Representing the Israeli Internet:
The Press, the Pioneers, and the Practitioners

NICHOLAS A. JOHN
The Hebrew University of Jerusalem

This article investigates the values associated with the early Internet in Israel. Given that the Internet was imported from the United States, it asks whether the techno-utopian discursive style surrounding the Internet in that country was imported to Israel too. Representations of the Internet are analyzed among three groups of actors: the press saw it in utopian terms, Israel's "Internet pioneers" described its importance in a combination of religious and nationalist terms, and the owners of Israel's first ISPs attributed no values to it at all. It would appear that the closer we get to the actual provision of the Internet to people's homes, the less likely we are to find techno-utopian representations of it.

Introduction

Given that the Internet was imported to Israel from the United States, it is worth asking whether the dominant discursive style surrounding the Internet in that country—techno-utopianism—was imported to Israel too. If so, who were its most faithful exponents? And where it was not taken up, why not?

In this article, I ask how the Internet was represented in Israel. What values were seen as accompanying the Internet? Were there differences in perceptions of the Internet among different groups of actors? If so, what were they and how are we to account for them?

These questions are asked in relation to three groups, all of which had a stake in the successful diffusion of the Internet to Israel, albeit in different ways: first, journalists and others whose opinions about the Internet were published in Israeli newspaper and magazine articles; second, the lobbyists and

activists who were trying to spread the Internet as broadly as possible throughout Israeli society in the early- to mid-1990s, whom I term Israel's "Internet pioneers"; and third, the people very closely involved in actually bringing the technology to people's homes and offices, namely, the founders and owners of the early ISPs in Israel. It should be noted that this is not a comparison of representations of the Internet among those three groups between the United States and Israel. Indeed, to the best of my knowledge this is the first study to interview the owners of ISPs in any country. In this sense, the references below to the technological utopianism associated with the Internet in the United States merely serve as a baseline from which to launch a discussion of the discourses surrounding the Internet in Israel.

In relation to the press, I ask the following: How was the Internet represented in Israeli newspapers in its early days? What values were attributed to the Internet? Was the Internet seen as a positive force? In brief, were the representations of the Internet technologically utopian?

Regarding Israel's Internet pioneers and the founders of Israel's first ISPs, I ask how they saw the Internet in its early days and how they tried to sell it to others. What were they telling other people that they could do with the Internet? How did they think the Internet might influence society? I also ask what motivated them to diffuse the Internet. Did they see the Internet as heralding a better society? If that was not what drove them, then why did they want to see the Internet take root in Israel? As I show, their representations differed quite strongly from those offered by the press, as well as from one another.

America, Techno-utopianism and the Internet

The dominant form of representation of the Internet in its early days in the United States was that of technological utopianism, defined as "a mode of thought and activity that vaunts technology as a means of bringing about utopia" (Segal, 1985, p. 10). Patrice Flichy (2007) has discussed the ways that the Internet was constructed from the outset as a utopian project in the United States. In particular, he shows how the seeds of utopian thought were already present in the minds of the designers of the Internet. Merav Katz-Kimchi found that the discourse surrounding the emergence of the Internet in the 1990s was "primarily techno-utopian" (Katz-Kimchi, 2007, p. i). For example, she shows how representations of the Internet in advertising images portrayed the Internet in a utopian fashion. "[I]n these advertisements," she argues, "the world in its myriad facets [...] is abstracted, simplified and condensed, through technology, to the utopian or 'dream world' of twentieth century tourism" (Katz-Kimchi, 2007, p. 60). Similarly, Suzanne Iacono and Rob Kling observed that the people promoting the National Information Infrastructure (NII) "all envision an extensively computerized future that is deemed preferable to the less computerized world in which we currently live" (Iacono & Kling, 1996, p. 87).

In short, from the moment it appeared in American public consciousness, the Internet was seen as providing a path to a better society. This is not to say that these were the only types of representations of the Internet, but it is to suggest that they were the dominant ones. Two main points are worth noting in this regard: first, the utopia suggested by the above texts about the Internet is a *global* one, and secondly, the genre of technological utopianism is an *American* one. In addition, we might note that the media constitute a key player in the diffusion of utopian (and dystopian) visions of technology. As Kling argues, "[t]he reporter will usually strive to construct the story within a frame that readers can readily

grasp. Technological utopianism and technological anti-utopianism are two such frames whose conventions readers can readily grasp" (Kling, 1996, p. 54; see also Iacono & Kling, 1996, p. 97).

Technologically utopian images of the Internet have portrayed it as a global technology in two ways: (1) it is seen as expanding to encompass the entire world; and (2) it is understood to eradicate space, thus making geographical location irrelevant.

Taking a step back from the specific case of the Internet, it has been argued that the very discourse of technological utopianism is particularly American. Howard Segal maintains that from its first settlement "America had been the object of utopian hopes," explaining that "what made America a potential utopia was its status as a blank slate on which a new society could be written" (Segal, 1985, p. 75). In other words, the very settlement of the North American continent was a utopian project (Kling & Lamb, 1996, p. 38). That is, part of what "America" means is a belief that technological progress is "the great panacea for everyday problems" (Smith, 1994, p. 23).

After the following words on methodology, I present the representations of the early Israeli Internet among the three research groups before attempting an explanation of the differences between them.

Methods

The findings presented here are based on two methodologies. The first is semi-structured interviews with key actors. Thirteen people from the ISP industry were interviewed. Ten of them had set up ISPs and served as the CEOs of their own companies. The other three interviewees from the ISP industry had held senior positions in ISPs that they themselves did not found or run. Interviews were also conducted with three of Israel's leading Internet pioneers. The interviews were semi-structured in-depth interviews and based on a pre-prepared basic interview schedule (Fontana & Frey, 1994). The interviews were recorded and transcribed. (See Appendix 1 for an example interview protocol.)

One of the main reasons for employing the oral history method in this study is the absence of a written record regarding the research questions. ISP owners were not viewed as interesting subjects for newspaper articles at the time; in fact, ISP owners have not been viewed as interesting subjects for any kind of investigation whatsoever. If we wish to know, therefore, what the people involved in importing the Internet to Israel thought about what they were doing back then, we have no choice but to ask them today.

