

CITIZENSHIP AND THE TECHNOPOLES

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Abstract

In a world in which people are increasingly identified as consumers and audiences, it is more important than every to invoke them as citizens. Citizenship elevates human activity to include legal, political, and social rights to participate fully in a democratic society. However, citizenship is also a discipline and a tool of discrimination that permits governments to exercise extensive control over who can participate and the extent of that participation. This article addresses the dual nature of citizenship as it applies to critical new spaces shaped by high technology. Specifically, it takes up citizenship in what Castells and Halls call the “technopoles” or regional concentrations of science, technology, and venture capital whose icon is Silicon Valley. The article uses citizenship to critique new manifestations of the technopole phenomenon and concludes by considering different forms of regionally based citizenship that provide alternatives ways to think about progressive social development.

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This paper begins by addressing why it is important to invoke the idea of citizenship and why it is equally important to critique it. Next, it relates citizenship to what Castells and Hall (1994) have called the technopoles, those regional concentrations of science, technology and venture capital whose icon is Silicon Valley. The paper uses citizenship to critique the technopole phenomenon and concludes by considering alternative ways to think about progressive social development.

It is especially important to invoke citizenship today because much of what we see in the media, as well as in academic accounts of media activity addresses people as consumers or as audiences.¹ Citizenship elevates human activity beyond the commonly accepted view that the best way, indeed, for some, the only way, to define human activity is by its marketplace value, its worth as a consuming or labouring commodity. The widely accepted view of citizenship is that elevation has also been accompanied by extension. Here it is common to invoke the work of T. H. Marshall (1964) who charted the progress of citizenship in modern Western society starting with the legal sense of basic rights and protections, for example, **habeas corpus**, due process, the presumption of innocence and the right of trial by a jury of one's peers. From here, citizenship was extended to encompass political rights, particularly the right to vote and to public assembly. Finally, social citizenship stretches the notion to include the right to employment, housing, health care, and other social welfare benefits.

The media and media analysis have also invoked citizenship from time to time. The turn to civic journalism and the movements around community networking and public broadcasting suggest an effort to extend media citizenship and resist the all-consuming process of media commodification. But the very necessity to specify journalism as **civic**, networking as **community**, and broadcasting as **public** defines the weakness of media citizenship. Civic journalism would have once been red-pencilled as a redundant expression. Now it is a hoped-for niche, however weak, in the singularity we know as the market, less evidence of citizenship's extension than of its exhaustion.

These developments lead to the conclusion that even as we welcome the insertion of citizenship into debates about communication policy, we need to critique it. Otherwise, citizenship dissolves into a flaccid and romantic populism that celebrates anything outside the market as genuinely oppositional and alternative. Witness the communitarian movement, the "not so Left's" version of family values, whose supporters wave the kinship banner even as they support an end to the very social assistance programs necessary to keep families together.

Discussions of citizenship today carry the burden of enlightenment assumptions that progress has deepened and extended citizenship to encompass more people and more facets of social life. Marshall's three steps in the evolution of citizenship comprise just the most celebrated of such visions of linear progress. But there is another view, one that I may be more sensitive to than most because I am part of that group of people for whom citizenship was an active choice and not just a taken for granted birthright.

Having chosen to take Canadian citizenship and participated actively in that never-ending Canadian pastime- the angst-ridden search for just what it means, I can appreciate that citizenship is also, if I may be excused a Foucauldian expression, a **discipline**. Sparing you the details, it took about two years for me to complete the process of citizenship and, although I have thankfully forgotten most of the my march through

the bureaucratic underbrush, two memories leave an aftertaste. The pamphlet, whose canonical version of Canadian history and politics I was asked to study in preparation for my citizenship exam, informed me that the Canadian state conferred but one citizenship benefit: the right to vote. For this I had to memorise the state's official view of history and more importantly, and this is the second image that lives on in my mind, swear allegiance to Her Majesty the Queen in a public ceremony presided over by a plum patronage appointed citizenship judge. My active participation in this process simply drives home a more powerful version of a general lesson about contemporary citizenship. It is not only a hard earned right fought for and won by wave after wave of working class struggle. It is also a state-imposed discipline that controls, shapes, and confines that struggle by creating a set of rules that determine legitimate participation in national state affairs. Moreover, it is a tool of discrimination that permits the state to define who among its people can have that right. This is not to suggest that it is a natural step from **liberté, égalité, and fraternité** to the Terror, that would amount to a simplistic inversion of Marshall's vision of the progress of citizenship. Rather, citizenship is not just a pure right or an unabashed gain but a social practice defined and redefined in political struggle. This fact was not lost on the Ayatollah Khomeini who extended full voting and civic participation rights in Iran to anyone over the age of 15. What would Marshall think of this?

