Envisioning a Habitus of Hygiene: Hands as Disease Media in Public Health Handwashing Campaigns

Sheryl N. Hamilton
Carleton University

ABSTRACT

Background  Public health posters exhorting viewers to wash their hands to prevent the spread of communicable disease are common in airports, shopping malls, hospitals, and workplaces. Yet the poster remains understudied by scholars working in communication, health, and governance.

Analysis  Analyzing a large corpus of Canadian public health posters targeting handwashing, this article identifies three themes: the articulation of an embodied pedagogy aimed at daily practices; the recognition of our body surfaces and those of people and things around us as contaminated skins; and the production of haptic visuality.

Conclusion and implications  These posters promote a habitus of hygiene, inviting us to modify our haptic etiquette, to see, know, and inhabit our bodies differently, and to imagine and interact with our environment on new terms.

Keywords  Media/mass media; Visual communication; Cultural studies; Risk communication

RÉSUMÉ

Contexte  Il est normal de voir dans les aéroports, les centres commerciaux, les hôpitaux et les lieux de travail des affiches encourageant les gens à se laver les mains afin de prévenir la propagation de maladies transmissibles. En revanche, il n’existe pas beaucoup d’études de telles affiches par les chercheurs en communication, en soins de la santé ou en administration publique.

Analyse  À partir de l’analyse d’un grand échantillon d’affiches canadiennes sur le besoin de se laver les mains, cet article identifie trois thèmes : l’articulation d’une pédagogie corporelle visant les pratiques quotidiennes; a reconnaissance de la surface de son corps ainsi que celle des corps d’autrui et des objets environnants comme sources de contamination; et la production d’une visualité haptique.

Conclusions et implications  Ces affiches promeuvent un habitus d’hygiène, nous invitant à modifier notre éducation haptique pour que nous voyions, connaissions et expérimentions notre corps différemment et pour que nous reconcevions notre environnement et interagissions avec lui d’une nouvelle manière.

Mots Clés  Médias/médias de masse; Communication visuelle; Études culturelles; Communication des risque

Sheryl N. Hamilton is a Canada Research Professor at Carleton University, appointed to the School of Journalism and Communication and the Department of Law and Legal Studies. Email: sheryl.hamilton@carleton.ca.
Introduction

Contagion, it seems, is spreading again.
— Margaret Pelling, 2010, p. 15

In pandemic culture, hands have become media of disease and dis-ease. In flu season, public health authorities regularly advise Canadians, through a variety of media, that our skins are crawling with disease-causing bacteria and viruses. We are invited to govern our bodies and bodily practices accordingly: getting a flu shot, sneezing into our elbows, and of course, washing our hands frequently. Hands are figured as key vectors in the spread of communicable disease, and over the last decade in Canada and the United States, there has been an explosion of public health poster campaigns targeting handwashing as a central pillar in managing this spread. These posters abound in the public places that stage the more or less indiscriminate encounter of human bodies: hospitals, public transportation, shopping malls, schools, workplaces, sporting facilities, and so on. Disease, it seems, has never been more communicable.

This article deliberately adopts a language of communicable, rather than infectious, disease. It explores not only how we communicate about disease, but also the complex ways that disease communicates, the manner in which it is produced as a communicative object, and the resulting ways in which contagion then becomes a problem of communication. This work takes up the issue of disease mediation rather than health communication or the communication of health. Public health posters are not only a key site for public health communication but also, importantly, the contemporary mediation of disease.

Public health authorities tasked with controlling the spread of communicable disease have long turned their attention to handwashing and have deployed various visual tactics to promote its practice. Rather than asking questions about the immediate effectiveness of these media in achieving their desired public health outcomes, this work explores them as cultural artefacts that do other important work. Like Alison Bashford and Claire Hooker (2001), this article reads public health efforts at educating the public through visual media as part of a larger “culture of hygiene” (p. 1). It suggests that the contemporary culture of hygiene in which handwashing posters circulate is particular to our current historical moment of increased pandemic awareness.

