To cite this article:

Wagman, Ira, and Liam Cole Young. "On the Mediality of Two Towers:
Calgary—Toronto." *Imaginations*, vol. 10, no. 2, 2019, pp. 5–37, doi:10.17742/
IMAGE.OI.10.2.1.

To link to this article: http://dx.doi.org/10.17742/IMAGE.OI.10.2.1

ON THE MEDIALITY OF TWO TOWERS: CALGARY—TORONTO

IRA WAGMAN AND LIAM COLE YOUNG

Abstract: This article uses the CN Tower and Calgary Tower to explore how the architectural form of the tower possesses a number of characteristics we typically associate with media technologies. To appreciate what we call "tower-mediality," we start first with a brief discussion of the scholarly literature on towers, highlighting that while much is said about towers' symbolic value, little attention has been devoted to thinking of these forms in material and infrastructural terms. Then we turn to the Canadian towers themselves, asking, first, why they have received so little scholarly attention, before suggesting some points of intersection between architecture and communication research. Finally, we offer three registers—ritual, perspective, and spectacle—by which to explore the mediality of the CN and Calgary Towers. In undertaking this analysis, we attempt to expand the vocabulary available for understanding how towers are platforms that mediate the temporal and spatial elements of civic culture and to invite further considerations of the mediating and communicative work that occurs along the vertical axis.

Résumé: Cet article examine la tour du CN et la tour de Calgary afin d'explorer comment la forme architecturale de la tour présente un certain nombre de caractéristiques que nous associons généralement aux technologies des médias. Pour apprécier ce que nous appelons "tour-médialité" nous commençons par une brève discussion de la littérature sur les tours, et nous soulignons que si beaucoup de choses sont dites sur la valeur symbolique des tours, peu d'attention a été consacrée à la pensée de ces formes en termes matériels et infrastructurels. Ensuite, nous nous tournons vers les tours canadiennes elles-mêmes, en nous demandant, premièrement, pourquoi elles ont reçu si peu d'attention de la part des chercheurs, avant de suggérer quelques points d'intersection entre la recherche en architecture et en communication. Enfin, nous offrons trois thèmes—rituel, perspective et spectacle—pour explorer la médialité des tours du CN et de Calgary. Nous essayons d'élargir le vocabulaire disponible pour comprendre comment les tours sont des plates-formes qui servent d'intermédiaires entre les éléments temporels et spatiaux de la culture civique et pour inviter d'autres considérations du travail de médiation et de communication qui se produit le long de l'axe vertical.

INTRODUCTION: TWO IMAGES

In July 2001, two Greenpeace activists—one British, one Canadian—scaled the CN Tower in Toronto by making use of its steel maintenance cables. The banner they unfurled from the observation deck, nearly 340 meters from the ground, claimed Canada and US President George W. Bush as "climate killers." The act was timed to coincide with an international summit on climate change taking place in Bonn, Germany, as a reminder to Canadians that both countries had failed to ratify the 1997 Kyoto Protocol. A CBC report at the time claimed that the activists were "reaching to the clouds to send a message about global warming" ("Taking Greenpeace's Message to the Skies" "Greenpeace Activists Scale CN Tower"). Nine years later, in 2010, Greenpeace took to another iconic Canadian tower. This time, activists hung a "Separate Oil and State" banner from the Calgary Tower so as to focus attention on the relationship between Canada's government and its oil industry centered in Alberta ("Anti-Oilsands Protest Unfurled on Calgary Tower"). This effort was timed to coincide with the start of a meeting of Canadian provincial premiers taking place in Winnipeg, Manitoba, nearly 1300 kilometers away.

Figure 1: Greenpeace Activists Scale CN and Calgary Towers

These examples, from two of Canada's highest spires, complicate the way towers are usually "read" as symbols of civic pride and identity, tributes to modernity and modernism, monuments to capital accumulation, or markers of power. Given its functional use in sending and receiving broadcast and telephone signals, the CN Tower is sometimes positioned alongside other forms of media infrastructure that facilitate communication across time and space, such as radio and cellular phone towers. While symbolically serving as "the cathedrals of a media society" (Von Borries, Böttger, and Heilmeyer 12), such towers also, according to Patrik Åker, subtly "integrate different forms of media distribution, their structure expressing de-materialization, the opposite of solidness and weight" (Åker 85). Shannon Mattern similarly traces the importance of towers and other vertical structures like telephone poles, antennae, and radio masts to imaginaries of modern communication, given that they stand as traces of otherwise invisible or "ethereal" media networks like radio. These artifacts for conceiving the inconceivable also provided inspiration for visions of urban futures typified by figures like Le Corbusier, Buckminster Fuller, and Sam Jacob (Mattern 4-8).

But our two images show that towers do both more and less than such readings imply. Most often, towers serve more humbly as platforms for other media to do their communicative work. In these cases, each tower hosted the writing and icons of cloth banners designed for political dissemination. In scaling their heights, Greenpeace sought to leverage each tower's capacity for broadcast within a local urban environment and to create a media event that would further expand the distance by which the organization's message was disseminated. In both cases the tower, as platform, was tactically crucial. It is surprising that very little has been written on how towers serve in such capacities for various forms of civic, symbolic, and even political communication.