Moreover, it is not just a question of invoking citizenship but of determining which one. For indeed, as Riesenbergs tells us in his masterful work *Citizenship and the Western Tradition* (1992), the concept is not only ambiguous, defining civic virtue in a public arena even as it supports discrimination and exclusion, the West has experienced two different citizenships. And here is where one can build a bridge to the technopole. Most of the discussion of citizenship is about what Riesenbergs terms Citizenship Two or the rights and privileges conferred by the nation state beginning roughly in the aftermath of the French Revolution. Discussion of this citizenship does not appear in English until about the eighteenth century, when according to the Oxford English Dictionary (Simpson and Weiner 1989, 259-260), Hume speaks about how "too great disproportion among the citizens weakens any state."

But there is another citizenship, that of the city, the community, the region or the city-state, which is canonically dated with classical Athens. The very first definition of citizenship, common in English from the fourteenth century, the OED tells us, is "an inhabitant of a city or (often) of a town; esp. one possessing civic rights and privileges, a burgess or freeman of a city" (Simpson and Weiner 1989, 249). It is this form of citizenship that merits reflection, but certainly not to dust off romantic visions of a classical golden age. De Ste Croix's work *The Class-Struggle in the Ancient Greek World* (1981), with its brilliant assessment of class divisions, slavery, and patriarchy, puts to rest uncritical celebrations of Athenian democracy. There are other reasons for such reflection.

Most of us would agree that in many important economic, social, and cultural arenas, nation-states around the world are in retreat, particularly with respect to those political and social rights that we have come to associate with citizenship. As a Canadian, my national government (and, by extension, the several provincial governments) are less able than they were twenty or thirty years ago to make economic policy, provide education, deliver health services, support the poor, protect our culture, or provide affordable housing. Canadians are certainly not alone in a position to conclude that the World Trade Organisation and the IMF have more to do with these matters

than the government my citizenship test bought me the right to vote for. But to say that citizenship is not what it used to be is not simply to conclude that it has diminished. It has also been reshaped. Today's national citizenship is more a matter of guaranteeing other things: protection from would-be immigrants, transmitting and adapting a global neo-liberal business agenda to the particular circumstances of each nation, and, not the least, giving us national teams to root for in international competitions like the Olympic Games and World Cup Soccer.

Even if one does not fully agree with this argument, it is reasonable to conclude that we need to spend more time thinking about citizenship *across* nations, indeed of global citizenship, if only because much of our analysis begins today with global actors, primarily transnational businesses which are closely connected to regional and international associations of nation states. Indeed, one of the few thorough reviews of the technopole phenomenon, Castells and Halls *Technopoles of the World* (1994, 3) admits that the primary structural revolution at work today is "the formation of a global economy, that is, the structuring of all economic processes on a planetary scale, even if national boundaries and national governments remain essential elements and key actors in the strategies played out in international competition." Given what we know about the formation of a global economy, it comes as no surprise to observe pleas to develop forms of global citizenship. Whether embodied in calls for global labour standards to offset sweatshops and slave labour, global environmentalism to halt emissions of greenhouse gases, or a global feminism to overcome "divide and rule" tactics that business uses to separate First from Third World women, the many forms of global citizenship are primary grounds for resistance to the spread of commodification and the reduction of all forms of social relations to the singularity of market relations.

Technology, particularly communication and information technology, is often associated with the march of the global economy in two important ways. First, communication technology enables the expansion of practically all businesses because it expands their geographical and organisational horizons making possible more profitable production, distribution, and exchange relations. Second, communication technology defines an industry in its own right and, based on a variety of measures, growth rate, profitability, or stock price, it is a, if not **the**, leading sector in the global economy. It is again hardly surprising that citizenship is increasingly connected to technology in expressions like "citizenship in the information society" and "cyber-citizenship" which make the plea for equity, access, privacy protection and the application of other long-recognised citizenship rights to the global information economy. This line of thinking also calls for increasing use of communication technology to build the networks, however virtual, that are essential for transnational citizenship.