As context for analysis, this article first explores the ways in which hygienic governance and contemporary disease states interact. Second, it considers the intersection of hands, haptics, and hygiene to outline the theoretical construct of the habitus of hygiene. Third, it examines the public health poster as a medium in general; after detailing the methodological approach, it analyzes a series of handwashing poster campaigns from a range of Canadian public health authorities.1 Particular attention is paid to three themes that recur across multiple campaigns, social sites, and jurisdictions. The first is an articulation of an embodied pedagogy targeted at the level of quotidian practice; the second is the re-visioning of our inter-subjective and subject-object relations as contaminated skins in touch; and the third poses a change of visual scale in order to shift the sensory register of self-awareness from looking to feeling. It is in the repeated and regular exhortations to wash our hands—to modify our haptic etiquette; to see, know, and inhabit our own bodies differently; to imagine and inter-act with
our environment on new terms—that a specific habitus is promoted. These posters call us into a habitus of hygiene particularly apt to managing disease at the personal register of the social—through our bodies, body schema, and embodied practices.

**Governance, public health, and diseaseability**

The techniques and tactics of disease governance play significantly in how we know and manage the body (Armstrong, 1995; Bunton & Petersen, 2002; Valverde, 2015). As Bashford and Hooker (2010) suggest:

> [t]he uncontrollability and unknowability of contagion, in surprise appearance in other bodies, in other places, in other creatures, invites systems of control and knowledge: hence the huge scientific and bureaucratic machine of public health, touching on so many levels of conduct and social organization, from the personal and local to the national and international. (p. 2)

Alan R. Petersen (1997) recognizes we are now faced with communication about an “endless parade” (p. 195) of risks that we are exhorted to manage in and on ourselves. These implicate the promotional strategies of what he calls the “new public health” (p. 196) in a framework of governance and risk management. He invites scholars to pay more attention to the self-subjection techniques this context invites.

Much of the governance and public health scholarship since the late 1990s still assumes the goal of the project of public health is the self-production of the healthy subject, who would, naturally, deploy the full range of options available to the neoliberal citizen at risk in pursuing their health (e.g., Gerlach, Hamilton, Sullivan, & Walton, 2011; Novas & Rose, 2000; Polzer & Power, 2016; Rose, 2006). They correctly identify the downloading of responsibility for individual and collective health from the state onto the individual, prudent citizen. Claire Hooker (2011) suggests that,

> [f]or most theorists risk-based public health is characterized by health promotion and education measures which define the maintenance of public health as a matter of individual rather than state, responsibility. Recent risk-based public health is centred on the self-reflexive, responsible actions of individual citizens, who are expected to identify and alter actions which place them at “high risk” of an infinitude of possible pains. (p. 145)

In many domains of healthy living, this production of the responsibilized prudent subject remains an accurate and persuasive lens. But pandemic culture elicits and relies upon a somewhat different logic (Gerlach & Hamilton 2014). In an environment where we are no longer able to isolate ourselves from the risk of disease, we are invited to engage in the now-continual negotiation of our behaviours (deliberate and unconscious) to minimize both the risks we face from others and also those we present to others. Pandemic subjects are thoroughly embedded within an environment of contagion that is increasingly framed as continuous. We are exhorted to act, not in relation to specific risks and within a causal logic but as subjects living in, and managing, a generalized state of what Gerlach and I refer to as diseaseability (Gerlach & Hamilton 2014).

Diseaseability is the affective state of disease attentiveness arising from regular and regularized communications from public and popular sources alike telling Canadians and Americans that we are at pandemic risk. These claims are grounded in
the “evidence” of a now-familiar litany of disease events: H1N1, West Nile Virus, SARS, MERS, Ebola, Zika, et cetera. The threats of pandemic, what Mika Aaltola (2011) calls “pandemic scares,” are familiar events in the Canadian and American mediascape since SARS. Each year’s flu season opens with what is now a recognizable news frame positing “this year’s flu” as the most virulent in recent memory (e.g., Sun & Wan 2018; Dangerfield, 2018). At the time of this writing, authorities had sounded the alarm about a significant rise in cases of measles in Alberta. Even when these pandemic scares do not result in an actual pandemic, which they rarely do, they do work, it is suggested here, to orchestrate our thinking and feeling about contemporary disease states.