Towers perform an array of medial functions at different times across a spectrum of communities and thus they cannot be reduced to any single meaning or function (whether symbolic, architectural, or communicative). The concept of mediality, we argue, captures the protean nature of towers and thus addresses the gaps and limits of understanding their role in public life. By mediality we draw upon what

Will Straw calls the "occasional state" that physical objects occupy when they demonstrate some of the qualities normally associated with media technologies (128). Such qualities include processing, storage, and transmission, functions most famously associated by Friedrich Kittler with "technical media" like the gramophone, film, and typewriter. However, in a vein similar to Straw, Liam Cole Young observes that such qualities can be found in a range of banal forms of communication, which also store, organize, and disseminate knowledge—for example, the everyday list (37-38). Mediality, rather than media, is a concept more attuned to the changing sites and vectors of communication that any object might temporally occupy. Moreover, for Jonathan Sterne, the concept of mediality avoids the pitfalls of approaches that implicitly view every process of mediation as a corruption—of ideal experience, truth, or physical reality (9-10). For theorists using mediality, there is neither a hierarchy of media technologies nor any privileged, *a priori,* experiential realm that such technologies degrade. The term instead describes a general condition in which media forms cross-reference and cross-pollinate, performing different functions at different times. The concept therefore pushes media theory beyond the hardware of devices and networks and the intentions or interpretations of people to consider intermediaries that "operate like catacombs under the conceptual, practical, and institutional edifices of media" (Sterne 16). Mediality encourages us to understand communication as a complex interplay of forms, surfaces, artifacts, users, and techniques that are constantly shifting and morphing. It thus offers a fresh view on the communicative capacities of non-traditional media like towers.

In this essay, we explore what we call "tower-mediality" through two of Canada's most famous steeples. Our aims are modest and two-fold. First, we wish to expand the vocabulary available for understanding how towers are platforms that mediate the temporal and spatial elements of civic culture. Second, we hope this essay invites further considerations of the mediating and communicative work that occurs along the vertical axis. Media theory has historically been very good at analyzing media devices, networks, and functions that move along the horizontal plane; but it has been less adept when it comes to understanding verticality. We proceed first with a brief dis-

cussion of the scholarly literature on towers, highlighting that while much is said about towers' symbolic value, little attention has been devoted to thinking of these forms in material and infrastructural terms. Even less has attempted to consider towers according to different medial states. From there we turn to the Canadian towers themselves, asking, first, why they have received so little scholarly attention, before suggesting some points of intersection between architecture and communication research. Finally, we offer three registers—ritual, perspective, and spectacle—by which to explore the mediality of the CN and Calgary Towers.

TOWER STUDIES AND MEDIA STUDIES

Towers have played an important role in the organization of culture for millennia. Lewis Mumford noted "tower" as one of the "graphically clear" symbols discovered by archaeologists at the ancient Mesopotamian city-states of Ur and Kish (alongside "temple," "water," "garden," "woods," "high-road," "market," but—much to his chagrin—not "city") (*City in History* 66). The Bible is chock-full of towers, the most famous is Babel, routinely used to explain the proliferation of different languages in the world. However, many others can be found in scripture: Towers of Edar, Penuel, Shechem, Jezreel, Jerusalem, Hananeel, Ophel, Lebanon, Syene, Siloam, and Meah. "The Lord" is referred to consistently as a tower—high, strong, and ever watchful (2 Sam. 22.3; Ps. 18.2, 61.3, 144.2, and 18.10; Song of Sol. 7.4 and 8.10). Towers are invoked as essential constitutive units of cities that will be built alongside walls, gates, and bars (2 Chron. 14.7). Watchtowers are also ubiquitous, particularly in the book of Isaiah (see Peters, *The Marvelous Clouds* 235). The presence of towers in sacred texts from various religions usually signals the power that accompanies "over the top" viewpoints.

One reason why the tower persists in our stories and cities is that it offers a central point of view, rising above all (or most) other sights, which is visible across space and time. The tower is to the vertical plane as the wall or trench is to the horizontal: a trace of ancient attempts by humans to re-shape the world through technics. As walls inscribe boundaries and borders, creating distinctions upon

which political concepts arise (such as between inside/outside, civilization/barbarism, order/chaos, us/them;), towers similarly inscribe concepts into the sky (for more on the political concepts inscribed by walls, see Siegert 11-12). As Rudolf Arnheim notes, all buildings share the "daring sin" of encroachment, intruding into empty space and raising "the basis of human action beyond the safety of the common ground" (34). It is this sense of size and range that we see the familiar claims of towers as "ladders to the Gods" or as points on the earth that aspire to pierce the heavens. In so doing, however, towers create platforms for a plethora of other human activities: communication, most notably, but also observation, time keeping, experimentation, and even violence. Michele Bertomen emphasizes amplification and distribution as essential aspects in how towers facilitate "communications between distant points and a consequent sense of the shortening of space and time" (55). That towers help link distant points via the sending and receiving of optical or acoustic data is a common refrain in media theory (see Kittler, "History of Communication" and Peters, *The Marvelous Clouds* 238-40).