It is hard to quarrel with this expansion of citizenship to the global, even to the global technological arena. The times seem to demand it. Moreover, the concept itself is not new. In the west, Francis Bacon talked about it in the seventeenth century and Thomas Paine and Oliver Goldsmith both wrote books entitled *Citizen of the World* in the eighteenth. Marx's call for workers of the world to unite is another manifestation. Now, supporters maintain, technology makes it possible, indeed essential to realise this age-old vision.

Compelling as this case may be, we would benefit from a more careful assessment of the march to globalisation. It appears that no theoretical or political position is immune from the tendency to be swept away by all the end of geography, globalisation

talk (O'Brien 1992). Marx may have started it all with his reference to how capital annihilates space with time. Castells' and Henderson's (1987, 7) assessment of a world divided between placeless power and powerless places is another way of saying the same thing. From another perspective, James Beniger's book *The Control Revolution* (1986) is noteworthy in this context because it offers what has to be the most extreme version of the "globalisation through communication technology" theme. The computer, Beniger maintains, is the logical result of a history of organising technologies that we have set against the second law of thermodynamics, the natural disorganising tendency physicists call entropy, delaying, though not conquering, the inevitable heat death of us, the earth, the universe and everything. But should we not be more careful about applying so-called laws of physics to social processes? Today most scientists would agree with the particle physicist Lee Smolin, when in *The Life of the Cosmos* (1997), he concludes that there is no **law** of thermodynamics, just a tendency under certain closed system conditions, and therefore no natural entropy and no inevitable heat death. Indeed, most cosmologists see what we call the universe as a lumpy mass of energy producing galaxies embedded in a cosmic ecology of universes.

Although it is true that few social scientists have gone as far out on the limb as Beniger, we have to credit him for playing out what is implied in the many visions of geography's end, of placeless power, of friction-free capitalism, that abound in the literature. That is a primary reason why the so-called new geography is so vitally important today. Simply put, the work of people like Doreen Massey (1992) in the UK and of Saskia Sassen (1991) and Sharon Zukin (1995) in the U.S. remind us that capitalism, like the universe, is also lumpy, that space and place matter, as do the relationships among places, and that this conclusion has profound consequences. In the last couple of years, I have turned my attention to these lumps, these earthly versions of Smolin's energy producing galaxies, whether defined as Massey's science parks, Sassen's global cities, Zukin's cities of the symbolic economy or Castells' technopoles. The remainder of this paper addresses the technopole, considers a couple of its manifestations, and reflects on the consequences for rethinking citizenship.

The technopole is a place that brings together institutions, labour, and finance that generate the basic materials of the information economy. They result from various local, national, and, in some cases, international, planning activities that bring together public and private sector organisations, to promote systematic technological innovation. The term technopole originated in the Japanese government's effort of the 1960s to build a science-based technopole Tsukuba about 40 miles outside of Tokyo and most would see Silicon Valley in California as its icon and most successful form. In their global survey, Castells and Hall refer to two dozen or so technopoles, many eager to emulate the Silicon Valley model.

For the past two years, I have been taking a close look at the technopole, concentrating on a handful that because they have recently developed, were overlooked, or did not fully qualify by the Castells and Hall criteria, are not in their survey. I would like to turn to two of these cases now and tie my conclusions to the theme of citizenship. These are the so-called Silicon Alley district in New York City and the Multimedia Super Corridor under construction south of Kuala Lumpur in Malaysia.

Silicon Alley is a global centre for multimedia design and development which is situated in buildings vacated by downsizing finance and investment firms (the headquarters at 55 Broad Street is just a block away from Wall Street). According to a 1996

Coopers and Lybrand report, the district anchors a new media industry that employs 27,000 in New York City and 71,000 in the metropolitan area's 4,000 new media firms, making it one of the largest employers of computer communication workers in North America, on a par with Silicon Valley. A 1997 report by the same company concluded that New York's software, electronics, and multimedia companies led the way with an increase in venture capital investment of \$111.3 million in 1996 more than doubling the 1995 total of \$49.5 million.