In pandemic culture, subjects are regularly asked to understand themselves as not only constantly vulnerable to contracting a communicable disease (not dissimilarly from past disease frames; see Wald, 2008), but also as indiscriminate vectors in its spread, a role that authorities and privileged citizens of the Global North have historically ascribed to the “primordial” regions of the world and their inhabitants. While lived vulnerabilities to disease remain shaped by inequitable systemic structures, in our globalized world we are all contagious—and contagion. Because members of the dominant “we” of the Global North are no longer just at risk of contamination but also risky ourselves, we are cajoled by public health systems to adopt new repertoires of hygienic practices and new ways of thinking of our selves, other subjects, and our interactions in and with our built and natural environments. We are reminded by the press in its coverage of regular outbreaks in all regions of the world, that pandemic is now a permanent feature of a global reality that leaks through the now-porous borders of North and South. This invites different strategies and tactics of public health. For example, the exhibit, “Outbreak: Epidemics in a Connected World” at the Smithsonian National Museum of Natural History in Washington, D.C., frames the management of disease outbreak in the following terms:

It seems there is a new outbreak reported every month. As people continue to change the environment and interact with animals, zoonotic infectious diseases are here to stay.

But so are the dedicated people who fight against them. New technologies, international collaboration, continued scientific research, and better public understanding of disease transmission and prevention will help us to recognize outbreaks, respond effectively, and prevent their spread or recurrence in the future.

Disease is here to stay. Public health strategy is not framed in a language of “cure” or “elimination” but in the prevention of spread and recurrence. In other words, disease is inevitable, and we must manage it.

In this context, the objective of disease governance interventions is no longer a return to a disease-free state. Our environment is too infected, and infectious, for that to be viable. A poster campaign for the flu shot during the 2018–2019 flu season at drugstores in Ontario, for example, deploys the tagline “Flu germs are everywhere.” The various visuals of the campaign focus on the germ-laden nature of everyday surfaces—from a computer mouse or keyboard to the hands of a colleague or stranger—
and on the impossibility of not touching these surfaces as part of our everyday routines. Diseaseability is thus a steady state in pandemic culture. As a result, public health handwashing posters target our bodily practices and our sense of self as bodies in context/action, in order to minimize the damage we do to ourselves and others. This article suggests that the significant rise and persistence of handwashing posters in our contemporary mediascape is an expression of, and serves in part to reproduce, that broader consciousness of ubiquitous pandemic risk. And according to handwashing poster campaigns, we best manage disease risk by managing our selves, and in particular, our hands and their daily work.

**Hands, haptics, and hygiene**

In contemporary disease discourse, hands are framed as volatile, as worrisome media of contagion, and thus as specific objects of regulatory intervention. More particularly, since its recognition as central to controlling disease spread in the late nineteenth century, handwashing has been part of an emerging public health apparatus of manual hygiene. Today, public health institutions from the World Health Organization to the U.S. Centers for Disease Control and Prevention to Ottawa Public Health publish hand-hygiene guidelines and offer multimedia tools to individuals, healthcare facilities, and communities (Centers for Disease Control, n.d.; World Health Organization, n.d.; Ottawa Public Health, n.d.). Other elements in our quotidian repertoire of manual interaction that appear in these guidelines include the ritual of handshakes (Hamilton, 2017), self-inoculation (the unconscious touching of our face), the use of hand sanitizer, and sneezing and coughing into our elbows rather than our hands.

Contemporary strategies of public health governance target us, and specifically our contaminated hands, inviting us to rewrite our selves as haptic subjects. Mark Paterson (2007) suggests the notion of haptic refers to touch “in all its forms” (p. ix). This includes proprioception or “the position, state and movement of the body and limbs in space”; kinaesthesia, “the sensation of movement of body and limbs”; and cutaneous sensations, those sensations that pertain “to the skin itself or the skin as a sense organ” (p. ix), including pressure, temperature and pain. The public health campaigns analyzed below do the work of making us very aware of our hands as a body part requiring our particular attention. They invite viewers to understand their daily relationship to the world and the others in it (animate and inanimate) as fundamentally cutaneous. In other words, they seek to raise our proprioceptive and kinaesthetic consciousness of our hands as media through which we engage the world. They interrupt our automatic and autonomic haptic routines, heightening our awareness of them as routines, asking us to be differently conscious of our context, and teaching us “new” body ways.

