, 36.8% of the men compared with 18.4% of the women were early adopters; 14.0% of the men were late adopters compared with 20.4% of the women.

#### Interview Results

An exploration of the ways in which men and women account for their use of the mobile phone offers an opportunity to learn about their identities and understandings of the role of the medium in their lives. Analysis of the discourse of domestic technologies, as Livingstone (1992) demonstrated, raises questions regarding their role in facilitating family

**Table V.** Perceived Improvement of Various Life Areas by Gender

	Women	Men	<i>t</i>	<i>p</i>
Utilization of leisure time	2.30 (89)	2.40 (121)	1.237	<i>ns</i>
Utilization of work time	2.24 (80)	2.55 (122)	3.697	.000
Utilization of travel time	2.76 (96)	2.71 (128)	0.774	<i>ns</i>
Quality of family relationships	2.52 (96)	2.44 (122)	1.146	<i>ns</i>
Quality of work relationships	2.33 (87)	2.59 (120)	3.703	.000
Quality of social relationships	2.55 (98)	2.54 (130)	0.184	<i>ns</i>
Efficiency of doing errands	2.83 (96)	2.88 (131)	0.950	<i>ns</i>

Note. Scale ranges: 1 = *makes worse*; 2 = *no change*; 3 = *improves*.

life and gender relations. In our study, a close analysis of the interview data revealed more striking gender differences than the quantitative data on actual uses of the mobile phone would have led us to believe. Women seemed to differ from men on three central dimensions.

#### *The Mobile Phone as an Extension of "Man"*

For many, the mobile phone has become a true "extension of man"—to use McLuhan's (1964) expression. The claim for a bodily appropriation of this technology was expressed regularly by men, and only men, who claimed that it has become a natural extension of themselves. "Once we used to get by without it, it was possible; but now I feel that the instrument is part of me, it is connected to me," argued one interviewee. "The cellular has changed the nature of life! This is why I convinced my mother to buy it—it is a positive revolution in the magnitude of the Internet . . . the cellular has become part of my body," declared another one. And a third admitted: "When I walk around without my phone I feel like I am missing a hand."

Many interviewees used terms such as "addiction," "dependence," and "restlessness" to describe their situation without the mobile phone, as if its absence leaves them with a physical as well as a psychological void. Our male interviewees seemed to talk about themselves through a perception that defines them in relation to mobile phone technology. It has become part of them: the subject, the "me," is being voluntarily blurred with the "mine." This seems to be in line with an ideology of hegemonic masculinity, which is typically framed within several normative expectations regarding, among others, the use of technology for domination, subordination, and/or protection of others—humans and nature alike—as well as its role in occupational achievements and in daring activities outside the domestic sphere (Cockburn, 1992; Hanke, 1998). Historically, from the spear to the computer, from the plough to the rocket, technology has become part of the social construction of manhood. Artistic and media representations of men have traditionally reinforced this conception by associating men with weapons, gadgets, and vehicles, as well as communication and technological devices (Craig, 1992). It is interesting, therefore, to note how our male interviewees so easily conformed to this facet of their manhood and how natural it seemed to them to describe their

mobile phone as a body organ, an extension of the self. These findings support the questionnaire data, according to which men (in contrast to stereotypical expectations) are heavier users of the mobile phone, both in terms of number of calls made as well as the range of locations. However, men's and women's responses to the questionnaire items in the survey regarding attitudes toward the role of the mobile phone in their lives describe their functional dependency on it in very different terms.

#### *The Mobile Phone as a Symbol of Inclusiveness*

Both men and women referred to the mobile phone's social status and its use as a form of inclusion within one's peer group. However, each group focused on very different aspects: whereas men mentioned the ownership of the instrument itself as a sign of connectedness, women were more concerned with its use, that is, the phone-calls themselves.

This can be illustrated by the fact that only men reported adopting the mobile phone in the first place as a status symbol, the mere "excitement" of owning and displaying a new toy like everyone else, or as a result of peer pressure. Reasoning such as "because everybody had one," or "to be 'in,'" were often mentioned by male interviewees. "I am a materialistic type . . . I didn't need it. I got excited, it's like a toy," said one. "I was among the first to buy one and I did it with show-off-excitement. The entire country got excited," admitted another one apologetically. Still another interviewee said it openly: "Everybody bought it so I did too, this is what you may call 'social pressure.'" Although the questionnaire data revealed that men were indeed earlier adopters of the mobile phone, as the literature on the diffusion of technology led us to expect, the social and emotional rationale for the decision was surprisingly stereotypically "masculine"—proving oneself as competitively "in."