As is frequently pointed out by oral historians, data collected orally during interviews must be subjected to careful scrutiny. Hoffman (1996) argues that we should judge respondents according to their *reliability* and *validity*. A reliable interviewee is one who tells the same story twice; in other words, one who is consistent with himself or herself. Validity refers to whether the interviewee's responses accord with other sources of externally validated knowledge (such as written primary materials). As I interviewed each interviewee only once, I cannot check for their reliability in this sense. However, the validity of their accounts can be, and was, checked against other records (see Denzin, 1989, on triangulation).

Why, though, should we believe that interviewees' comments in interview correspond with their views at the time? This is another way of asking how much we should trust the interviewees' memory. Of course, we cannot place undoubting confidence in anyone's memory, though in the current instance there are some good reasons to be reasonably trusting. First of all, this was an important—and thus presumably memorable—time for both the Internet pioneers and the ISP owners, who were setting up new companies offering entirely new services. More significantly, though, the interviewees' recollections were rich and (mostly) accurate regarding matters that could be, and were, independently checked, suggesting that the period was still vivid in their minds. Also, many of the interviewees also talked articulately about their views regarding other issues that were relevant at the time (such as their negative attitudes to the incumbent telecoms monopoly). In short, when taken as a whole, the interviews read as coherent accounts of a specific period of time.

In addition, the interview itself was conducted in such a way as to draw out the interviewees' recollections. For instance, after asking a general question about what social effects the interviewees had thought that the Internet might have, I followed up with quite specific questions about the possible utopian and globalizing impacts of the Internet, asking the interviewees whether they thought it would make society better and whether they thought it would expose Israelis to global culture. The interviewees' responses are reported subsequently, but in terms of method I would posit that the use of specific questions about views on specific matters improves the validity of the interviewees' answers.

Another indication that the findings from the interviews are usable is that, as I show, the comments the interviewees made were quite different from the tone of the press. In other words, the wide availability of utopian cultural discourses lends credibility to my focus on their absence among the two groups that I interviewed. Apart from one interviewee—who, by talking about the Internet from the "now" of the time of interview rather than the "then" of the period under study, highlighted the fact that others did not—they did not follow these scripts, which, I argue, allows us to take the interviewees seriously. At the very least, it enables us to proceed from the assumption that, during interview, they were not merely parroting prevalent cultural scripts about Internet/society relations that had been drafted in to take the place of lost recollections.

However, even the reader with a healthy skepticism of findings based on interviewees' recollections of events from a decade or more in the past will, I hope, concur with the findings presented below that the two groups of interviewees spoke differently from one another and that both groups talked in terms that differed from the prevalent discourse as expressed in the press. In other words, doubting the reliability of the interviewees' recollections, and reading their responses as reflecting their views today, does not necessarily imply rejecting this study's findings. For the reasons just argued, I think that the interviews did capture the interviewees' attitudes towards the Internet in the early 1990s; however, even if all that the interviews captured are the interviewees' current attitudes, this does not fatally undermine the theoretical interpretations of those attitudes presented in this article. The Internet pioneers and the ISP owners can nonetheless be seen to be speaking in voices that are distinct from one another, and distinct from that of the press.

The second source of data consists of newspaper articles on the Internet as it appeared and developed in Israel. I found over one hundred such articles in Israel's three main newspapers—*Haaretz*, *Yedioth Aharonoth*, and *Maariv*—for the period under study. All of the articles were published in Hebrew, and citations in English are my own translations.

In order to reinforce the validity of the interpretations offered below, and in keeping with Altheide and Johnson's (1994) exhortation to "explicate *how* we know *what* we know" (p. 496, emphasis in original), I note that the collected data (both interviews and press clippings) were analyzed according to the grounded theory method (Corbin & Strauss, 2008; Glaser & Strauss, 1967). That is, they were subjected to repeated readings from which themes were extracted. Examples of themes in the context of motivations for spreading the Internet include "national pride," or "efficiency."

Researchers have listed a great number of types of validity that they see as pertaining to qualitative research (see Whittemore, Chase, & Mandle, 2001, for a survey), with the implication that "judgment is necessary to determine the optimal weight of each criteria in specific studies" (p. 528). Given the attempt undertaken below to conceptualize the three groups' different ways of talking about the early Internet in Israel, the key notion here is that of theoretical validity (Kirk & Miller, 1986, pp. 21–32).

In his discussion of validity in qualitative research, Maxwell (1992) argues that "there exist ways of assessing accounts that do not depend entirely on features of the account itself, but in some way relate to those things that the account claims to be about" (p. 283). I refer to some of "those things" in the concluding section of this article, in which I place my interpretations of the three groups' representations of the Internet within the context of Israel of the early 1990s, and especially the hopes for peace and the "normalization" of Israeli society. This context is important in order to persuade the reader that "the researcher sees what he or she thinks he or she sees" (Kirk and Miller, 1986, p. 21).

Representations of the Internet in Israel in Its Early Days

The Israeli Press

This question of the representation of the Internet in the Israeli press can be divided roughly into two parts. First, what characteristics did journalists and other contributors to the press attribute to it, and how did they see those characteristics as impacting on society? And second, what was the Internet portrayed as enabling people to do that they could not do before, and how were these new activities evaluated? We can then ask how these representations resonated both with American technological utopianism and with social and cultural trends afoot in Israel at the time.

Many of the journalistic articles published in Israel offer utopian visions of the Internet in keeping with the utopian views of technology that took root in American society as early as the 18th century (Smith, 1994). For instance, some saw it as an inherently democratic environment, sometimes comparing it to ancient Greece (Goldman, 1995; Gordon, 1995b). By this I mean that they pointed to the very structure of the Internet as democratic: it has a horizontal, and not a vertical, hierarchical structure, for

instance; each voice has equal weight; information passes through the network in an indiscriminate fashion; and so on.

