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June - July 2005
Live digital LAPD radio was scanned, decoded, and rebroadcast on AM 1710, near its original 1931 frequency from Slauson and Western, one of the neighborhoods damaged in the 1992 LA riots.

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The Central Dispatch Center, or CDC, goes online as one of the world's most sophisticated non-military control centers. With 62 networked computer consoles, each designed specifically to share and distribute information to and from mobile units across the city.

1981-1982
Individual officers get their own personal two way radios, now made affordable through technological advances. Previously, only police cars carried two way devices. Now every officer in the city at any moment had access to give or receive information to the central LAPD control.

1950-1980
Throughout the next three decades, LAPD radio continued to grow in efficiency and sophistication to handle a rapidly growing population. However, its accessibility and means of distribution remained basically unchanged.

1947
The LAPD changes to a FM frequency. Although this station was not received by regular radios, the equipment was common and affordable. Also, the number of trained radio operators having just returned from WWII and the popularity of amateur radio in the wartime generation kept the LAPD radio spectatorship readily available.

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Aware of the wide listening audience, the LAPD publishes emergency codes related to acts of war and encourages amateur listening as a patriotic act of national defense. At the time, the transmitter was strong enough to be heard across the nation, on the east coast and Hawaii. In 1945, the LAPD received complaints from the Aleutian islands off Alaska for interrupting their local programming.

1935
LAPD police cars get their own transmitters so they can talk back to the station. Radio has taken off as a popular form of Depression-era entertainment. LAPD radio was one of the most popular, even turning radio operator Sgt. Jesse Rosenquist into a celebrity who later became a voiceover artist in Hollywood police radio simulations.

1931
LAPD gets one of the first police radio transmitters to contact patrol cars. The original frequency, AM 1712, was just at the end of the AM dial, so most home radios could listen to the police communication just by turning the dial all the way to the right.

Jeff Cain, *Radio LAPD: 70 Years of Public Work*, 2005, detail, diagram with time line and map, 36 x 36 in. (91.4 x 91.4 cm) (artwork © Jeff Cain)

Radio LAPD: 70 Years of Public Work

Jeff Cain

The exhibition and presentation of *Radio LAPD: 70 Years of Public Work* for *The Look of Law* was a nonsite installation of a project developed for the *Supersonic* exhibition at the LA Design Center in South Central Los Angeles in 2005. The original intervention was a technological rearrangement of the Los Angeles Police Department's radio communication system. The installation intercepted and decoded the live LAPD radio from the currently encoded digital radio frequency (implemented in 2001) and rebroadcast the content to the gallery and the immediate surrounding neighborhood on the LAPD's original 1931 AM radio frequency. To help viewers contextualize the intervention, a brief history of the LAPD radio was presented in a diagram in the gallery, and a regular AM receiver played the rebroadcast in the gallery.

The installation is a physically and visually unassuming arrangement of two clusters of electronic equipment separated by a thirty-six-inch-square diagram of a timeline of the LAPD radio system overlaying a Los Angeles city map. The pedestal on the right contains all the equipment needed to receive and retransmit the LAPD signal. On the left, a single AM radio plays the live AM rebroadcast.

As one enters the gallery, the sound is immediately audible although not comprehensible; the repetitive chatter of voices intercut with static and occasional electronic tones cuts cleanly through a room, even at low volume. Directly in front of the installation the sound is more intelligible, and one can hear a real-time, indexical mapping of conflict and control within the city that the viewer can visualize on the map. As it is difficult to comprehend the written text and the live audio simultaneously, the installation is designed so the viewer can slip from one form of information to the other: listening to reading, current to past, moment to context.

The impetus for the project came from investigating the physical context around the LA Design Center, which is located near the intersection of Western and Slauson avenues in South Central Los Angeles. After the Los Angeles Riots of 1992, sparked by the acquittal of four white LAPD officers who had been videotaped brutally accosting a black man, Rodney King, "only 4.2% of the [655] buildings in the Project Area were in sound condition, whereas 95.8% of the buildings required some measure of repair."¹ More than fifteen years after the riots the neighborhood now contains the new LA Design Center, as well as other recently completed projects at Slauson and Western, including a shopping center with a Home Depot and a Starbucks. With this redevelopment, the riots have been erased from the drive-by business landscape.

While investigating the security of these new businesses with an old radio scanner, I discovered that I could no longer find the LAPD on the radio. Like the local architectural amnesia about the 1992 uprising, the police department whose brutality and acquittal ignited the rioting had also "disappeared" because of redevelopment. My easy-to-use thirty-dollar scanner could find only an unintelligible string of garbled electronic tones. To decode this, I would have to acquire a five-hundred-dollar scanner, an additional hundred-dollar chip for decoding the signal, a hundred-dollar antenna, and a personal computer—and face a hefty learning curve.