The growth of Silicon Alley began at a time when businesses were fleeing a city on the verge of bankruptcy with an eroding infrastructure and dwindling tax rolls (Goff 1996). Silicon Alley is now an integral part of a revived lower Manhattan whose new, up-scale neighbourhoods (Battery Park City and Tribeca) join with the artistic communities of SoHo and Greenwich Village, and the Madison Avenue advertising district. These, in turn, are increasingly linked to the mass media rejuvenated, mid-town and Times Square districts, supported by major investment from the Disney Corporation and most recently by Reuters which is building a headquarters across from a Disney theatre, to produce an agglomeration of interconnected post-industrial spaces rooted in cultural production. The 1996 Coopers and Lybrand report highlights the significance of close ties among businesses in these several communities. Forty-three per cent of new media companies surveyed worked principally for advertising firms and forty-two per cent for print publishing and entertainment firms.

The New York case invites a focus on the role of the media (especially publishing and advertising), the arts (particularly the development of SoHo) for attracting talent to multimedia design and production, and telecommunications (for example the regional Teleport). Additionally, there is the role of new neighbourhood development (specifically Battery Park City and Tribeca) in attracting people to work and live in the city. Much is made of the role of the state and city governments in supporting the recycling (including rewiring) of vacant buildings, making it easier for multimedia start-up firms to locate in sites that meet their technical requirements. For example, the city of New York announced in 1997 that it would set aside \$30 million for a Silicon Alley job creation fund. It is also important to consider the significance of universities, particularly New York University, and networking organisations, primarily the 4000 member New York New Media Association, in fostering new businesses in this sector.

If New York is viewed as the information age phoenix rising from the ashes of manufacturing decline, then Malaysia is the magic land where palm-oil plantations become Multimedia Super Corridors almost overnight. The increasingly celebrated place is a 10-mile by 30-mile tract of land south of the capital city of Kuala Lumpur where the Malaysian government proposes to spend between \$8 and \$15 billion of public and private money to turn this area of rolling countryside, rain forests and palm-oil plantations into a post-industrial district where multinational corporations will develop and test new software and multimedia products. Much of this will be anchored in the new cities of Cyberjaya, what one pundit called "an info tech omphalos," and Putrajaya, a new cyber-ready capital (Greenwald 1997; Rizali 1997; Wysocki 1997). Today their only existing highway is a \$2 billion fibre network under construction. But the plan is that in these cities bureaucrats will serve the public in cyberspace, consumers will shop with smart cards, children will attend virtual schools, professors will lecture electronically at the planned Multimedia University, executives will manage through teleconferencing, and patients will be treated through telemedicine. The

MSC is an effort to stem the erosion in the massive growth that Malaysia experienced based on a labour cost advantage it enjoyed in computer and telecommunication hardware production. Having lost that advantage to other Asian nations, particularly to Bangladesh, Vietnam, and China, the Malaysian government believes it can pioneer in software and product development. Malaysia proposes nothing short of making a national model out of the city-state Singapore's centrally directed, export-oriented, high technology approach to development. Indeed, although the MSC is concentrated in one soon-to-be developed region, plans exist to support the MSC with a hardware corridor in the north of Malaysia, including the island of Penang, that would attract national and foreign businesses interested in higher end production with more skilled labour than can be found in the lowest wage regions of Asia (Ng 1997, 23). Malaysia marks an important test of whether the once super fast-growing regions of Asia can continue to grow in the highly competitive area of software engineering and information technology product development. It also bears close scrutiny because Malaysia proposes to retain tight censorship, strong libel laws, and a patriarchal Islamic culture, even as it welcomes foreign multinationals, inviting them to test the full range of new media products on its citizens. Recent developments in global financial and equity markets also mark this as a case to watch because massive declines in currency values, near collapse of stock prices and the withdrawal of foreign capital have created huge rifts between Malaysia (joined by Indonesia, Singapore and Thailand) and first world powers that once pointed to these so-called Asian tigers as evidence for the success of traditional modernisation schemes (Sanger 1997).