Not only is the Internet seen as democratic in itself and as fostering democracy around the world; it is also represented as contributing to world peace. Reviewing what to the best of my knowledge was the first academic conference in Israel on the Internet, Yehuda Koren (1995) quotes a researcher as saying that "the Internet erases differences between people, and brings them closer together. In such a world it will be difficult for leaders to take their nations to war." This attribute of the Internet is related to its perceived borderlessness, both as a feature of the technology and as a social consequence of it. For instance, in another quote from that article, the same researcher says,

> my life used to be dictated by the fact that I was born in a certain place, studied in a certain school, and have friends with whom I served in the army. Local geography determined who I married. No longer. We are heading toward a world without borders. (Koren 1995)

Similarly, another newspaper article claimed, "In the cybernetic space, where all words are identical, national boundaries and distinctions are blurred" (Kantrowitz & Rogers, 1994). This clearly resonates with Nicholas Negroponte's suggestion that "[d]igital living will include less and less dependence upon being in a specific place at a specific time" (1995, p. 165).

Many articles described the ways in which the Internet can make our everyday lives easier. This is reflected in the ability to carry out tasks such as shopping online (Beller, 1994; Blizovsky, 1994c; Frankel, 1994), checking one's bank balance (Goldman, 1991), distance working (Berger, 1994), and ordering videos on demand (Beller, 1994). The Internet, according to these journalists, can make everyday tasks easier to carry out and enable us to do them more efficiently.

Not all representations of the Internet were so positive, however. Along with the increased efficiency associated with distance working, for instance, concerns were expressed that it might make the workplace less egalitarian, with only relatively highly skilled workers being given the freedom to work from home (Berger, 1994). And while shopping online may be faster than going to the store in person, it might also become an alienating phenomenon, as expressed in an article titled, "You'll No Longer Meet in the Supermarket" (Frankel, 1994).

Many of the articles that were published between 1994 and 1996 were aimed at explaining to the public what one can do with the Internet, given that it was a new technology largely unfamiliar to most people. What is worth noting is that most of the examples given of uses of the Internet refer the Israeli reader overseas. For instance, various articles mention that one can read foreign newspapers and periodicals (especially American ones, such as *The New York Times*, *TIME,* or *The Washington Post*), shop at Macy's, visit the online store of a Moscow museum, check out the world markets, take an interest in the New Zealand theatre scene, discuss Thai food with other aficionados, and so on (for instance, Blizovsky, 1994a; Goldman, 1991; Gordon, 1995a; Koren, 1995). In other words, the experiences offered by the Internet, as represented by Israeli newspaper articles from its early days, are cosmopolitan, though with

an undeniably American leaning. The Internet in Israel was represented as connecting users to the larger world beyond Israel's national borders (this may have been because at the time the Israeli Internet lacked similar sites of its own, although that does not undermine the impression of the Internet as linking Israelis with "the world"). These representations include references to what we might see as the exotic and unfamiliar (Thai food, New Zealand theater), as well as to the familiar though out of reach (Macy's, *The New York Times*).

Finally, a major use of the Internet reported by journalists from the early to mid-1990s is as a communication tool, in particular through e-mail and chat software, as well as in online forums. Indeed, the Internet as a communication tool appears in many descriptions of it from the period (see, for example, Benholm, 1995; Blizovsky, 1994a, 1994d; Gordon, 1995a; Koren, 1995; McGarret, 1994).

Representations of the Internet Among Founders of ISPs and Internet Pioneers in Israel

So far I have dealt with representations of the Internet in the press, which were largely positive, and which resonated with the techno-utopian views prevalent in the United States. But what of the people who were involved firsthand in bringing the Internet to the Israeli public? How did they conceive of the very technology that they were instrumental in bringing to Israelis' homes?

Internet Pioneers

I call "Internet pioneers" those people who had also been involved with the Internet in the early- to mid-1990s and whose involvement was bereft of any financial interest. When I talked with leading Israeli Internet pioneers Doron Shikmoni and Hank Nussbacher about their part in persuading companies to ask the Ministry of Communications for permission to hook up to the Internet (in the days before it was freely accessible to the public at large), they provided me with lively descriptions of their activities at that time. Shikmoni, for example, related that businesses did not appreciate the efficiencies to be gained from using e-mail. Nussbacher repeated in some detail an analogy that he had heard someone use when trying to explain to businesses why they should invest in Internet connectivity many years prior to our interview:

> In New York State, there's a bridge between Staten Island and New Jersey or between Brooklyn and Staten Island [. . .] Before the bridge was built people used to go by boats back and forth bringing merchandise [. . .] so when you go to the government [. . .] and you say "I want to build a bridge for $20,000,000," they'll say "Well look, look how much merchandise is going between these two points, it's not really worthwhile." But you then have to explain to them that once you have this bridge and it's five lanes in each direction, the amount of traffic that can start flowing is exponential and it will generate more merchandise and more trade.

Nussbacher and Shikmoni, and other Internet pioneers with whom I spoke, did not talk in the same utopian style as characterized the newspaper articles referred to above. Clearly, because they were trying to sell the Internet, they had to adopt a more practical tone than journalists needed to, yet even when talking about the Internet more generally, they did not adopt the kind of techno-utopianism that

appeared in the press. That is, they argued that the Internet could increase workplace efficiency and increase trade, but not that it would bring about a more peaceful world. Where there was talk of globalism, it was in the context of the global Jewish community.

What, then, was driving these people, who voluntarily gave up hours of their time to promote the Internet in Israel? Why were they so keen for the Internet to catch on in Israel? Did they associate any kind of social agenda with the Internet? By way of comparison, an article on McDonald's in Israel has shown how the exclusive franchise holder, Dr. Omri Padan, used McDonald's to advance certain ideological or political conceptions of his regarding how Israeli society should look (Illouz & John, 2003). For instance, he has not opened branches of the restaurant in the Occupied Territories and has waged bitter struggles against the Jewish religious establishment. Perhaps there is a similar pattern here. Given that the Internet is an American technology associated with globalization, it might be tempting to follow commentators on Israeli society, such as Shafir and Peled (2002) and Levy (2007), and see it as possessing some kind of natural affinity with the secular left wing in Israel. Rather than assume that, though, where Rob Kroes asks, "to what extent can we see the web as a carrier of cultural values and a mental habitus that are recognizably American?" (2003, p. 238), I ask to what extent the Internet pioneers in Israel saw it as such.