This work expands and develops the concept of the habitus of hygiene from Brian Brown, Brigitte Nerlich, Paul Crawford, Nelya Koteyko, and Ronald Carter (2008, 2009) in their research into cleanliness and infection control in nursing work. Their notion is, of course, anchored in the work of Pierre Bourdieu (1990, 1999; Bourdieu & Wacquant, 1992) and his collaborators and interpreters. Habitus directs our attention toward the collectively manifesting ways of thinking and acting that individuals acquire through social interaction. In Bourdieu’s (1990) words it is an “acquired system
of generative schemes” (p. 55). It is a way of understanding embodied reality that becomes de rigueur for a particular group. “Habitus captures the way the social is internalized individually; integrating all past experiences in the form of durable, lasting and transposable dispositions to think, feel and act” (Ahmed & Jones, 2008, p. 60. Put succinctly: “[h]abitus is socialized subjectivity” (Bourdieu & Wacquant, 1992, p. 126). Habitus is not merely a way to explain the operation of ideology on the subjects it determines but also to capture the ways in which biography, history, and the social interact at the level of habit, bodily action, predisposition, perception, and so on. It highlights the spontaneity of social practices while recognizing some of the patterns and dispositions that organize them and make them more or less legible. Brown et al. (2008) suggest there is a value to considering Bourdieu’s suite of concepts in the healthcare setting:

One consequence of drawing upon Bourdieu for sociological understanding of healthcare is to enable an account of the moral and strategic stances that some actors may assume, which permit certain forms of improvisation while inhibiting or disallowing others, perhaps where choices concerning infection control, hygiene and cleanliness are concerned. (p. 1049)

The habitus of hygiene further allows us to look at the way that bodily movement and gesture, the repertoires of our embodiment in everyday life, can be understood as learned through a typically implicit pedagogy. These bodily practices frequently occur at a level below consciousness and discourse. Handwashing is one of these everyday bodily dispositions and practices that often takes place outside of our deliberate, reasoned attention. Yet public health campaigns seek to intervene in these habits of cleanliness. They arrest our attention, making express the bodily enactment of this specific practice, bringing the already habituated set of gestures into conscious thought and purposeful action. This inflects the action with values not only tied to the outcome of individual cleanliness but also to the social value of hygiene. Handwashing is not, therefore, merely to render our hands clean; it is a heightened and embodied state of awareness of the relations between cleanliness, disease, and health. These handwashing campaigns seek to re-write, or perhaps re-train us in our habitus of hygiene if, upon closer scrutiny, it is flawed or in need of work. Inevitably it is, or so the ongoing presence of these posters attests. These messages seek to make us aware of our bodies in action in our personal, quotidian haptic, emotional, and social economies. They ask us to adopt and internalize “new” socially sanctioned repertoires of awareness and gestures. And it is not unimportant that the guided set of knowledges, practices, habits, and awarenesses proffered and provoked by public health handwashing messaging circulates most frequently in a deceptively simple medium in the visual register.

Public health posters and the communication of contagion

Public health poster campaigns targeting handwashing are the new wallpaper of our most promiscuous places, alongside their sibling technologies of touch-free toilets, sinks, and hand dryers in public washrooms and hand-sanitizer dispensers. Notable in their ubiquity in Canada and the United States, handwashing posters are key artefacts in the production of our contemporary habitus of hygiene. In 2010, David Serlin
exhorted scholars to study in more detail the intersections of public health and visual culture and the ways in which those practices are implicated in the implementation of a paradigm of hygiene in the nation-state. He noted that “the transmission of health information” has become “one of the appurtenances that defines one’s subjective engagement with modern life” (Serlin, 2010, p. xxi). Indeed visual public health messages are all around us, and posters are a key genre within this regulatory clutter.