This double absence brought me to a historical investigation that mirrored my technological attempts to find the absent police signal. I began to uncover

1. Community Redevelopment Agency of the City of Los Angeles. "Conditions at the Time of Adoption," available online at www.crla.org/internet-site/Projects/Western_Slauson/about.cfm.

connections among the local neighborhood, the riots, the once radically accessible police, and the increasingly objectified public—all evoked through the evolution of the legal and technological architecture of the LAPD radio. The summarized history is retold on the diagram:

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June 25–July 16, 2005

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The text, decidedly concise to provoke interpretation and investigation in the viewer instead of serving as a comprehensive explanation, tells only part of the story.

When the transition was made from analogue to digital, there was very little press about or discussion of the matter. The most concerned public discourse came from the amateur-radio community, such as in the pages of *Police Call* magazine and on the webpage of amateur radio enthusiast Harry Marnell.² This group of technologically savvy, predominantly working-class, elderly men, many of whom were retired police officers themselves, widely disliked the community implications of the 2001 format change. The digital format shift was not just a quantifiable loss in listening audience; the shift in technology also formalized a lack of public transparency on the part of the police. The question centers on the right to listen, and the right of the people of a city to “watch the watchers.”

In this case, the new technological structure created a public silence; its implementation bypassed legal and bureaucratic processes as well as informed public approval or acknowledgement. The bond issue passed in the wake of the riots to fund the new LAPD radio mentioned nothing of public accessibility. The laws that regulate the accessibility of police communication permit amateur listening and only prohibit use for ambulance-chasing and “divulging” of information to aid in committing a crime or helping a criminal escape.³ These laws have not changed since the 1930s and they have almost never been enforced.⁴

Before the radio system was implemented in 1931, officers used call boxes placed throughout the city. Police had to call in to the main station once an hour to contact headquarters. An officer’s immediate knowledge was essentially limited to his own corporeal vision. Citizen participation in observation was necessary for crime identification and resolution, because the public was the technology of observation. When radio first began in Los Angeles, citizen cooperation was still a firm value—enough for the LAPD to knowingly broadcast to every home and car with an AM radio.

Like almost all organizational systems that require active participation and communication, growing too large becomes an impediment to flexible discourse; ultimately, policies and technology automate communication. When police officers left off walking the neighborhood beat and entered the patrol car, the public became filtered through a windshield and a data-based network of information shared through computers and radio communication. The public was decreasingly part of the observational technology and increasingly became solely the subject of it.

From the LAPD’s standpoint, the public’s access to police information is a vestigial organ left over from the era of more technologically cooperative neighborhood policing. But for the public, it is that evolutionary remnant that checks the power of the police and holds a police department accountable to the people it protects and serves.

All of these ideas lay hidden under the intersection of Slauson and Western, the location of a seemingly banal and ubiquitous shopping center in South Central Los Angeles, once laid waste by rioting in response to videotaped witnessing of police brutality. As an artwork, *Radio LAPD* is designed both to reveal and intervene in the unseen history of civil unrest and police infrastructure and to open up new speculative possibilities within an overwhelming technological and political system.

The project is still evolving. I am currently pursuing support for the historical information and radio rebroadcast to become a proposed exhibition at the

2. *Police Call* was an independent publication started in 1964 by the Los Angeles radio enthusiast Gene Hughes. Initially focused on Los Angeles Police Department radio, it eventually documented communication systems across the country. The final paper issue was published in 2005. Marnell’s website is at <http://harrymarnell.com>

3. Los Angeles Municipal Code 52.46; Federal Communications Act of 1934.

4. From e-mail on April 7, 2005, to Jeff Cain from Harry Marnell, former police radio operator and now police-radio historian and enthusiast. “In 40+ years on both sides of police radios, I’ve only heard of one instance of anyone being arrested for either [law] (and that was the County ordinance, out in Temple City years ago), and that charge was dropped before ever going to court.”

Jeff Cain, detail of a photographic proposal to reinstall a police call box at the recently redeveloped intersection of Western and Slauson avenues, Los Angeles, 2005, digital photograph (photograph © Jeff Cain)



Los Angeles Police Historical Society Museum and also for a proposed documentary video, featuring interviews with the retired police officers and radio hobbyists whose guidance made the first stage of the project possible. As the projects require cooperation from both inside and outside the police community, it is important to clarify my artistic intention. While undoubtedly this project makes a firm critique of opaque police practices, my interest is less in using art as a form of criticism, and more in having the project operate within a practical discourse about using technology to facilitate open and transparent police practices.