Nussbacher's thoughts regarding the social implications of the Internet are particularly interesting in this regard. "I try to view [computer] networking as being a neutral ground," he said, explaining why he had no ideological problem helping Palestinians in the West Bank to get online. He explained that the Internet in the Palestinian Authority was having difficulties dealing with its telecoms incumbent, PalTel, which was proving problematic to Palestinian Internet pioneers in a similar way that Bezeq, the Israeli telecoms monopoly, had been problematic to Israeli Internet pioneers, according to Nussbacher's reading of the situation. So while the Internet may not help bridge national and ethnic divides—Nussbacher was quite explicit on this, as I shall show presently—aiding its diffusion was important enough for him to meet with people from Beir Zeit University, for instance, and explain to them how Internet connectivity worked and could be best implemented in the territories under the control of the Palestinian Authority. His perception of the Internet as value-neutral, though, was best reflected in his comments on the effects of exposing children to cultural diversity via the Internet. While children may encounter other cultures by surfing the Internet, he rebuked my suggestion that we might see this as leading to pluralism or tolerance, as in the utopian visions of the Internet. "It doesn't mean you're tolerant," he explained, "it means that you're going to learn from them, [...] or learn not to do it their way."

The closest that any of the Internet pioneers came to talking about the Internet in the global terms noted above among the journalists was when Dov Winer (a specialist in the field of the Internet and education who was employed by the Inter-University Computing Center to explain to businesses in the private sector why they should hook up) talked about the possibility that the Internet could challenge what he saw as the insularity of Israeli identity (Winer himself is an immigrant to Israel from South America). However, even then, what Winer hoped would replace this insular identity was a global *Jewish* identity. One particularist identity was to be replaced by another.

From the way that the Internet pioneers talked about the Internet, it would not appear that they saw it as worth spreading because of the type of society that it entailed. Indeed, the Internet was not associated by my interviewees with a political agenda of any kind. So the question remains: if they did not see the Internet as desirable because of certain inherent traits or because they thought they could use it to further a social or political agenda, why did they take part in these struggles in the first place? Doron Shikmoni was able to articulate the motivation behind his involvement: he wanted people to hook up because "we thought it was a great thing and that it was very important and good that as many people as possible would be connected and involved with it." In other words, Shikmoni wanted people to get online, not because that would help reduce conflict in the world, for instance, but rather for its own sake. "You want a provocative analogy?" he asked me. "It's like converting people [...] and you want to be even bigger, and bigger, and bigger." That is, while Shikmoni tried to push the Internet by claiming that it made communications more efficient, in his own eyes the Internet was of value in and of itself. In this sense, his approach to the Internet was far more emotional than rational. In this light, Nussbacher's description of his own efforts to persuade "every single person you know [...] to put in routers, put in lines" as "evangelizing the Internet" takes on added meaning.

Rather than promoting the Internet because of the better society it is meant to bring about, it would quite clearly appear that the Internet pioneers in Israel are instead representative of a long tradition of linking technology with religion (Drees, 2009). Dinerstein (2006) traces this tradition from Lewis Mumford through James Carey to David Noble. For instance, he notes that Mumford (1934) described the American belief system as "mechano-idolatry" back in 1934, while Carey talked about "the language of futurology" in the United States as containing "an orientation of secular religiosity" (1989, p. 114). These are views, then, that compare people's attitudes to technology with those of religious people toward the object of their worship. This would seem quite an appropriate theorization of the Israeli Internet pioneers' actions, given their own use of religious terminology.

I further suggest that the work of Arnold Pacey (1983) can help us conceptualize the Internet pioneers' enthusiasm. Pacey cites a book by an American engineer, Samuel C. Florman, titled *The Existential Pleasures of Engineering*, who claims that, "[a]t the heart of engineering lies existential joy" (Florman, 1976, p. 101; cited in Pacey, 1983, p. 80). He also refers to John Kenneth Galbraith's talk of "technological virtuosity"; Herbert York's notion of "technological exuberance"; and Mary Douglas's description of what Pacey calls "the joy that comes through discovering and understanding how systems work" (Pacey, 1983, p. 81). That is, Pacey discusses what a technology means to the people who develop it—this is its "existential" aspect: "the fact remains that research, invention and design, like poetry and painting and other creative activities, tend to become compulsive. They take on purposes of their own, separate from economic or military goals" (Pacey, 1983, p. 82). Given that the Internet pioneers in Israel in the mid-1990s were not trying to make money from the spread of the Internet (while their livelihood was in some way contingent on the success of the Internet, this is not what was motivating them) or to bring about a better society—in other words, they do not appear to have been driven by economic goals or techno-utopian thought—religious and existential concepts would appear to be more useful in helping us understand their motivations.

ISP Owners

Having shown how the press adopted the genre of technological utopianism, and how Internet pioneers without an economic stake in the technology approached it from what may fruitfully be conceived of as an existential or religious angle, we turn now to the owners of Israel's first ISPs, a group that has not been paid attention by researchers. As with the previous two groups, here too I ask what values they associated with the Internet and whether they saw it as a force for social change.

Regarding the activities that the Internet enabled users to carry out, all interviewees agreed that the two most important uses of the Internet in the mid-1990s were e-mail and the retrieval of information. E-mail was championed over the use of fax machines as being faster and more efficient; while interviewees pointed to the large amounts of data accessible through the Internet. In particular, they related that if they themselves ever needed to find technical information or get technical assistance for the ISP companies they were setting up and running, they would find whatever they needed on the Internet. Some of them mentioned entertainment, but this was not particularly stressed; indeed, the use of the Internet for leisure was barely bought up. What is noticeable, then, is what they did *not* mention. They did not talk about new possibilities for working from home, for instance, or about possibilities for making friends around the world. In contrast to the press, their tone was mundane and practical.