Despite the recognition of posters as an effective technology of public health by health authorities themselves (e.g., Centres for Disease Control, 1994; World Health Organization, 2009), the public health campaign poster has not received the range and diversity of scholarly attention that it merits (see also Cooter & Stein, 2010). In part, this is because when scholars have recognized the value in studying the symbolic and cultural dimensions of disease, the dominance of the paradigm of the “representations of” disease has led to a privileging of varied forms of ideological critiques and a focus on the press as the primary cultural site (see discussion in Brown et al., 2009). When scholars have turned to posters, the extant research is primarily concerned with their effects and effectiveness (or not) in achieving the desired behaviour changes they target (e.g., Boen, Maurissen, & Opdenaker, 2010; Kerr, Eves, & Carroll, 2000; Montazeri & Sajadian, 2004; Pittet, Hugonnet, Harbath, Mourouga, Sauvan, Touveneau, Perneger, & Members of the Infection Control Program, 2000). The instrumental question of effects and effectiveness, while important, does not open up the ways in which public health posters participate in the broader social imaginaries of hygiene and disease. The literature on HIV/AIDS posters, while specific to that particular pandemic, does consider the broader cultural work that those posters do (see Cooter & Stein, 2009, 2011; Gilman, 1995; Heller, 2011; Hunter, 2004; Hunter & LaCroix, 2016; Johnny & Mitchell, 2006; McDonnell, 2010; Oyebode & Unuabonah, 2013; Pelling, 2001; Treichler, 1999). Inspired by this scholarship, and drawing in particular on Roger Cooter and Claudia Stein’s (2009, 2010; Stein & Cooter, 2011) work, this article explores the ways in which handwashing posters operate as communication artefacts, rather than as public health tools. These posters bear the traces of their emergence in the current pandemic culture and adopt particular modes and forms that tell us much about how we are making sense of disease, our bodies, and our environment. In short, even if the posters do not work, they do work.

Posters have specificities as media and propagate various genres of discourse. Analysts must attend not only to what the images convey, in aesthetic or semantic terms, but where they occur, the cultural forms of address they mobilize, the nature of viewers’ consumption of them, and their existence as highly ephemeral material objects. A blend of imagery and text, meant to be read quickly (often while viewers are on the move), public health posters typically employ a single message aimed at encouraging an identifiable change in behaviour in the viewer (Cooter & Stein, 2010). William H. Helfand (2010) frames the poster as a change medium: “the integrated words and illustrations [are] designed to persuade the viewer to change certain behaviours” (p. 128). Cooter and Stein (2010) remind us that: “[t]he public health poster by its very nature moralizes behavior, guiding the viewer to a clear notion of what is or is not socially acceptable” (p. 178). How posters do this, however, is always specific
to the behaviour requiring modification and the historical and cultural context of the communication.

Representational norms changed over the twentieth and into the twenty-first centuries toward posters with significantly less text and more imagery. The range of persuasive tactics public health posters mobilize is diverse (fear, worry, humour, reason, solidarity, etc.), the visual imagery is myriad (animation, black and white or colour photography, high design, realism, etc.), and the resulting emotional effects and affects equally numerous (pride, worry, concern, smugness, amusement, nausea, discomfort, hesitation, distaste, and so on). Viewers bring already existing knowledge to bear on their interpretations, even when that sense-making happens almost instantly (Cooter & Stein, 2010). It is perhaps more accurate to suggest that posters invite the viewing practice of scanning rather than reading, or glancing rather than gazing. While the medium itself is static, disrupting our screen(ed) expectations, we are mobile. Posters in public spaces sit alongside other textual and imagistic artefacts: the graffiti on the bathroom stall door, the handbill for an upcoming band or event, the notice of a missing pet with its pull-off phone number tabs. It is unlikely that any of these specific objects will remain in that space, although others of their kin may appear.