Women, on the other hand, did not mention social pressure or excitement over the novelty of the gadget as motivation for acquiring the mobile phone in the first place. Instead, they were mostly concerned about the function of the mobile phone, that is, the "call" itself. Once they owned a mobile phone they became particularly sensitive to the social hierarchy it seemed to convey: "the phone itself has become an issue in its own right—'how many called you?' 'Why doesn't anyone call me?'" It indicates a

social status. Someone who gets fewer calls is less popular.” Similarly, the mobile phone, according to some women, takes part of the sensation of romance out of a relationship: “once upon a time when someone was coming on to me it was a big deal—‘has he called?’ ‘When did he call?’ Today he simply says—‘call me on my mobile.’ It loses all the interest.” Both examples suggest a form of passivity on the part of the women, expecting to be called by others and measuring their popularity by others calling them. Once again, although in practice women are active users of their mobile phones (even if to a lesser degree than men), they chose to present themselves in stereotypically passive terms.

### *The Gendered Advantages of the Mobile Phone*

Although both men and women rated the questionnaire items and discussed the advantages of the mobile phone for accessibility, efficiency, social and familial contact, and sense of security in a similar manner, they differed in their framing of these qualities. Men tended to talk more about their accessibility to others, framing this characteristic of the mobile phone in active terms: “it is always possible to reach whomever you want whenever you want.” They were pleased, for example, with their ability to call for assistance while on the road: “the cellular helps me when I’m riding my motorcycle and I have a flat tire and I can order someone to come and help me.” Similarly, men presented themselves as conscientious and responsible citizens: “I live in a [remote] settlement and sometimes you get stuck here without a bus. It’s always good if you need to report on a suspicious object [such as a potential bomb].”

Women, on the other hand, discussed themselves in a passive tone as they were more concerned about others being able to reach them: “It’s always possible to reach me;” “I’m freer to leave the house because even when I do errands I know that they can reach me and I can come home if necessary.” The importance of the mobile phone for managing household roles from a distance was very apparent in women’s discussion of the advantage of accessibility. “I need to be accessible all the time if something happens to the kid and the caregiver needs to let me know urgently,” explained one mother, and a second one demonstrated this quality “in real time” by saying: “. . . even now when I’m talking to you, the kids are bugging me with call-waiting. They’re always trying to get hold of me. I’m supposed to order

a pizza for them . . . today is pizza day . . . it’s important for me to be accessible.” Clearly, although both men and women talked about the importance of being connected with other family members, only the women discussed concern about the management of the household and used the mobile phone to facilitate their traditional roles.

Another form of women’s discourse of dependency was their argument for the mobile phone’s use as an “authority-substitute.” Only women praised the device for allowing them to receive long distance instructions for handling a repair or getting directions. “Once I got stuck and I called my husband and he told me on the phone what to do,” recalled one woman, and another one said, “it’s convenient when I get instructions on how to travel somewhere, and they direct me all the way to the place itself.” Here too, the juxtaposition of the gendered discourse about the mobile phone with the empirical evidence about its much less gendered use suggests a surprising gap between gender performance during an interview situation and actual practices. One possible explanation is that normative discursive practices that are socially shared lag behind actual individual practice.

## **DISCUSSION**

The findings reported above suggest several interesting conclusions. Clearly, the profile of the typical heavy mobile phone user is that of an early adopting man, who holds positive attitudes toward the role of the mobile phone in his life and the improvements that it has brought about in both his professional and personal realms. This typical male user perceives the mobile phone to have revolutionized his world, as one of the interviewees said, “I can’t get along without it, and in general, it’s on 24 hours a day. One day without my mobile and I go crazy. How will I be in touch with the world?” The contexts in which men use the mobile phone seem to expand with experience, moving from public places where there is no alternative phone, through private locations, all the way to preferring it on a regular basis over all other phoning methods in all locations. However, the amount of use of the phone seems to remain stable across gender, as well as over time. Similarly, the attitudes of users toward etiquette regarding mobile phone use do not differ as a function of gender, amount of use, or time of adoption. Although users hold very positive attitudes toward the ways

the mobile phone has improved their use of time—such as running errands and traveling, in terms of actual use for both genders the mobile phone seems to be more of a medium for interpersonal interaction rather than a tool for work, information, and emergency needs.

These insights present challenges to several assumptions we hold regarding the processes of domestication of technology, as well as its gendered and interpersonal nature. Following Haddon's (2001) argument, the adoption of the mobile phone is not an event but rather a process of evolving attitudes and habits. Our own in-depth interviews reveal that the perception of the mobile phone in Israeli society, as reconstructed by the interviewees, has moved from a position of a man's "status symbol" to a common taken-for-granted gadget for both genders. "At first it was a matter of luxury, to be 'in,'" explained a male interviewee, "but with time the cellular became part of my life . . . a service tool, inseparable . . ." As such, it has moved away from the male-dominated formal public space to the everyday space as well as to the private space. Similarly, it has moved away from basically being a modern version of a "chastity belt" that husbands purchase for their wives to protect them from harm, and from being only an extension of the woman's private responsibilities of coordinating the family while away from home. For most users, the mobile phone has become an instrument for maintaining their intimate social networks, as was proposed a long time ago regarding the fixed telephone (Aronson, 1977). A female interviewee expressed this function well when she said: "I see this instrument as providing me with a sense of security. It helps me maintain good relationships with my friends . . . the mobile is a bridge to the outside world and between people."