Jeff Cain is an artist whose projects in new media, sculpture, and performance have been presented internationally by venues including the Getty Research Institute, the Los Angeles County Museum of Art, and the Center for Contemporary Art in Kiev. He is currently on staff at the University of Southern California Roski School of Fine Arts and is the 2007–8 artist-in-residence at the Center for Integrated Media at the California Institute of the Arts.



Jeff Cain, *Radio LAPD: 70 Years of Public Work*, 2005, installation with AM radio, diagram with time line and map, equipment to receive, decode, and rebroadcast digital police radio signal, installation view, *The Look of Law*, University Art Gallery, University of California, Irvine, 2006 (artwork © Jeff Cain; photograph by Kristine Thompson, provided by University Art Gallery, UC Irvine)

Technology gives the message a source, provides a channel, potentially a dominant channel, a means for producing feedback and ambiguity, and a mechanical form. . . . [Police] organizations view technology as a cause of message production, a source of control over work, and a symbol of formal authority and supervision and indirectly of citizen control. . . . As the message moves from one subsystem to the next, the aim changes from defining, organizing, filtering, classifying, and judging the credibility of the call and the caller to ordering the message as a police message governed by subcultural principles to an occasion for individual independent entrepreneurial action and the performance of variable physical, clerical, and interpersonal tasks. The matter at hand becomes organized and organizational rather than human and personal.⁷

Cain's work is specifically concerned with the impact of the adoption of digital transmission on the venerable public practice of monitoring police radio

7. *Ibid.*, 244.

transmission for fun, excitement, and possibly civic duty. The awareness that citizens were monitoring police bands not only forced police to be careful about what was said over the radio but also provided a form of informal civilian oversight, to complement the many forms of formal oversight which—especially in Los Angeles—have now been imposed on the police. Of course, the Rodney King beating and its aftermath have been the most visible manifestation of this. The pursuit and beating of King were aired on LAPD radio, though it was the silent video that was most crucial to construction and deconstruction of that event.⁸ As Cain notes, the King beating was a key factor in facilitating the LAPD switch to digital radio.

This quasi-public function of radio, Cain shows, is rendered obsolete by digital transmission. In an age of increasing surveillance, the police are increasingly seen as agents of a panoptic state.⁹ But, as some scholars have noted, much of the contemporary discourse about surveillance tends to forget a crucial aspect of Jeremy Bentham's original panopticon: civilian monitoring of the state.¹⁰ Architecturally, this was embodied in the social configuration of the notorious observation tower at the center of the panopticon, for in addition to serving as a post from which to observe the inmates, the tower was supposed to be open to the public, available at all times for the public to enter and observe what was being done by the state in its name. Bentham's vision, therefore, was not merely one of the state watching the citizenry, but rather one of total transparency, in which state and citizenry alike were disciplined through the awareness of monitoring and watching.

Recently, this notion has been revived by the physicist and science-fiction writer David Brin, who has argued cogently, if perhaps not entirely persuasively, that neo-Luddite resistance to the technology of surveillance is destined for failure and that such efforts will only facilitate the monopolization of surveillance technology by the state (and perhaps also, we might add, by corporations). Instead, Brin proposes that we embrace both surveillance technology and the principle of total transparency. As his prime illustration of what he means, Brin uses the police. In exchange for allowing the police to continue and extend various surveillance projects (such as installing closed-circuit television [CCTV] cameras), the citizenry should demand equal powers of surveillance: full coverage CCTV cameras in police stations (which are, after all, public institutions) wired to the internet, essentially police-cams that any citizen can view at any time, generating a quasi-utopian future based on what Brin calls "mutually assured surveillance."¹¹ This proposal has already come to fruition in some sense through policing reality shows and such phenomena as the now-discontinued "jail cam."¹² But such novelty uses are less than what Brin envisioned.

Another science-fiction writer, Neal Stephenson (author of *Snow Crash* and *Cryptonomicon*), has explored a similar notion with his proposal for a "global neighborhood watch," in which communities on opposite sides of the globe would monitor one another using web cams.¹³ The notion of watching the police is, of course, far from new, from Juvenal's famous aphorism "who watches the watchers?" to the modern reality-television show *Cops* and its imitators.¹⁴ Copwatching is practiced by vast numbers of interested citizens and also by a small cadre of ethnographer-criminologist researchers.

Cain's crucial insight is to conceive of the police not merely as consumers of radio technology, but as producers of radio content, content which, through the shift

8. See Charles Goodwin, "Professional Vision," *American Anthropologist* 96 (1994); and Avital Ronell, "Video/Television/Rodney King: Twelve Steps beyond the Pleasure Principle," *Differences: A Journal of Feminist Critical Studies* 4, no. 2 (1992).