The primary locations of the handwashing posters explored here are high-flow public places, infused with democratic susceptibility. Public washrooms are a favoured site for these campaigns. People are temporarily captive in these places, the routines of those locations themselves require us to slow down for a moment, stop even, at a sink, in a lineup, in a stall, long enough for the poster to make its impression. It bears noting that the bathroom in general, and public washrooms in particular, are locations already embedded in a long history of dirt (Douglas, 1966). In their fascinating study of touch-free technology in public toilets, Martin Dodge and Rob Kitchin (2012) note, “[p]ublic toilets are inherently disgusting places because of the unavoidability of physical contact by one’s own skin onto surfaces used by others, and consequent fear of contamination from other people’s bodily residues … both seen and unseen” (p. 195). We are primed by this embodied sensibility to be receptive to the impress of the poster. The sinks, soap dispenser, and touch-free Airblade™ hand dryer are right there; we can act immediately on the public health hail. Finally, public washrooms are also longstanding sites of social surveillance and moral regulation (Barcan, 2005; Berlant & Warner, 1998; Jewitt, 2011; Molotch & Noren, 2010). Among other scrutinized and monitored practices, handwashing, or its absence, invites observation, judgement, and even commentary from strangers. Thus what is, at some level, a solitary and embodied practice in a public setting is solicited, amplified, legitimated, and rewarded as public performance by the ever-present poster. In all of the public sites in which one finds these posters, handwashing is a “normal” activity, and yet the stability of that normalcy is simultaneously embodied in, and belied by, the very presence of the poster requesting its enactment.

Reading handwashing posters
The corpus of material for the larger study on which this article is based consists of over three hundred public health posters from local, regional, and national public health authorities across Canada and the United States from 2010 to 2018. While Canadian posters are highlighted here, my analysis is informed by my familiarity with
the larger selection of Canadian and American public health campaigns I have collected. Campaigns were identified both through Google searches and sustained internet searches across public health agencies in every province. In addition, certain campaigns were identified through my own travels and photo journaling, as well as through acquaintances who sent photographs. These campaigns were then researched in more detail through the relevant health agency. For this article, posters were drawn from Alberta Health, Toronto Public Health, Leeds Grenville and Lanark Health Unit, Manitoba Health, Provincial Infection Control Network of British Columbia, Ontario Ministry of Health, Ottawa Public Health, Newfoundland and Labrador Public Health, Region of Peel Public Health, Saskatoon Health Region, and the Ontario Hospital Association.

The methodology is both qualitative and interpretive and based in a coding system developed after periods of “immersion” in the corpus as a whole and then refined with more intensive immersion in its sub-categories. The aim was not a semiotic reading of individual posters but rather to identify dominant trends in the broader genre of public health handwashing posters. After immersion in the initial collection of posters organized by health organization, a review was undertaken focusing on dimensions of form and structure. From this, the first-level coding system was developed. It consisted of: 1) dominant informational mode (e.g., instructional, scientific, and so on); 2) dominant visual mode (photography, graphics, text-image proportion, animation, etc.); 3) target audience (general adult, general children, workplace specific); and 4) level of visual/design sophistication (ranked for complex, average, or simple). For each poster, information was noted on jurisdiction and any other information that it was possible to obtain for that campaign (dates, location of campaigns, and designers). The latter information, interestingly, was not often available on the websites of the health agencies. Results were then tabulated for each of the categories to obtain a rough sense of the distribution of mode, form, and structure. Based on this, posters targeted at children were eliminated. They mobilized modes of address and information distinct enough to require a different analytic frame. Children are also located in a different life stage in terms of their relationship to shifting habituses of hygiene. This research focuses on posters targeted at either the general public or more generalized categories of white-collar workers.

A second round of immersion was then undertaken with this reduced corpus, this time with a thematic focus. Dominant visual signs (e.g., germs/viruses, scientific paraphernalia, medical personnel, hands, faces, inanimate objects, children, animals, water, soap, etc.) were noted, as was a sense of the dominant affect the poster immediately solicited (humour, anxiety, curiosity, etc.). This was refined into a coding guide based on relative prevalence. The corpus was reread two further times to code for signs and affects. Tabulating the presence and frequency of signs and affects, cross-referencing them with each other, and taking account of mode and form enabled the identification of three prominent “types”: instructional posters, posters targeting the environment, and posters deploying haptic tactics. Each type will be briefly discussed below.

There was a significant number of instructional posters from a wide array of health agencies across the country. They were often low on visual sophistication, without pho-
tography, and mixed in terms of the use of images and text. From both my own experience and the photographs sent to me, these were most frequently posted in locations where they were adjacent to handwashing facilities. They were not particularly evocative of any pronounced affect and were more illustrative than directly persuasive.