Towers are also useful tools for thinking more closely about the political and ethical implications of how social activity is arranged spatially. Eyal Weizman argues for a politics of verticality to show how two-dimensional mapping cannot adequately capture what he calls "the experience of territory" by those living in the West Bank. The presence of Israeli settlements built on hills and the use of drones demonstrate occupation and surveillance even if maps show separation and autonomy. "Geo-politics," Weizman writes, "is a flat discourse," part of the "cartographic imagination inherited from the military and political spatialities of the modern nation-state" (Weizman). Towers might similarly serve as a powerful tool for considering the relationship between vertical space and the governmentality of everyday life.

Modern towers appear primarily through the prism of the skyscraper—a potent architectural symbol of the transformation from traditional to modern society. In *Skyscraper Cinema*, Merrill Schleier writes that the role of skyscrapers in film concerns "the relationship between masculinity and modernity…a metaphor for upward mobility and capital achievement" (3). Mumford took a wider historical view but still saw in the skyscraper the same base will-to-power

(and capital). Skyscrapers were the newest instantiation of the tendency of those with power and capital to produce monumental architecture—at great expense, using costly material, and with much fanfare—as a symbolic expression of that power (Mumford, *City in History* 65 and *Sticks and Stones* 108). Both Andreas Bernard and Stephen Graham have noted the significance of elevators within skyscrapers as an important—but surprisingly little-studied—medium of movement and circulation, which has for the last hundred years played a key role in the organization of vertical space (Bernard; Graham, "Super Tall"). There is a rich literature that examines the expression and delineation of class or racial divisions via the organization of space along lines such as urban and rural, or inner city and suburb. Graham, however, expands on this literature to note that such separation also occurs along the vertical plane. He carefully traces how society's financial elites retreat from busy and congested cities by living in expensive high-rise apartments that offer abundant light, fresh air, and personal safety that is short supply on the ground and thereby transform city skylines (Graham, *Vertical* 174-220).

Such are the terms with which we tend to describe how humans climb the vertical axis in attempts to, among other things, mediate between heaven and earth, achieve large-scale non-verbal mass communication, and express power. The assessments of Schleier, Bertomen, Weizman, Graham, and others effectively emphasize the representational, political, communicative, and economic registers that shape so much of our thinking about towers. However, it is equally important, we argue, to complement these interpretations of verticality with ones more attentive to the material and infrastructural characteristics of towers and other "sky media" (Peters, *The Marvelous Clouds* 165). There is already some important work being done in this field, for instance, on the media archaeologies of Wi-Fi, radio, and other towers (Mattern), analyses of satellites and earth-observing media (Parks, *Cultures in Orbit*; Russill), and the politics of grain elevators on the Canadian prairies (Barney). Darin Barney, in this last example, argues that grain elevators serve as "unconventional media that structure temporal and spatial experience—and political possibility—on the Prairies" (5). In placing these archetypal rural towers (which have received almost no scholarly attention) on the agen-

da for communication research, Barney seeks to correct ignorance about the rural within contemporary theorizations of technology and politics, which continue to treat such settings with either nostalgia or simplicity. Author Ali Piwowar and photographer Kyler Zeleny echo such sentiments in their recent article for this journal, noting that the role of grain elevators in networks of economic and social activity, in addition to their architectural "monumentality," are essential to understanding grain elevators' intangible cultural heritage (Piwowar). Such work invites us to consider the modes of social cohesiveness that are produced by the cultural and material infrastructures entangled in the tower as monument.

These themes resonate with John Durham Peters's characterization of towers as "logistical media" that organize people and places in space and time ("Calendar, Clock, Tower" 37-38). A tower's ascendance up the vertical axis, Peters claims, facilitates the expansion of its reach along the horizontal, allowing humans to extend their communicative reach. Towers, for example, allow one to see and hear *over* a great distance, but also to be seen and heard *from* a great distance. They also represent exclusivity, as access to the tower from the ground is often limited. For Peters, these characteristics are part of the reason they are associated with divine and secular power (Peters, "Calendar, Clock, Tower" 36). The new perceptual vistas offered by towers open them up to an array of uses and functions that make them objects of awe, tourism, and also resentment (Peters, *The Marvelous Clouds* 234-40). Peters's insights build on Mumford's earlier understanding of time-keeping techniques in Benedictine monasteries that established basic rhythms of time according to the seven canonical hours, each marked by the ringing of bells. These techniques would eventually synthesize the optical (clock face) and acoustic (bells) data streams as part of the "cultural preparation" for modern "clock time" (*Technics and Civilization* 12). Alain Corbin also shows how the nineteenth-century bell towers of rural France symbolized community identity, ordered time, marked geographic territory, and characterized sacred or solemn moments by transforming auditory space during festivals, holidays, deaths, and church services (Corbin).

For Peters, towers—and a family of tall structures ranging from minarets to radio and television antennas—are platforms for dissem-

ination and markers of public space and time. In a similar register, the historical work of David E. Nye, Anne Cronin and David Nasaw points to the role played by advertising billboards, nighttime lighting, and electrification in the transition of nineteenth-century city life into an era associated with the "technological sublime" of modernity and its popular entertainments (Nye; Cronin; Nasaw). David Henkin neatly describes how the appearance of words on a variety of surfaces around New York City (such as on walls, handbills, and street signs) represented shifts in nineteenth century public culture caused by media innovation and urbanization (Henkin). Aurora Wallace details how newspaper owners made use of their office buildings for competitive advantage, displaying billboards of breaking news about sporting events, political developments, and other matters of public interest. These displays were soon replaced by stereopticon shows that were projected onto canvas sheets draped over buildings, and which sometimes displayed advertisements in between newsworthy images (Wallace 58).