I asked the ISP founders how they represented the Internet to potential customers. As mentioned, they all referred to e-mail and information. However, even though I asked quite specifically how they tried to attract customers back in the early days, notwithstanding the fact that most of the companies lacked the capital to embark on full-fledged advertising campaigns, none of the ISP founders talked in anything like the terms I encountered in press clippings from that period. My questions did not arouse memories of examples they had used in marketing materials, for instance. One interviewee even questioned the very need for marketing the Internet at all: He worked on the assumption that everyone would want to get online, and that anyone who could afford to, would hook up. All in all (and perhaps somewhat surprisingly, given that these are the people whose companies' raison d'être was to persuade people to pay money for an Internet connectivity package), it appeared that the issue of how to sell the Internet was not one that interested them very much at all. Alternatively, the benefits of the Internet may have been so obvious to them, so deeply taken for granted, that they found it hard to actually verbalize them. Either way, they appear not to have thought very hard about how to represent the Internet to potential customers.

Perhaps this is a function of the time that had elapsed between the period I was discussing with the interviewees (the mid-1990s) and the interviews themselves (the mid-2000s). The interviews I conducted with Internet pioneers, and their detailed recollections of how they tried to push the Internet, make that claim somewhat questionable. Indeed, comparing the vagueness of the ISP founders' recollections concerning their representations of the Internet with the lucidity of their memories about their relationships with the telecoms monopoly (Bezeq), for instance, suggests that there is no fundamental problem surrounding their remembering the period under discussion. Also, as mentioned above, it is significant that the ISP owners did not deploy the prevalent cultural scripts of utopianism or dystopianism, which is what one might expect were they to have no voice of their own. Given this, I argue

that these interviewees' comments reflect their state of mind at the time under study rather than merely testifying to forgetfulness.

In addition, I asked the ISP owners whether, in the early days of the Internet, they had given any thought to its possible influence on society. One interviewee replied quite bluntly: "Not at all. I was thinking about the money we'd earn. That's all." Another said, "There are people who think it's good, there are people who think it's bad. It's a matter of opinion." Others, however, were more willing to share their thoughts, but they tended to be quite vague and not indicative of particularly deep reflection on the matter. One ISP founder, for instance, suggested that the global nature of the Internet makes one more open and broadens one's horizons, but did not expand much on that. This point of view, undoubtedly aided by hindsight, is far from the vision of the borderless world that the Internet was seen by some as heralding.

The ISP owners, then, certainly did not talk in the technologically utopian style of the press. It is not that they thought that Internet would not bring about a better society; rather, they appear not to have thought about it at all. They appeared not to have really engaged in such issues at the time, and when prodded by me in interview, they seemed disinclined to explore them. The words of Ian Reinecke might apply here, if only partly:

> Those who know most about technology are in many cases the worst equipped to appreciate its implications for the lives of ordinary people. Consumed by technical and corporate objectives that become ends in themselves, they fail to see that their work may very often be contrary to the interests of their fellow citizens. (Reinecke, 1984, p. 243, cited in Kling, 1996, p. 33)

While Reinecke's tone here is clearly critical, which is probably not applicable to the owners of ISPs in Israel, it would appear that they were ill-equipped to assess the implications of the Internet "for the lives of ordinary people." Part of the reason for this may be that they were "consumed by technical and corporate objectives," but another part may be that they were simply not very interested. This would seem to be borne out by their answers to questions posed about how they used their free time: they spent it with their families; they enjoyed Hollywood movies from time to time; sometimes they might read some fiction; but they said nothing to indicate an interest in social issues. They read up on technological matters in books and magazines but not on matters of technology and society. They are blind to "the interests of their fellow citizens" not out of greed or sheer hard-nosed determination, but rather in the way that most people do not ask themselves how the work they do influences society. I offer a further explanation of this finding in the concluding section.

Discussion

In this article, I have presented and tried to account for the ways that three different groups of actors involved in the Israeli Internet in the mid-1990s represented and talked about this new technology. In this final section I shall place the three groups on a continuum that runs from the global to the local,

arguing that we understand the different groups' representations of the Internet in terms of their proximity to global discourses regarding technology in general and the Internet in particular.

Of the three groups discussed in this article, the press was the closest to the global discourses of technology and the Internet that were being produced in the American press. Writing about a technology that had come to Israel from the United States required Israel's technology journalists to be outward looking and to take as their reference point developments overseas, and especially in the United States. This can be seen in the articles about the Internet that were published during the period under study. Some were Hebrew translations of pieces originally published in the United States, indicating that Israeli editors felt that American analyses of this new technology were consumable as is by their Israeli readerships. Others were articles that explained to Israelis how the Internet enabled them to interact with the world beyond Israel's borders. The proximity of the press to global discourses is also related to how "computerization movements" are promoted and computing technologies diffused (Kling & Iacono, 1994). As briefly mentioned above, Kling and Iacono emphasize that "[t]he mass media has become a major promoter of the PC movement" (1994, p. 135), and that "[j]ournalists and news reporters [...] have become central to the mobilization of computing in general" (p. 126). This is a role that the Israeli press took upon itself in relation to the global technology of the Internet.

It is also relevant to the press's representations of the Internet that they were writing during the so-called Oslo years, when Israeli was undergoing an accelerated process of cultural and economic Americanization and "normalization." The early- and mid-1990s were years of economic growth and foreign investment (Shalev, 1999). This normalization also had a cultural side, as Israel experienced changes in patterns of consumption—shopping centers were opened all over the country, filled with more and more American shops (such as Pizza Hut, Ben and Jerry's ice cream, Burger King, Domino's Pizza, Toys 'R' Us; see especially Azaryahu, 1999; Ram, 2007). That is, if, according to the cultural approach to media studies, the media are a site for the negotiation of meaning between journalists and their audience (Carey, 1989; Schudson, 1989), with the latter representing the society in which they operate (Carey, 2000; see also Zandberg & Neiger, 2005), it is pertinent that Israeli society in general was occupied with questions of globalization at precisely the time that the Internet was being diffused there.