This is particularly interesting with regard to the possibility that this technology contributes to the blurring of gender differences. Our study supports an emerging line of empirical studies where no marked gender differences in uses and gratifications of communication practices were found (e.g., Lemish, Liebes, & Seidmann, 2001, regarding the role of the phone—both fixed and mobile—among children and in youth culture in Europe). Both men and women use the mobile phone first and foremost in order to talk to family members and friends. This development follows that of its predecessor—the fixed phone. Indeed, women's social uses of the fixed phone are now credited for having been responsible for the development of the culture of phoning

from being goal-oriented to social process-oriented (Fischer, 1992).

Very few significant gender differences were found in the other areas tapped by the questionnaire. Thus there were significant differences between women and men regarding only 2 of 16 statements presented in the quantitative survey. Men agreed more than women that "thanks to the mobile phone people can work in a flexible way in terms of time and space" and that "most people select their particular mobile phone in order to impress others." This was also reinforced in the qualitative interviews, as only men reported having adopted the mobile phone in the first place as a status symbol, or out of mere "enthusiasm" over owning and displaying a new toy. Finally, men and women differed on only 1 of the 10 measures of mobile phone "etiquette." Women more than men reported that they ask the person they are calling regarding personal matters whether or not it is convenient for him/her to talk: 37.9% of the women always do so vs. 21.8% of the men, and 21.4% of the women seldom or never do so vs. 33.1% of the men,  $\chi^2 = 8.612$ ;  $df = 3$ ;  $p < .05$ .

The concrete everyday use of the mobile phone, as studied in our case, suggests that it may be stereotypically masculine in the sense of being a mechanical gadget, yet it is stereotypically feminine as it is used mostly for networking. We suggest, therefore, that the mobile phone might indeed also be playing a role in the blurring of gender differences in the actual use of communication technologies, and not necessarily reinforcing existing social divisions. Supporting evidence comes from a recent cross-cultural study (Plant, 2002) that suggests that, although as expected from the use of other leisure technologies, women use the mobile phone more as a means of expression and communication, whereas men use it more as an interactive toy, the mobile phone is making these men more chatty and communicative than they were without it.

This trend of blurring divisions is evident in several respects, including the higher frequency of making social calls in comparison with work-related calls, the growing tendency (with time since adoption) to use the mobile phone not only in public places for special needs and in the absence of a regular phone, but also for mundane everyday use in private places and in the presence of other phoning options. This was also evident in our own comparison of the questionnaire and IVR data (Cohen & Lemish, 2003). The mobile phone has thus

graduated from being a “special” technology for “special” people with “special” professional needs, and particularly for men, to a democratic, universal, domestic, and everyday technology accessible and useful to all. This perspective was strongly reinforced in the personal interviews when interviewees described their daily uses of their mobile phones at home, including humorous stories such as the one told by a mother who regularly wakes her teenager for school by calling his mobile phone from the next room, or a man who admitted to being too lazy to get an extension cord for his fixed phone and instead used the mobile phone while reclining in bed.

Thus it seems that internalizing the use of the mobile phone and adopting it in everyday routines goes hand in hand with a growing positive attitude toward its role in life by both men and women. This might be attributed to self-reinforcement and reaffirmation involved in attitude change and the adoption of innovations (Rogers, 1995). We suggest, therefore, that the mobile phone in Israel, much in the same way as the fixed phone, has become an everyday, highly regarded, multi-purpose interpersonal communication device rather than a working tool.

In sum, users’ actual calling habits and attitudes point to a pattern of domestication of the mobile phone, and even a feminization of its use. However, in contrast to this general assertion, discussion of the mobile phone during a research-related interview seemed to offer another site for men and women to perform their gendered identity. Both men and women discussed their perceptions of its role in their lives in quite a traditional gendered manner—activity and technological appropriation for men, and dependency and domesticity for women. The discrepancy between the conventional construction of gender in discourse about the mobile phone versus the actual practices associated with it that indicate a process of feminization raises a host of new questions regarding the gendered nature of technology and processes of social change. It brings forth once again the argument that gender continues to be constructed through performance and social practices even in situations that are gradually becoming less gendered. Normative discourse seems to remain one such central mechanism, apparently quite resistant to change. It is not only the behaviors themselves that should concern us as students of gender, but also the discourse about them through which identity is constructed and negotiated.

## ACKNOWLEDGMENTS

The authors thank three people at *Cellcom*: former Vice President Oren Most for his invaluable help in supporting the project, Michal Dvoretzky and Neta Amorai who coordinated the study with the various departments within the company. Finally, thanks are due to Mr. Ziv Sharon for coordinating the study at Tel Aviv University and to our students who worked on the project with much diligence.

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