Such work echoes Peters's larger point that for too long our tendency has been to think of "media" only as devices that send and receive signals, but, "[i]f we took towers, sundials, and clocks as media of communication, as they undoubtedly are, we would have to think freshly about where meaning comes from" (Peters, *The Marvelous Clouds* 240). For the remainder of this essay, we take this proposition seriously but wish to bring more specificity to Peters's general theorizations. Our two Canadian case studies will show how towers are ideally suited for considering the interaction between symbolic communication, vertical orientation, and mediality.

TWO CITIES, TWO TOWERS

If it is clear from our literature review that towers represent ideal forms through which to consider the interaction between the built and medial environments, it is more difficult to see why there appears to be so little written to address these issues—especially in the Canadian context. Perhaps the lack of attention paid towards them reflects the feelings that many people in Calgary and Toronto have about their towers. Though the CN Tower remains a key nodal

point in communication systems, as the main transmitter for 16 television and radio stations as well as microwave transmissions and fixed mobile communication, it is largely cut off from most circuits of mobility used by Torontonians, save those trekking to sporting events at the Rogers Centre or the newly built aquarium. It was not supposed to be this way. The CN Tower was originally conceived as part of a major revitalization project. Toronto's old rail yards were to be replaced by an expansive "Metro Centre" complex featuring a communication tower, a new headquarters for the CBC, and a transit hub to replace Union Station (which was to be demolished as part of the plan).

Figure 2: Early rendering of CN Tower as part of Metro Centre Complex

Though politicians of the day imagined the project as a vehicle by which Toronto would enter the pantheon of great world cities, its final result was considerably reduced. Only the CN Tower and a small plaza at its base were built, with the SkyDome to follow thirteen years later (in 1989).

This inauspicious start was a sign of things to come. The tower has occupied an uncertain place in the urban fabric of Toronto and the imaginations of its inhabitants from the start. The opening of its

doors on June 26, 1976 was greeted by press coverage that oscillated between excitement about the tower's scale (it was once the tallest free-standing structure in the world) and anxieties about lightning strikes, fire safety, earthquakes, and falling ice. Since then, article after article has acknowledged the CN Tower as, variously, an engineering marvel, a bland symbol of architectural largesse, or an elaborate white elephant devoid of cultural value. In one of the more famous early characterizations, *Macleans* columnist Allan Fotheringham referred to the tower as a testimony to "mechanical machismo," an "exercise in juvenile senility," and as "a collection of concrete piled higher into the sky than any other pile of concrete" (88).

Figure 3: CN Tower around the time of its completion, 1975 (Bois Spremow)

Arthur Kroker's 1984 book *Technology and the Canadian Mind* is significant as an example of the early scholarly discourse about the CN Tower, and for its effort to link it to other communications technologies such as "the railway, radio, television, telegraph, and microwave transmissions," which he sees as central to "Canadian discourse" and "Canadian identity" (9). For Kroker, the CN Tower is an "aggressive display of the architecture of hi-tech," a "phallocentric symbol of the union of power and technology in the design of Canadian discourse,"

and a "reminder of our immersion into the processed world of communication technologies" (9-10). He sees the CN Tower as an ideal symbol of the "in-between" nature of the Canadian position, "a restless oscillation between the pragmatic will to live at all costs of the Americans and a searing lament for what has been suppressed by the modern technical order" (7-8). This account draws upon themes from strains of English-Canadian thought, best exemplified in the work of Harold Innis and George Grant, which combines skepticism of Canada's surrender to technological imperatives and broader anxieties about American cultural imperialism. Kroker's skepticism regarding the CN Tower's "bold" yet "almost primitive" architecture should also be understood in the context of a general unease about the symbolic value of concrete, a building material that, as Julia Morgan Charles notes in her study of 1960s and 70s Montreal megaprojects, is frequently "blamed today for the homogenization of urban centres and the erasure of local architectural characteristics" (Kroker 10; Charles 56).

Calgary's tower has similarly struggled to match the scope of its conception. Stephanie White recounts that as early as 1963, architect W.G. Milne envisioned a "great golden spire" that could be, in his words, "admired and shown with pride […] visually apparent; an integral part of our day to day life and available to all" (qtd. in White 30). Milne pitched the project to celebrate the 100th anniversary of Canadian Confederation and create a sense of pride of place for Calgarians. The first part of his pitch was a difficult sell for Western Canadians, but for the second part found a receptive audience in Calgary's political and commercial classes, whose collective mood was jovial throughout the 1950s and 60s. The city's population more than doubled between 1950 and 1965, employment was at an all-time high, and coffers were full thanks to the continuing drift of the Canadian economy toward oil and gas as economic staples.