Next we turn to the Internet pioneers. Being heavily involved in the political and bureaucratic aspects of diffusing the Internet in Israel, in interview they showed high levels of awareness of similar procedures of the diffusion of the Internet in other countries. Nussbacher is an immigrant from the United States, where he had played a central part in installing BITNET (an academic network that began in 1981 by linking City University of New York's colleges and Yale University), and in interview he constantly compared the Israeli Internet with its American version. He has made similar points in interviews with the press, where he complained that Israel was lagging three years behind the United States in matters of Internet connectivity (Beller, 1994; as Iacono and Kling observe, "the most fervent advocates of computerization" tend to argue that "the actual pace of computerization in schools, offices, factories, and homes is too slow"; Iacono & Kling, 1996, p. 88). However, shown by as his abovementioned comment about how the Internet can teach us how *not* to behave like people from other cultures, Nussbacher's comparative perspective on the Internet does not imply the cultural versatility or tolerance of foreign cultures suggested by the concept of global habitus (Illouz & John, 2003) and a techno-utopian outlook.

Similarly, when Shikmoni talked to me about how quickly Israel set up a local chapter of the Internet Society relative to other countries outside the United States, he mentioned that this was a source of *national* pride and that it was meaningful for him that Israel should be a frontrunner in such matters. This could also be seen in the way that Nussbacher talked about the Internet in Israel:

Question: Was it important for you to see *Israel* make these technological advances?

Answer: Absolutely, I'm extremely Zionistic and therefore [. . .] it was very important for me to show that the country had technical excellence, which is what I believed all the time, and the fact that Israel is always [leading].

Question: So it's important that Israel should have good networks because . . .

Answer: Zionistic. Being able, I felt that it was an important aspect of the country, the same way that you have to have good water supply and electricity.

In other words, it was more important that the Internet in Israel be as advanced as possible, for the sake of national pride and to "show the world" that Israel was extremely advanced, than it was to link Israel up to the world, say, and expose its citizens to a range of other cultures, as suggested by the press articles presented previously (represented by Thai food or theater in New Zealand).[2] For these people, then, the Internet links in to concepts of national pride and international competition, not to mention insularity and a feeling of responsibility to defend Israel from its many enemies abroad. Indeed, Shikmoni said that he used to be known as "Mr. Usenet" and related that he spent hours online arguing about Israeli politics with "Israel-haters" in the United States and elsewhere. He also talked of the pride that he and others felt in the relatively advanced state of the Israeli Internet. Dov Winer, as mentioned above another of the Israeli Internet pioneers of the 1980s and 1990s, focused much of his energies on developing the Global Jewish Network Project. These activities are certainly not the manifestations of a global habitus or the expressions of being a "world citizen."

Beyond locating the pioneers at a remove from the global discourses of technology that were reproduced by the press, this explanation raises the question of why the pioneers should have spoken about the Internet in ethnocentric terms of national pride. First, is not uncommon to find ethnocentrism among Israelis, or among members of most national communities for that matter.[3] Secondly, and more specifically, one might venture that the very process of importing the Internet entailed making competitive comparisons with other countries, at least partly because the Internet was, and still is, very

---

[2] While a comparison with other media lies beyond the scope of this article, it is interesting to note that in public debates over the import of television, which came to Israel only in 1968, the prevailing argument was that the introduction of this American technology would harm Israeli efforts at nation building (see Oren, 2004; Soffer, 2008). Israeli pride in its technological capabilities emerged only later.

[3] Unfortunately, the lack of study of equivalent groups of Internet pioneers in other countries prevents a comparison between the Israeli pioneers' level of ethnocentrism and that of other countries' pioneers.

much organized in a Westphalian manner (John, 2011). That is, when evaluating the state of the Internet in Israel, which the pioneers did constantly, the natural point of comparison was other countries, and for a number of years it would appear that the Israeli Internet compared favorably with progress made elsewhere in the world.

Lastly, the Israeli ISP owners appear to be the most locally oriented of the three groups discussed in this article. To start, they did not feel themselves to be part of a global industry of Internet provision in any way. Although the Internet is the technology that has been most strongly associated with globalization over the last fifteen years, Israeli ISPs were run on an entirely local basis: there was no need to travel overseas; all customers were local; and equipment was bought from local representatives of foreign firms. Also, because at this time there was no competition in the international telephony market, they had no choice but to buy international bandwidth from Bezeq. In short, the companies were no more global than any other local service industry. Not only were they not required to move from one national context to another in the course of running their businesses, but they seemed quite indisposed to doing so, refraining from joining various multinational committees and forums, except on an ad hoc basis as and when they needed a specific piece of information. Furthermore, apart from one notable example (the ISP NetVision, including NetManage and Elronet, the companies from which it was formed), the ISP owners, nearly all of whom were engineers, openly admitted that they had hardly any formal knowledge of management and that they certainly did not model the management of their companies on management theories from the United States.

Indeed, in interview, most of the ISP owners described themselves as locally rather than globally oriented. For example, one had named his company "Canaan" as a conscious effort to resist the trend for using English words in place of Hebrew, while another said he was no more a "world citizen" than his car mechanic. Yet another defended his Israeli identity in strong terms, denying that his work in the ISP industry had made him "less Israeli" or that he was in any way a "world citizen." Finally, in the context of a discussion about whether the Internet opened Israel up to the world, another ISP owner stated that "anything that makes an Israeli less of an Israeli is bad, in my opinion."

This has implications for the way we conceive of the interface between globalization and technological diffusion. In particular, the closer we get to the people who were actually providing the Internet to people's houses and offices, the further we seem to get from global, technologically determinist, and utopian discourses. There is no doubt that the techno-utopian discourse that was so characteristic of the Internet industries in the United States in the 1990s was imported to Israel along with Internet technologies themselves; however, while the press rapidly adopted that discourse, the people who were actually providing access to those technologies—the computer engineers who set up Israel's first ISPs—hardly spoke about the relationship between Internet and society at all. While commentators wrote excitedly about how the Internet opened up Israel to the world, the individuals who owned the companies that made this possible remained extremely locally oriented.

The spread of the Internet around the world has been a material, infrastructural, and political process. This article has shown that it was also a discursive process. Furthermore, though, this article has demonstrated that the two need not go together, or at least are not borne by the same agents. In

particular, we have seen here how the people most involved in the material diffusion of the Internet quite markedly set themselves apart from the discursive aspects of the process (recall the interviewee who said, "There are people who think it's good, there are people who think it's bad. It's a matter of opinion.")