The most important conclusion that I can draw from my analysis of these cases, and which by and large applies across the technopole literature, is that there is a great deal of interest in them as economic growth engines, some interest in the technopole as a new form of cultural representation (King 1996, Zukin 1995), and practically no interest in their political governance, that is, in addressing technopoles as sites of political power and their residents as citizens. It is not particularly surprising that the research concentrates on the technopole almost exclusively as a site for economic growth. Whether it is Silicon Valley or Silicon Alley, or, for that matter, my home of Ottawa, once primarily known as the National Capital Region, now more frequently called Silicon Valley North, the technopole is researched and assessed as an engine of economic development. It is somewhat surprising that this view is shared by writers on the broadly-defined left, by people like Manuel Castells whose book with Peter Hall provides 275 pages on the phenomenon but nothing on governance (see also Saxenian 1994). One reason for this support may be that most technopoles confound free market purists because they require government support and involvement in their planning and development, as well as connections to local universities. Hence the technopole naturally attracts those who would find a role for the state, for technology, for the university and for more than a small measure of planning in the development process.

So with the exception of the occasional critic like Harrison (1994) or Sassen (1991), the Left has proven to be as drawn to the technopole as the high tech companies that reside there. This means that critical assessments based on a concern for governance and citizenship are muted, with the primary concern levelled, as the work of Castells and Hall, as well as Saxenian demonstrates, at the failure to deliver on economic promises, an outcome attributed to fumbling state or large corporate bureaucracies.

This is particularly unfortunate because many of the technopoles, including the New York and Malaysia cases, are not only test beds for high tech products. They are also testing new forms of governance with significant implications for citizenship. For example, along with the creation of a new media district in New York, we find a significant transformation in governance with the formation of private sector run Business Improvement Districts that have been put in charge of a wide range of services. They police the streets, manage the parks, haul away trash, and remove the homeless, all with private, mainly non-union, low-wage workers. In addition to this, they have the authority to issue bonds (much to the consternation of city officials who fear both the competition in credit markets and the consequences of a BID default) and pay their management well: the head of one earns over twice the salary of the mayor. Moreover, the BID which encompasses Silicon Alley, has managed to divert public and private funds to build some of the only new public spaces in New York, primarily to service up-scale high tech workers and their families. So along with high technology comes the privatisation of basic services and the reorganisation of urban government and civic spaces. Once public places like historic Bryant Park, adjacent to the New York Public Library, now under BID control, closes at night, contains swarms of private security guards, particularly in evidence during the many corporate sponsored events such as fashion shows, who prevent people with large bags, i.e. the homeless, from entering the park (Birger 1996; Breskin 1997; Greenhouse 1997; Zukin 1995).

Similarly, the Malaysian government has signed agreements with several of the world's major computer and telecommunication firms under which the companies agree to set up shop in the new technopole and in return receive a ten year or so tax holiday and complete freedom to bring in their own work force and capital and to export all products developed in the zone. They presumably would test new products in several application areas including telemedicine, virtual schooling, and virtual government. Putrajaya is to be the new national administrative capital operating as fully as possible in an electronic environment, including compulsory smart cards for each resident (Multimedia Development Corporation 1997). One cannot help but conclude that this gives a whole new meaning to the responsibility of citizenship, namely, beta testing new products for transnational computer companies. Shall we call **this** virtual citizenship?

It is hard to find in the technopoles of the world any genuine source of inspiration for fresh thinking about citizenship at the local level, for ways to return to its original of meaning of citizenship in the city or the community. And neither the New York, nor even the Malaysian cases are the most extreme. Consider Oceania (<http://oceania.org>). This is a planned libertarian paradise hatched by a Las Vegas entrepreneur that would be built on a concrete and steel platform 80 kilometres off the coast of Panama. The city-state, styled as a postmodern version of 15th century mercantile Venice, is to serve as a "capitalist paradise" where taxation, social services, and public space would be outlawed and the No. 1 business would be electronic financial services. Is there an alternative? The answer to this question depends on how you think about reform. On the one hand, it is tempting in the current cold climate to be modest, to weakly succumb to a kind of **reform pastoralism** that takes whatever you can get: a commitment to high tech growth (whatever the consequences for governance), three hours a week of educational television (so what if stations count Jerry Springer), or competition in telecommunications (what does it matter if most people are paying more than ever

for a telephone). On the other hand, it is just as likely that one might succumb to the opposite extreme, to a **fatalistic naturalism**, that removes reform from the realm of possibility or suggests the impossible.