If Milne's idea for a golden spire was an easy sell to Calgarians, financing it was not, even in those halcyon days. It took a partnership between the City of Calgary, Husky Oil and Refining Ltd., and the Canadian Pacific Railway. As White recounts, Milne would not end up the tower's lead architect, nor would it be built on any of his proposed sites (31-33). When the tower finally appeared in 1968,

christened "Husky Tower," both his involvement as architect and his aspirations for nation-building had been scrubbed (architects think about nation and imagination, CEOs about economics and supply chain).

Figure 4: Calgary Tower under construction, 1968

The Calgary-Husky-CPR coalition arose from three separate though related goals. Milne had captured the imaginations of city council and planners and put them in a monumental mood. Meanwhile, the

Canadian arm of Husky Oil Ltd. had purchased all outstanding U.S. shares of the company in 1960, so it was eager to cement its position in Calgary's corporate scene and the Canadian economy more broadly. The tower project presented an opportunity to fulfill its practical need for office space with flair. Finally, CPR was eager to redevelop the land on which its old station had stood, which its newly minted real estate arm, Marathon Realty, still owned. In an inversion of what would happen in Toronto, it took a larger complex—including a shopping mall, parking, a new CPR station, and office space—to get Calgary's tower built.

In spite of Milne's everyday, egalitarian concept, the Calgary Tower now sits in a largely forgotten corner of the downtown core. As White notes, it is impacted on all sides, by commercial rail lines, major auto thoroughfares, and the historic Palliser hotel (35). Thus, like its Toronto counterpart, the Calgary Tower is disconnected from the city's major circuits of economic and cultural activity.
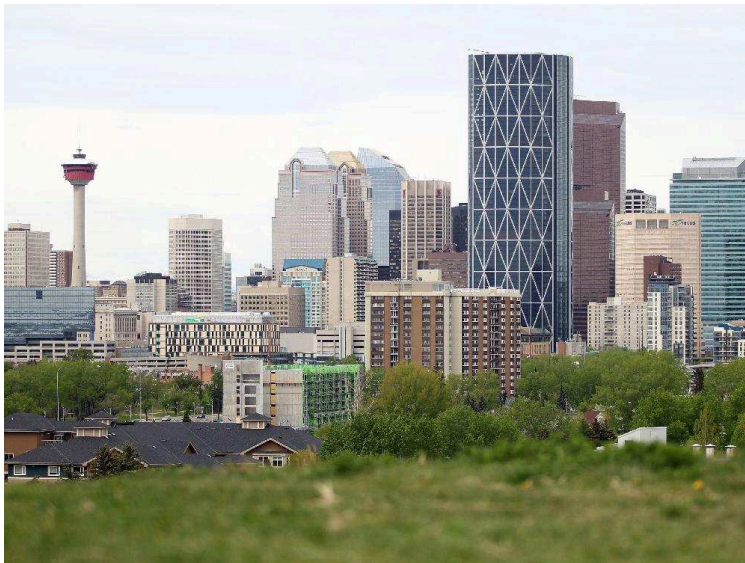

Figure 5: Lonely Calgary Tower, 2015 (Stuart Graydon, Calgary Herald)

Once the tallest structure in Western Canada, the Calgary Tower has been surpassed in height many times over, in Calgary and elsewhere, and is now visible only from relatively few areas of the city. When the tower does come into view, it offers quaint reminders of Calgary's mid-century emergence as economic engine of the "New West" and of the city's entrée onto the international stage as host of the 1988 Winter Olympic games. But such nostalgia doesn't typically assuage critics, who bemoan how its concrete and dwarfed proportions stand awkwardly amongst downtown's sleek glass surfaces (Spearman; Burgener). The Tower seems to have become, in the imagination, what it always was in material terms: *grey*. It is commonly described as boring, banal, and unspectacular, a conscientious architectural functionary without a function. Even the tower's "red spaceship" top, without the proper room to exhibit itself, is rarely admired (White 34). Flashy new structures from star architects, such as Santiago Calatrava's Peace Bridge and Norman Foster's The Bow, seem only to have further marginalized the Calgary Tower. As an editorial in the *Calgary Herald* put it in 1989, the tower "is just there" (Spearman).

If the Calgary Tower seems no longer to resonate in symbolic registers of nation, regional identity, power, or progress, it also resists being understood in logistical or infrastructural terms. Unlike the CN Tower, it is almost never used for communication or air traffic control purposes, and so does not readily send or receive signals in the sense we are used to towers doing. It has a carillon and radio antenna for "police and taxi use"; but these are rarely used or mentioned (Joynt). The Calgary Tower has no religious affiliation and so mediates heaven and earth only in the most tangential ways. There is no public square or central gathering place at its base. The Calgary Tower is haunted by these earlier medial functions, but seems to be denied the opportunity to act as its predecessors have and therefore struggles to live up to their lofty legacies. However, because it was not originally designed to function as a conventional medium of information storage, transmission, or processing, occasions when the Calgary Tower *does* adopt the position of media platform are conspicuous and sometimes confounding (two irresistible features for curious scholars). Furthermore, the Calgary Tower's limitations invite us

to cast terms like *platform* and *infrastructure* into wider registers. Infrastructure need not only describe the structures and systems upon which military affairs, communication, transportation, and habitation depend. Civic culture, too, requires infrastructure, and towers like Calgary and CN, in platforming other media and modes of communication, dutifully oblige. In what remains of this paper, we account for such functions by considering three medial registers that are activated by both towers. These bring together the symbolic, aesthetic, and material components of towers we have outlined so far in this paper.