In sum, it would appear that the closer they were to the actual provision of the Internet to people's houses in Israel of the mid-1990s, the further the actors referred to here were from the global discourse of technological utopianism.

◊◊◊

Nicholas A. John is a Lady Davis Postdoctoral Fellow at the Noah Mozes Department of Communication and Journalism, The Hebrew University of Jerusalem, Israel.

Appendix 1
Sample Interview Protocol for ISP Owner

The following is a sample interview protocol for an ISP owner. The protocol for interviews with Internet pioneers is very similar, though instead of asking how the interviewee "got into the ISP business," for instance, I ask how he or she got into computing. Note that because the interviews were conducted as discussions, not every interviewee was asked every question on the interview sheet, which served more as a guideline than as a hard and fast set of questions.

1. Tell me how you got into the ISP business.
    a. What training do you have (including in the army)?
    b. What courses have you taken? Degree?
    c. Have you studied overseas? Have you lived overseas?
    d. Is it important that your employees have studied overseas, or speak English?

2. What motivated you to do business in this area? What attracted you to the Internet?
    a. Was it pure business opportunity?
    b. Are there characteristics of the Internet that made it seem particularly interesting to you? What?

3. Tell me a few things about how you run your business.
    a. What language do you run it in?
    b. Do you have knowledge about American business culture? About American management?
    c. Do those things affect the way you manage your company?
    d. Do you travel a lot for business?
    e. How do you account for your success while other companies have failed?

4. In order to set up an ISP you need a lot of technical knowledge.
    a. What knowledge did you have?
    b. Where did you get it?
    c. Was it widely available in Israel at the time? And now?

5. Do you keep yourself up to date about developments in knowledge in the field?
    a. How? Do you read? What?
    b. Do you go to conferences? Where?
    c. Where is this knowledge based?
    d. How does it get to Israel? Through people who have studied? Written material?

6. How did you market your product? How did you sell the Internet?
    a. Imagine we are in 1993–1995. How would you explain the Internet to me, and how would you try and convince me to get hooked up? What was the added value?

    b.   What kinds of things did you tell people they would be able to do?

    c.   Did you aim at a certain population?

    d.   Who did you think would sign up?

    e.   Do you know who did sign up? Men? Jews? Educated people?

    f.   How did you present your company? What kind of image did you try to portray then? And today?

7.   Did you think it would interest Israelis? Why or why not?

    a.   What about it did you think would be particularly attractive to Israelis?

    b.   Why do you think people signed up?

    c.   What do you think people were doing with the Internet in 1995?

8.   How has the Internet affected Israeli society, in your opinion?

    a.   Does it make Israel less Israeli? More American?

    b.   Does it make Israelis less Israeli? Does it compete with Israeli culture?

    c.   Then and now?

    d.   If so, or if not, is this bad? Good? Indifferent?

    e.   Has it made Israel more open? Israelis more open to the world? Or not? Is this good in your opinion?

9.   You work in a global industry.

    a.   Has your identity changed through working in this field? Do you feel Israeli? Has your work in the internet changed your feeling of belonging to Israel?

    b.   Do you feel you are a "world citizen"?

    c.   Are you more a member of a local community of Internet people? Or part of a global community?

    d.   Do you know other ISP providers around the world?

    e.   Does your knowledge make you feel closer to other people doing a similar job around the world?

    f.   Is there a global community of Internet industry people? Are you a member of it?

    g.   Could you move to America, or Europe, of Japan, and manage an ISP there? Or are there Israeli aspects to you or your company that would make that hard?

10. When you were setting up you ISP, there were a number of other companies setting themselves up as well.

    a.   Did you know each other at the time?

    b.   Did you know each other beforehand?

    c.   Did you feel you had shared aims? Or were you simply business competitors?

    d.   Did you ever meet up? Were there issues you worked on together?

    e.   Are you in touch with any of those people today?

    f.   Other people in ISPs in Israel today?

    g.   What was the feeling like to be working in the field of the Internet in 1993–1994?

11. Can you describe the industry in Israel today?
    a. What distinguishes the industry in Israel vis-à-vis other countries? Are there differences? Or is it the same all over the world?
    b. What is particularly Israeli about it?
    c. Who are the people running other ISPs today? Does anything characterize them? Where did they gain their knowledge?
    d. Could you today go to any other country in the world and set up a similar company?

12. Personal background:
    a. Where did you grow up? Go to school? Serve in the army?
    b. Parents' occupations? Siblings?
    c. Religious? Political leanings? At home and yours today?
    d. Income?
    e. What do you do with your free time?
        i. Last book?
        ii. Last film?
        iii. Traveling?

References

Altheide, D. L., & Johnson, J. M. (1994). Criteria for assessing interpretive validity in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 485–499). Thousand Oaks, CA: SAGE Publications.

Azaryahu, M. (1999). McDonald's or Golani Junction? A case of a contested place in Israel. *Professional Geographer, 51*(4), 481–492.

Beller, R. (1994, July 21). [Crawling on the information superhighway.] *Haaretz,* p. B4.

Benholm, D. (1995, May 28). [The cyber jungle.] *Haaretz,* p. B1.

Berger, W. (1994, June 10). [Freedom or entrapment.] *Haaretz,* p. B6.

Blizovsky, A. (1994a, September 16). [Yuvik announces "virtual places" for creating Internet-based services.] *Haaretz,* p. C3.

Blizovsky, A. (1994b, November 16). [On the information superhighway.] *Haaretz,* p. 13.

Blizovsky, A. (1994c, November 23). [Electronic mall on Internet.] *Haaretz,* p. C15.

Blizovsky, A. (1994d, November 30). [New information service: Infonet, graphic interface for databases and files.] *Haaretz,* p. C15.

Carey, J. W. (1989). *Communication as culture: Essays on media and society*. Boston: Unwin Hyman.

Carey, J. W. (2000). Some personal notes on US journalism education. *Journalism, 1*(1), 12–23.

