Putting the TV Back in Television Studies Doron Galili

Questions of technological change and innovation concern scholarly debates in the field most typically with respect to current developments or to speculations about the future of the medium and its audiences. What I would like to suggest in this discussion is that a more thorough engagement with the early technological history of television may prove relevant for contemporary discussion of media obsolescence and convergence. Today, scholarly discussion and public debates alike are concerned with the impression that the very nature of television is undergoing a transformation due to the introduction of digital technologies that have opened new possibilities for television production, dissemination, and spectatorship. These transformations seem to challenge our sense of television's medium-specific traits and traditional cultural function as they mark a break from a wide array of practices, conventions, and reception patters familiar from the broadcast era, the long-standing dominant mode of television since it emerged as a mass medium.

Canonical humanistic television studies has provided an ultimately limited historical scope for considerations of current media change. Focusing on issues of popular culture and mass media effects, they deal primarily with historiographies of programs, genres, and institutions; therefore, most television studies scholarship is concerned less with the periods during which television itself was a new medium, an emergent technology that (not unlike today) differed from broadcast-era television. What I wish to propose here is that technological histories of television are valuable for contemporary debates on media change because they offer us a consideration of television along a significantly longer timeline, one that includes the periods that preceded television's deployment as a mass medium in public broadcasts.

Consider, for instance, the earliest period in the history of television. The initial ideas regarding devices for electric audiovisual transmission across distances appeared in the late 1870s and early 1880s. Practical television, of course, had not been realized until the mid-1920s, when the first working models of moving image transmission technologies were publicly demonstrated. However, in late nineteenth century writings on image transmission devices by technicians and popular commentators one can find not only the very first proposal of technological schemes for television, but also the formation of the televisual "technological imaginary" (an unrealized conception of the design and use of a technology which becomes, in turn, one of the crucial resources available for inventors). Tracing the nineteenth century technological imaginary of television reveals what were the desires and intentions that television's initial material development aimed at fulfilling. As historiographies of television technology make clear, in the late nineteenth century, the slowly emerging moving image transmission devices were not conceived (yet) as autonomous media. Rather, they were considered as extensions of telegraphy or as visual auxiliaries for telephone systems, not unlike how new televisual systems are products of convergence with personal computers, mobile devices, and the World Wide Web.

Time and again, nineteenth century technicians stress in their writing that television was conceived as closely related to modern electric network technologies. The technicians

point out that the inspiration for fabricating image transmission apparatus comes from the introduction of the telephone, at times referring to the emerging visual medium as an instrument for "seeing by telegraphy." It is importantly to remember, however, that the notion of "network" in the technological and cultural context of the telegraphy and telephony is radically distinct from today's notions of television networks, where a few central broadcasters operate a chain of transmitters. The late nineteenth century networks of telegraph and telephone were global coordinated systems consisting of a myriad of communication lines, linked to one another and to a potentially infinite number of points, and thus represents a particularly modern decentralized social, spatial and temporal organization. Given this, the public launching of television as a broadcast medium in the 1940s, in fact, marks a break from the manner in which the media technology was initially imagined and designed. Conceiving of television along the lines of associated early electric media like the telegraph and the telephone, the first commentators on the prospects of television media (up until the first decade of the twentieth century) considered it primarily as a medium for two-way, point to point long distance transmissions that are not necessarily operated or administrated by the media industry professional. This way, the most prominent of the uses imagined for television in the early period of its emergence in fact anticipated much later televisual applications, including video-conferencing, visual surveillance, and even on-demand viewing of stage performances and news events, often across national borders.

To be sure, by pointing out at the lessons of the early technological history of television I do not intend to suggest that the post-broadcast era brings us full circle to the origins of television, nor that global web applications neatly bookend the history television. I rather wish to claim that by considering the technological schemes and social practices that informed the initial emergence of television, we might have a broader perspective from which to examine critically and in historical specific terms today's dynamic shifts in the modern mediascape. As we know well, technological innovations emerge in response to particular cultural needs, desires, imaginations and possibilities; as such, they are never socially and ideologically neutral. The various technological changes in the history of television (conceived broadly since the 1870s) thus correspond in particular ways to distinct historical situations. One may, therefore, claim that the late nineteenth century emergence of the idea of moving image transmission technology is strongly bound to contemporaneous social and cultural processes such as the rise of industrial capitalism, territorial expansion of markets and transportation networks, changes in the conception of time, the utopian reception of electric technologies, and the rise of techniques of management and social control. The nineteenth century socio-cultural context is thus quite distinct from both that of the rise of broadcast television in the 1940s, which was typified by post-War economy, culture of consumption, suburbanization, mass media, and pursue of "mobile privatization," and from that of the postmodern/information-age, within which post-broadcast, digital, online television devices and practices have emerged.

It is through such considerations of television as a continuously shifting technology, with origins in the nineteenth century and an ongoing series of alternations in its material basis and cultural function that we may better address the challenges that the break from the

broadcast model poses to us today. By drawing on the "archaeology" of television as it is recorded in available technological histories while informing them with humanistic-based scholarship on the historical and cultural contexts, on intermedial relationships, and on social construction of technologies, we may not only re-define the historical scope of research on television, but indeed define anew our very object of study. Rather than consider television as an object with certain given technological and cultural medium-specific traits that are currently becoming obsolete and replaced by newer media, we may benefit from thinking more broadly about transformations in image transmission technologies and the various historical-specific social and cultural functions they have fulfilled throughout a larger, ongoing, historical sweep. While I am not suggesting that by considering television alongside its "pre-history" and "post-history" manifestations we would gain access to a certain truth about its essential nature, I think such pursuits may allow us to continue asking productive questions regarding the medium.