RITUAL

Since James Carey's famous essay on the topic, the longstanding relationship between media technologies and various kinds of ritual has been well documented (11-28). Media commemorates important events; but they are just as important in structuring the more banal rhythms and rituals of daily life, from checking messages and e-mail on our phones in bed, listening to radio programs during morning commutes, to updating, curating, and otherwise maintaining social media newsfeeds all day-everyday-everywhere. Thinking of towers through a ritualistic lens allows us to consider how forms of architecture are part of spatial and temporal arrangements of people, places, and things within city life.

One of the most striking ritual features of the Calgary Tower is that, like the hilltops in Aeschylus's *Agamemnon*, it is a platform to disseminate the "elemental" medium of fire (Peters, *The Marvelous Clouds* 115). Atop the tower sits a natural gas cauldron capable of releasing flames of up to 10 metres. The cauldron was installed for the 1988 Olympic Winter Games and its illumination was one of the most memorable moments of the Games' opening ceremonies. This giant torch—which bears a striking, though coincidental, resemblance to the official torch of the Games—remained lit for the duration of the Games and still holds the record for highest Olympic flame. The tower provides a platform for fire to conquer vertical space, as the Olympic torch relay has traditionally done with horizontal space, and to mark durational time.

Figure 6: cauldron atop the Calgary Tower during the Vancouver Olympic Games,
18 January 2010

Today, the cauldron serves a wider array of ceremonial and commemorative purposes. It is lit to mark holidays like Canada and Remembrance Day as well as major sporting events (e.g. in celebration of every gold medal won by Team Canada in each Olympic Games since Calgary '88 and the more infrequent successes of the Calgary Flames NHL team, such as when it won the Stanley Cup in 1989). A recent initiative has resulted in torch lighting to memorialize local military and service professionals killed in action. The passing of famous Calgarians, such as its former Mayor and Premier of Alberta Ralph Klein, have also been marked with the lighting of the flame.

The Calgary Tower also hosts a sophisticated suite of LED lights, installed in 2015, that signals holidays, citywide events, and temporal phenomena such as seasons. The CN Tower has had a similar lighting scheme since 2007, and both towers are platforms for these ritual modes of communicating time. In Toronto, the LEDs are illuminated whenever one of Toronto's major sports teams makes the playoffs

Figure 7: Screen capture, CN Tower Lighting Schedule, May 2017

(until recently a rare occurrence). However, the tower also takes requests from non-denominational, nonpolitical registered national charitable events or causes. A look at a recent schedule, posted in part here (Figure 7), finds the tower serving as a form of information distribution about a range of social causes stemming from hypertension to Lyme disease, and from lupus to bladder cancer, each with its own distinctive color palette. Some structural lighting is dimmed for five minutes on the top of the hour throughout the night on the day a Canadian soldier is repatriated. In both cities, height and light proves to be an irresistible and formidable combination.

In focusing on the ritual elements of marking space and time we can see that towers are more than symbolic. They "platform" other media in complex ways; fire conquers vertical space via the Calgary Tower, in a convergence of logistical and elemental media. In such ritual uses, towers are central points upon which the gaze of the community becomes fixed at certain moments and according to certain rhythms. Like all towers, both CN and Calgary function, simultaneously, as platforms for relaying information, disseminating public virtue, and as ephemeral markers of public record. In so doing they complicate our tendency to associate such characteristics—gatekeeping, status conferral, production of collective experience—in sociological terms with traditional media like newspapers or public broadcasting.

The ritual register frames the Calgary and CN towers as objects to be looked at. But as Roland Barthes brilliantly understood, towers uniquely combine being seen with seeing. We should recall that these Canadian towers were built with looking in mind—they are consistently described as "freestanding observational towers"—and the views they open up of the cities below are important aspects of their role as media platforms.

PERSPECTIVE

In a special issue commemorating the opening of the CN Tower, the *Toronto Star* characterized it as the "King of the Clouds," reminding readers that "the only place higher man's stood is a mountain peak or the moon." From the tower's observation decks high above the city, Torontonians would be given "a view so vast …

on a clear day you can see Barbara Streisand" (King). The article gave the sense that the opening of what was then the world's largest freestanding structure would provide an experience of complete and comprehensive visuality that was a unique gift to the world and privilege of Torontonians.

The *Star*'s characterization also reminds us of how architectural structures and media technologies facilitate the creation and manipulation of sensory perspective, and, as Angela Miller explains, create panoramic views that convert nature into spectacular forms (Miller). Much of the literature exploring the relationship between architecture and media similarly links modernity's transformation of urban life with new cinematic and photographic media that emerged during approximately the same period. For example, we have an extensive literature on panoramas, as both mid-nineteenth-century forms of entertainment and as aesthetic transformations of visual perception that are the result of technological innovation (Huhtamo; Nye). Yet this literature is by and large inattentive to the role of the tower itself in mediating panoramic visions.