The identified environmental theme came, frankly, as a surprise. The campaigns’ sustained effort to situate the need for handwashing in a rethought physical context was not anticipated. A significant number of posters drew attention to surfaces in our daily lives. There were multiple ways in which their contagious nature was communicated, whether by showing the surfaces or objects, referencing them in words, or even preparing visual aids to be located on the surfaces themselves. Many of these posters used a realist mode, sometimes scientific, and their design sophistication was higher. This was a category striking in its diversity, yet despite a myriad of rhetorical strategies—from the factual/instructional to the humorous to the scientific—it was clear that viewers were being invited to look at their environment as one laden with contagious possibility due to their inevitable contact with it, usually via their hands.

The third theme of haptic visuality was generated both by the overwhelming proliferation of images of microbes and their co-location with hands and a variety of scientific signifiers, and the dominant affect of creepiness. A significant number of posters across a wide diversity of representational tactics and modes sought to make us aware of the “germs” on our hands. There were points when reviewing the posters in this sub-category when the skin on my palms literally crawled, and I had the overwhelming urge to go and wash them. For me as a viewer, it was the photorealistic and more overtly “scientific” posters that generated the most pronounced affective response. This does not mean the posters “work” in any simple sense of the word, as my conditions of viewing them were highly concentrated, but it does suggest that there are affective implications to the repeated consumption of these posters in our daily lives.

These three themes were selected given their repetition and consistency across the corpus as a whole. They were dominant themes running across multiple jurisdictions, different aesthetics, and different modes of address. In this, these three regularities go some way to articulating some of the generic attributes of these campaigns as a whole. In analyzing in more detail each of the three thematic clusters, the idea of the habitus of hygiene began to take shape as a way to capture the campaigns’ sustained effort to get us to rework our practices, to re-envision our world, and to re-feel our hands in action. Posters from the three thematic clusters that accurately captured the dominant elements of the theme in question, that demonstrated some of the diversity of types of posters, and that offered a range of health jurisdictions were selected for closer analysis. These themes and exemplary posters will now be discussed in greater detail.

**Theme one: Embodied pedagogy**

Numerous posters instruct their viewers in how and when to wash their hands. The Ottawa Public Health campaign’s “Your Health is in Your Hands” poster is an illustrative instance (see Figure 1). The serial process of “proper” handwashing is closely detailed for the viewer (in French, English, and graphically): wet hands, use liquid soap, lather and rub for at least 15 seconds, rinse hands, towel or air-dry hands, and turn off
taps with towel or your sleeve. The poster is aesthetically functional rather than eye-catching, seeking to remind us and reteach us the finer details of handwashing, such as washing for at least 15 seconds or turning off the (dirty) taps with now-clean hands protected by a second skin of paper towel or clothing. The campaign has circulated widely for a number of years in public settings in Ottawa and its surrounding communities. In some versions, it overtly makes viewers accountable for their own health, in others, the health of the city.

Figure 1: Ottawa Public Health, “Ottawa’s Health is in Your Hands”

The Toronto Public Health Unit opted for a less rhetorically aggressive campaign, pursuing a more matter-of-fact mode of interpellation. This low-design campaign, similar to its more graphically sophisticated counterparts, seeks to retrain us in public washroom practice in an urban setting (see Figure 2). Again the message is serially organized and the poster is visually spare with simple graphics rather than photographs. In addition to the now-standard description of handwashing, this poster also advises when to wash: after you sneeze, cough, or blow your nose; use the washroom or change diapers; handle garbage; play outdoors; and before and after you prepare food or eat food, or touch a cut or open sore. These necessary quotidian activities are all rewritten as contagious, flattening differences among and across them.