9. See Michel Foucault, *Discipline and Punish: The Birth of the Prison* (New York: Vintage, 1979).

10. See Benjamin Goold, "Public Area Surveillance and Police Work: The Impact of CCTV on Police Behavior and Autonomy," *Surveillance and Society* 1, no. 2 (2003); and Janet Semple, *Bentham's Prison: A Study of the Panopticon Penitentiary* (Oxford: Clarendon, 1993).

11. On CCTV, see Benjamin J. Goold, *CCTV and Policing: Public Area Surveillance and Police Practices in Britain* (Oxford: Oxford University Press, 2004); Clive Norris and Gary Armstrong, *The Maximum Surveillance Society: The Rise of CCTV* (Oxford: Berg, 1999); and David Brin, *The Transparent Society* (Reading, MA: Perseus, 1998).

12. Formerly available online at www.tnacso.net/cont/jailcam.shtml.

13. Neal Stephenson, "Global Neighborhood Watch," *Wired* 1998, available online at www.wired.com/wired/scenarios/global.html.

14. Mariana Valverde, *Law and Order: Images, Meanings, Myths* (Abingdon, UK: Routledge, 2006), pp. 102-7.

from analogue to digital, is being taken off the public airwaves. The limitation of access is, of course, a political decision, not a technical one. Nothing about digitization inherently demands decreasing accessibility of police-radio traffic. Indeed, the opposite could quite easily be true; digitization could broaden access beyond the rather narrow band of ham radio and police-scanner enthusiasts.

This notion of the police as radio content producers was explored in another police-radio project by the British artist Nick Crowe.¹⁵ In Crowe's 2006 project *Police Radio*, police drivers of patrol cars function as DJs, introducing their favorite tunes between recorded discourses with an ethnographer (Crowe) who rides with them and conducts unstructured interviews about the nature of police work and other topics—a sort of elaborately documented “ride-along.”¹⁶ The resulting broadcast, which alternates recorded music and recorded interviews, is available on the internet in the form of single, continuous, twenty-four-hour looping “transmission” (where one breaks into the broadcast depends on the time of day). This “broadcast” time, moreover, corresponds roughly to the time at which the interview (and music selections) were made: thus, at two in the morning, one hears an interview that was made around two in the morning. As Crowe notes, this element produces an atmosphere oddly reminiscent of traditional broadcast radio: the graveyard-shift transmissions are slow and languorous, the early morning ones bright and infused with adrenaline. This temporal dimension also reflects Stephenson's *Global Neighborhood Watch*, in which “awake” communities watch while their antipodal counterparts slumber. Crowe's project, like Cain's, originated in Southern California with the LAPD. We learn from Crowe, “Some of my first experiences of web streaming were the live scanner relays of LAPD (Los Angeles Police Department) control broadcasts being picked up in California and sent out over the early internet. I clearly remember the frisson of trespass, the sense that one could use the internet to listen in on police car radio and the implicit promise of some access into the private world of the cop.”¹⁷

Whereas Crowe's *Police Radio* is highly stylized—produced—Cain's project valorizes authenticity; he wants to provide the public with direct access to real-time communications. The interesting question is whether the public distinguishes between the two. As digital transmissions, Cain's *Radio LAPD* is at once more accessible than analogue information and more fungible; as the comparison with Crowe's project implies, it could as easily be an artist's fabrication as an authentic decryption of LAPD digital-radio communications. Do people understand Cain's broadcasts as authentic reports of some sort of truth to be snatched from the air, captured, and archived, or do they view them as productions, too, as simply more of the warp and woof of the latter-day, cacophonous ether we call the internet?

15. Nick Crowe, “Unplanned Articulation: Web Radio and Interrogative Documentary in *Police Radio*,” *Convergence* 12, no. 2 (2006).

16. Crowe's project of turning cops into DJs strikes me as an interesting counterpoint to Chris Csikszentmihalyi et alia's project of roboticizing the DJ function. For information see Chris Csikszentmihalyi et al., *DJ I Robot* (2002), available online at <http://web.media.mit.edu/~csik/dj-i-robot/>.

17. Crowe, 141.

Simon A. Cole is associate professor of criminology, law, and society at the University of California, Irvine. He is the author of *Suspect Identities: A History of Fingerprinting and Criminal Identification* (Harvard University Press, 2001), and he recently contributed to *Suspect* (MIT Press, 2005), the tenth issue of the design-award-winning series *Alphabet City*. He is son of the late artist and visual poet David A. Cole.