One exception is Barthes, who was transfixed by this function of the tower. As he wrote, the views offered by towers fundamentally reshape our perceptions and understandings of the cities that contain them. To view Paris from the Eiffel Tower, he argued, was to "read" rather than simply perceive the city—"to transcend sensation and to see things *in their structure*" (9). This visual mode, Barthes thought, offered a more playful and exploratory experience of the city than possible from below. From the top of a tower, sidewalks, roads, structures, and people are elevated from the usual functional relations we have with them on the ground. They are rendered open to inspection, contemplation, and comparison. New connections can be recognized or forged in this process of what Barthes called "intellection"—a process similar to what Marshall McLuhan, writing about different media phenomena, had earlier described as "pattern recognition" and associated with "cool" media like television (Barthes 9; McLuhan 23-33). From the platform of the Eiffel Tower, Barthes argues, the durational history of Paris is available for the eye to survey and the mind to consider. "Paris, in its duration, under the Tower's gaze, composes itself like an abstract canvas in which dark oblongs

(derived from a very old past) are contiguous with the white rectangles of modern architecture" (12). The eye skips from pre-modern to medieval to modern in a way that is impossible for a grounded body. The tower is the platform of such vision, offering something akin to ocular time-axis manipulation. We are now used to thinking about the way that techniques of visualization such as lists, diagrams, typeface, page layouts, and infographics forge new connections among and pathways through words, people, data, and things; but we are less used to thinking about how media platforms like towers enable the eye to scan the built environment in similar ways.

Figure 8: View from the CN Tower looking west, 6 March 2015 (Ken Lane)

Such views have always been central to the appeal and marketing of the towers in Calgary and Toronto. But if the vistas offered by their observation decks are panoramic surveys of immense spaces, those available through their glass floors are more microscopic in nature. One looks down at a framed, finite space and sees it teeming with movement. Pedestrians, cars, and bicycles uncannily enter, travel across, and exit this frame rather like the way people and objects enter and exit the frame of the cinema. Film's power lies in its ability to show movement, what Deleuze called "time itself," by rendering

the space of the screen as liquid and temporal (16). Here, through the glass floors, the movement of time is similarly presented to the eye.

Figure 9: View from the Calgary Tower's glass floor, 31 December 2005 (D'Arcy Norman)

A slice of the city is offered to the observer not to survey (a spatial act), but to watch unfold in time. If panoramic vistas from observation decks turn time into space, allowing the eye to make jump-cuts across layers of durational time, in these cases we see the reverse: glass floors turn space into time, unfreezing a more localized view.

SPECTACLE

Our final register, spectacle, recalls the images with which we began this essay. The Greenpeace activists in Toronto and Calgary understood the long relationship between towers and the spectacular. Of course, towers of any kind are obvious candidates for a Debordian critique of spectacle as "capital to such a degree of accumulation that it becomes an image"—a logic which, as David

Harvey observes, has transformed cities into dazzling visual displays of capitalist excess (Debord; Harvey 66-98). We should note, however, that towers were spectacular expressions of accumulated wealth and power long before capitalism. But Debord's spectacle is not the only sense in which towers activate the "spectacular." More simply, towers *tower*. They are eye-catching and extraordinary objects to behold—especially those, like Calgary and the CN Tower, built to stand apart. As such, towers synthesize these two aspects of spectacle, symbolic-ideological and sublime. They are platforms upon which spectacle is both crafted and experienced.

To cite a classic example: Throughout 1999, Paris leveraged the Eiffel Tower's spectacular status to become a global attraction for the countdown to the new millennium. Communities in Toronto and Calgary similarly, if less ambitiously, use their respective towers to craft "spectacular" media events for an array of civic purposes. For instance, charity groups often invite citizens to run or walk up the steps, as, for example, in Calgary's twenty-eight year running "Climb for Wilderness." Each year, newspaper articles about the event abound, recounting extraordinary cases of people, young and old, defying expectations for a higher cause. In spite of, or perhaps *because* of, such virtuous uses, towers also attract subversive uses. In addition to the Greenpeace banners, we might cite country musician and amateur pilot Cal Cavendish's infamous "manure run" of 1975, in which the disgruntled musician flew his plane over Calgary, twice buzzing the Calgary Tower in order to startle the diners in its restaurant before dumping 100 pounds of manure on the city's downtown ("The Day the 'Mad Manure Bomber' Struck without Warning").

Despite their potentially subversive uses, such spectacular vistas remain part of the attraction of towers and are marketed accordingly. Promotional material for the CN Tower, for instance, boasts about its "thrilling" high-speed glass elevators that "give you a breath-taking view as you race upwards at 22 kilometers per hour!" ("High Speed Elevators"). Since 2011, more adventurous visitors are able to experience "Toronto's most extreme attraction," the EdgeWalk. This is the "world's highest full circle hands-free walk" that takes place on the top of the tower's main pod, 356m above ground ("EdgeWalk Overview"). These more recent additions complement the many iter-

ations of restaurants and bars that have been housed at the top of the tower, from today's restaurant "360" to "Sparkles," a nightclub that began in the 1970s as a disco and which would go on to house other subcultural events including punk and rave shows (Benson).