Corbin, J. M., & Strauss, A. L. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Los Angeles, CA: Sage Publications, Inc.

Denzin, N. K. (1989). *The research act: A theoretical introduction to sociological methods* (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.

Dinerstein, J. (2006). Technology and its discontents: On the verge of the posthuman. *American Quarterly 58*(3), 569–595.

Drees, W. B. (2009). *Technology, trust, and religion: Roles of religions in controversies on ecology and the modification of life*. Leiden, The Netherlands: Leiden University Press.

Flichy, P. (2007). *The Internet imaginaire*. Cambridge, MA: MIT Press.

Florman, S. C. (1976). *The existential pleasures of engineering*. New York, NY: St. Martin's Press.

Fontana, A., & Frey, J. H. (1994). The interview: From structured questions to negotiated text. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 645–672). Thousand Oaks, CA: SAGE Publications.

Frankel, F. (1994, June 10). [You'll no longer meet in the supermarket.] *Haaretz,* p. B6.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine Publishing Co.

Goldman, D. (1991, August 8). [Let the computer connect you to the world.] *Yedioth Ahronoth,* pp. 30–31.

Goldman, D. (1995, March 10). [The new world.] *Yedioth Ahronoth,* pp. 40–46.

Gordon, D. (1995a, January 29). [What actually is Internet?] *Maariv,* pp. 16–17.

Gordon, D. (1995b, February 24). [If you are not there, you don't exist.] *Maariv,* pp. 20–21.

Hoffman, A. (1996). Reliability and validity in oral history. In D. K. Dunaway & W. K. Baum (Eds.), *Oral history: An interdisciplinary anthology* (2nd ed., pp. 88–106). Walnut Creek, CA: AltaMira Press.

Iacono, S., & Kling, R. (1996). Computerization movements and tales of technological utopianism. In R. Kling (Ed.), *Computerization and controversy: Value conflicts and social choices* (2nd ed., pp. 85–105). San Diego, CA: Academic Press.

Illouz, E., & John, N. (2003). Global habitus, local stratification and symbolic struggles over identity: The case of McDonald's Israel. *American Behavioral Scientist, 47*(2), 201–229.

John, N. A. (2011). The diffusion of the Internet to Israel: The first ten years. *Israel Affairs, 17*(3), 327–340.

Kantrowitz, B., & Rogers, A. (1994, August 17). [The parents of the Internet.] *Haaretz,* p. C 6.

Katz-Kimchi, M. (2007). *The rise of the Internet in America: Myths, metaphors and discourses (1990–2000).* Ph.D. dissertation, Bar Ilan University, Ramat Gan, Israel.

Kirk, J., & Miller, M. L. (1986). *Reliability and validity in qualitative research (Vol. 1)*. Thousand Oaks, CA: SAGE Publications, Inc.

Kling, R. (1996). Hopes and horrors: Technological utopianism and anti-utopianism in narratives of computerization. In R. Kling (Ed.), *Computerization and controversy: Value conflicts and social choices* (2nd ed., pp. 40–58). San Diego, CA: Academic Press.

Kling, R., & Iacono, S. (1994). Computerization movements and the mobilization of support for computerization. In S. L. Star (Ed.), *Ecologies of knowledge: Work and politics in science and technology* (pp. 119–153). Albany, NY: State University of New York Press..

Kling, R., & Lamb, R. (1996). Analyzing alternate visions of electronic publishing and digital libraries. In R. P. Peek & G. B. Newby (Eds.), *Scholarly publishing: The electronic frontier* (pp. 17–54). Cambridge, MA: MIT Press.

Koren, Y. (1995, June 12). [Fell in the Net.] *Yedioth Ahronoth,* pp. 10–11.

Kroes, R. (2003). The Internet: An instrument of Americanization? In U. Beck, N. Sznaider, & R. Winter (Eds.), *Global America? The cultural consequences of globalization* (pp. 235–253). Liverpool, UK: Liverpool University Press.

Levy, Y. (2007). *Israel's materialist militarism*. Lanham, MD: Lexington books.

Maxwell, J. A. (1992). Understanding and validity in qualitative research. *Harvard Educational Review, 62*(3), 279–301.

McGarret, P. (1994, June 10). [The electronic future is already here.] *Haaretz,* p. B6.

Mumford, L. (1934). *Technics and civilization*. New York, NY: Harcourt.

Negroponte, N. (1995). *Being digital* (1st ed.). New York, NY: Knopf.

Oren, T. G. (2004). *Demon in the box*: New Brunswick, NJ: Rutgers University Press.

Pacey, A. (1983). *The culture of technology* (1st MIT Press ed.). Cambridge, MA: MIT Press.

Ram, U. (2007). *The globalization of Israel: McWorld in Tel Aviv, jihad in Jerusalem*. New York, NY: Routledge.

Reinecke, I. (1984). *Electronic illusions: A skeptic's view of our high tech future*. New York, NY: Penguin.

Schudson, M. (1989). How culture works. *Theory and Society, 18*(2), 153–180.

Segal, H. P. (1985). *Technological utopianism in American culture*. Chicago, IL: University of Chicago Press.

Shafir, G., & Peled, Y. (2002). *Being Israeli: The dynamics of multiple citizenship*. New York, NY: Cambridge University Press.

Shalev, M. (1999). Have globalization and liberalization "normalized" Israel's political economy? *Israel Affairs, 5*(2–3), 121–155.

Smith, M. R. (1994). Technological determinism in American culture. In M. R. Smith & L. Marx (Eds.), *Does technology drive history? The dilemma of technological determinism* (pp. 1–36). Cambridge, MA: MIT Press.

Soffer, O. (2008). The eraser and the anti-eraser: The battle over colour television in Israel. *Media, Culture & Society, 30*(6), 759.

Whittemore, R., Chase, S. K., & Mandle, C. L. (2001). Validity in qualitative research. *Qualitative Health Research, 11*(4), 522–537.

Zandberg, E., & Neiger, M. (2005). Between the nation and the profession: Journalists as members of contradicting communities. *Media, Culture & Society, 27*(1), 131–141.