I have been exploring the space between these views. Some of this exploration is historical: for example, there are important lessons for reinventing citizenship in the cultural industries contained in the experience of popular front movements in the United States from the end of the first World War through the 1950s. Among others, Michael Denning in his brilliant new book *The Cultural Front* (1997) opens this period as no one else has. Of greater relevance to the theme of this paper are alternatives to the technopole, regional spaces where citizenship and democracy heat up this otherwise cold climate.

One such region is Emilia Romagna in north central Italy which includes and extends out from the city of Bologna. In spite of its enormous economic success, which regularly places it among the fastest growing regions of Europe, Emilia Romagna rarely appears in any of the technopole literature partly because high technology is not central to its development and most likely also because the region has been governed by the Communist Party of Italy, now the Democratic Party of the Left.

"The Third Italy," as it is widely known, in contrast to the heavy manufacturing region of the north and the poor, agricultural land of the south, bases its economic success in thousands of small, mainly family businesses producing customised products for the export market. In 1996 it ranked tenth among 122 regions of the EC in per capita income and was the second highest region in Italy. There are some 68,000 manufacturing firms in this region of 3.9 million and only a handful of firms employ more than 500 workers. Compare this to the state of New York with 16 million people and only 6,000 manufacturing firms. Moreover, the Third Italy supports a thriving co-operative sector with 60,000 workers in 1,800 so-called red co-ops. Emilia-Romagna is particularly interesting because it emerged out of a remarkable partnership between enterprising family firms and a series of supportive regional governments of the left.

Those who see the Third Italy as a genuine alternative to the major mainstream models of economic development build on the work of Bagnasco (1977) who concluded that Emilia Romagna combined two key traits: commercial, artisan, and financial skills based on a centuries-old set of entrepreneurial values and, equally important, strong networks of mutually supportive families. These combine to support post-Fordist production based on flexible specialisation and customisation for the export market. The regional governing parties of the Left have supported this development with a strong definition of co-operative citizenship: a rich social welfare system, universal trade unionism, widespread social and political networks, and region-wide agencies that pool capital for local investment, distribute business information and co-ordinate global marketing efforts (Brusco and Righi 1989; Cossentino, Pyke, and Sengenberger 1996; Fitch 1996; Piore and Sabel 1984; Putnam 1993).

Admittedly, critics like Harrison (1994) and Amin and Robins (1990) call our attention to the underreported influence of large national and transnational firms in the region, on the brief time-period that post-Fordist practices have operated, on the inadequate use of new technologies, particularly communication and information technologies, that would be essential to sustain the Third Italy, and on the growing reliance on immigrant labour unprotected by the "discipline" of citizenship (see also Bianchini 1991). Nevertheless, the region invites our close scrutiny because it has at

least until recently succeeded in weathering this cold climate and managed to combine strong citizenship with economic success.

In conclusion, communication scholars, particularly those working in the critical tradition, have tended to concentrate on the nation-state, the global structure of nation states, and on national and international businesses as their stock in trade units of analysis. There are important reasons for this and good reasons, though explication would be appropriate for another paper, for continuing this pattern. Nevertheless, whatever our thoughts about technopoles and other approaches to regional development, it is time that more than a handful of communication scholars join this multidisciplinary debate on the importance of expanding to sites around the world the regional development model pioneered in Silicon Valley. We need to enter this wider stream of thought because it is generally barren of concern for democracy and citizenship and because of what we know about the relationship of communication, including new media, to political and economic development. Whether the rise of global cities and regional development strategies are part of the decline of the nation state, the return of the city state or merely represent the latest iteration in capitalist market expansion and of liberal fantasies of a beneficent capitalism, it is time that communication scholars and activists took a closer look.

Note:

1. In fact, in a recent genealogy of the term "audience," Kaye and I conclude that it is evidence of the immaturity of communication studies as a discipline that one of its central theoretical concepts, "the audience" has no particular warrant in disciplinary or intellectual history. The concept of the audience was hatched largely out of the marketing departments of companies with a stake in selling products through the media. Why even critics continue to use the term is an interesting question (see Mosco and Kaye, forthcoming).

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