As with other revolving restaurants in towers from Calgary to Vancouver and Niagara Falls, these offer visitors the opportunity to enjoy eating and dancing "in the clouds." During the 1980s and 90s, large video arcades and installations offering tours of the universe greeted visitors of the CN Tower's main level. Each of these different forms of amusement offers experiences of the latest technological innovations—whether video games, lasers and strobe lights, or early experiences with virtual reality—further entrenching the association visitors have between the CN Tower and the world of hi-tech. As such, the tower is consciously made and remade as a site for futuristic tourism and sensational thrills, a contemporary iteration of the "culture of attractions" often associated with early motion picture technologies (see Gunning).

In each of these examples, towers are platforms for spectacular events or experiences that arise in association with the material and symbolic significance of towers as well as their capacity to attract media coverage. Towers should thus be understood as important nodal points within broader networks of urban spectatorship and communal experience.

CONCLUSION

Towers are pillars of horizontal networks, the leverage points by which fantasies of connectivity and nation-building attempt to ascend the vertical axis. The CN and Calgary Towers are the vertical expressions of power and wealth amassed by the Canadian National Railway's conquering of horizontal space and Husky Oil's extraction of subterranean material. Yet, as our analysis shows, these towers are enmeshed in wider networks of activity—not just communal, symbolic, or space- and time-binding—but also ritualistic, perspectival, and spectacular. Through their uses as platforms for different communicative forms, in their capacity for storage, and as disseminators of information, towers can also exhibit medial char-

acteristics. All towers should therefore be considered in ways that move beyond conventional analyses that reduce them to monuments of capital accumulation, pillars of militarily logistics, or expressions of phallic symbolism.

We wish to conclude by emphasizing this point about verticality. Towers teach us the value of casting our eyes up, and their absence in dominant streams of communication and media theory shows a pronounced bias toward horizontal media and networks—railroads, fur trades, highways, telephone networks, and the like. We hope the medial functions of towers described above will provide some preliminary conceptual tools for considering other vertical intermediaries. For instance, how do Montreal's Mt. Royal, Sudbury's Inco Superstack, Halifax's Citadel, or St. John's Signal Hill (among many other possible examples in Canada and beyond) similarly stitch communities together across space and time (for better or worse)? How might a consideration of each site's mediality expand the scope of our understanding of civic culture, both urban and rural? Might analyses of Haida *Gyáa'aang* (totem poles) in terms of verticality open up modes of engaging these structures in ways that reject colonial optics that would diminish their community-binding functions?

Figure 10: Inco Nickel Smelter Superstack, October 2006

Future work might consider the relationship between verticality and mediality in more subtle terms. Recent research on "urban screens" or "media screens" in architectural and media studies literature has been instructive in this regard (see especially McQuire et al.). Such work explores the continued expansion of screens in urban life, from large "Jumbotrons" at sporting events to LED billboards in cityscapes along with buildings constructed with screens built into the form of the building itself (on "Jumbotrons," see Siegel). Might we also reconsider the Calgary Saddledome or Toronto's Scotiabank Arena as part of a more expansive understanding of Canadian media spaces? How can we hope to understand the effects of home-sharing platforms like AirBnB without considering the vertical transformation of many neighbourhoods, particularly in metropolises like Toronto and Vancouver, into arrangements of condominium towers that further separate rich from poor and displace long-term residents from city centres? Can we reconsider the nature of Canadian life by considering a range of media technologies—from in-flight services to flight

control panels—as part of the mediation of airspace? What role does height play in "flat" lands like the prairies? How might we consider things like mountainside chalets and ski hills as themselves medial in nature, offering forms of panoramic visuality that are provided to those visiting the CN and Calgary Towers? (see Dini and Girodo)

Our thinking along the vertical axis need not only move up. Unconventional media objects, practices, techniques, and technologies come into view when we also consider what lies beneath the Earth's surface. Recent work in this field combines media theory with geosciences to understand how the Anthropocene is inscribed into the strata of the Earth itself (Parikka). Digging, drilling, pumping, pulling, and other techniques of extraction, however, have been central to human culture for millennia. Recent research into "petrocultures'" shows that these activities continue to structure global political economy in Canada and beyond (Wilson, Carlson, and Szeman). At the same time, histories of tunnels and subterranean subterfuge remind us that people have taken advantage of the Earth's cover for an even longer time.

As our attention turns increasingly toward the mediation of culture and politics by digital platforms, we would do well to consider "platforming" operations over longer time horizons. We know that towers are central to communication and surveillance networks, as are other "sky media" like drones (Parks, *Rethinking Media Coverage*). But their verticality also provides a basis for conceptual and abstract modeling that might bring into focus phenomena of unthinkable sizes and scales, such as Benjamin Bratton's modelling of "planetary-scale computation" as The Stack (xviii and *passim*). Bratton's model helps us understand that computation exceeds the flat diagrams of nodes and links that have for too long dominated our conceptions of networked communication. Towers are stacks, too (as residents of Sudbury, ON well know). A collective imaginary biased toward two-dimensions and flat ontologies has limited our thinking about such issues. In facing uncertain futures, we need to turn our attention to structures like towers that have been teaching us about mediality along the vertical axis for a very long time.

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ACKNOWLEDGEMENTS

IMAGE NOTES

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