In the Provincial Infection Control Network of British Columbia (PICNet) poster (see Figure 3), the hands are not merely isolated visually but are anatomized, scrutinized, and divided into different areas. Numerous posters in the corpus echo this call to be
sure to get at the “trouble spots.” Typically these are represented, as they are in the Toronto Public Health poster, as the back of the hands, between the fingers, the fingertips, and under the fingernails. This anatomy of contamination is echoed in PICNet’s Grime-busters campaign aimed at healthcare workers (see Figure 3). This poster is also pedagogically structured, but it specifically focuses viewers’ attention not merely on the fact of washing but also on its thoroughness and effectiveness. The instructions are provided in small print, but the visual messaging in this poster is more arresting than that of the Toronto Public Health Unit. Certain areas of the hands are emphasized as places where “germs are likely to hide.”
both through labelling and also in the portrayal of little, cute-ugly cartoon germs. Parts of our hands are represented as a haven for such germs and germs are portrayed as agents, with intention, trying to hide from our efforts. The call is for vigilance in our bodily routines of hygiene and the poster invites us to look at our own hands, not only as severed from the rest of our body, as autonomous media, but as comprised of parts, some dirtier than others, requiring both recognition and extra attention. This same visual logic of pedagogy is present in the Saskatoon Health Region's “Be Germ Smart” campaign. In its poster, “Outsmart Germs ... Wash Your Hands!” (see Figure 4), viewers are specifically told and shown how to “scrub them right.”

![Figure 4: Saskatoon Health Region, “Be Germ Smart”](image)

Hands are articulated as the key interface in the spread of infectious disease, and our hands are (always) at risk and risky because of the activities of daily life and the agency of germs, bacteria, and viruses. Certain activities are singled out as particularly likely to contaminate us. We must be active and vigilant, not only in knowing when to cleanse but how to do so, and how to do so properly. Because of the level of contamination in our environment (which is analyzed in more detail in the following section), however, this is a cyclical process. Our handwork is never done.8

In this theme, the hands are severed from the body, amputated from their embodied and social contexts. The hand, almost always white and never visibly dirty, dominates these images, whether in photo realist or line-drawn form.9 Our hands are
contaminated and contagious, but not necessarily dirty. Adopting a pedagogical mode of address, these posters instruct us in the anatomy of the contaminated hand. And if we adopt their advice, we become more physically aware of different regions of the hand in this practice where the visual and haptic blur.

These campaigns intervene in a quotidian embodied ritual, the habits of which were developed for most adults in their young childhood. What is practiced often as a seamless and largely automatic set of gestures is divided into its component parts and serialized to encourage us to dwell more consciously on our technique (and technic). It shifts our mode of somatic awareness and our articulation of gestural repertoires. Some handwashing routines are better (or worse) than others. While some posters focus on merely reminding us to wash our hands at all, most reinforce the standards our technique must meet in order to be effective in achieving the decontamination we are told we need. We are advised that all areas of the hand must be properly cleansed: fingers, under the nails, between the fingers, the palm, wrists, back of hands. Jewellery should be removed, long sleeves pushed up. Particular regions are tricky, eluding lazy efforts at washing. This is, after all, moral work. Germs are, of course, invisible, but they are also agental, crafty, hiding in the nooks and crannies of our bodily surfaces, lurking in folds: fingertips and nails, the back of the hands, thumbs, wrists, and in between the fingers. These skin surfaces are particularly volatile and can betray us. As a result, they require particular kinaesthetic and cutaneous awareness. This anatomical theme differentiates the skin, requiring us to not only sever but also to divide our body and our learned epidermal attention(s) to it.

**Theme two: An environment of dirty skins**
The Provincial Infection Control Network of British Columbia (PICNet) characterizes our world as one of touch, drawing specific examples from labour practices in a healthcare facility (see Figure 5). While the proliferation of photographic images in this poster provides isolated stills of work in healthcare, many of these representations of work resonate with other familiar occupational practices and office settings: communication technology touchscreens, computer keyboards, telephones, other people, elevator buttons, pens and paper, and other equipment in the white-collar workplace that is touched by many. Work is constituted as tactile activity, and we, as employees, are haptic beings, indeed required to be so. Touch, the poster tells us, even defines us as a generation—*generation touch*—or at least those of “us” with jobs.

The poster (see Figure 5) animates a burden that those of us in generation touch experience: “many commonly touched surfaces never get cleaned.” In other words, our haptic environment is inevitably and thoroughly contaminated. In order to address this constant risk state, we are advised on the nature of our appropriate (and more effective) agency. We cannot control our environment—notably the poster does not ask us to intervene in or on our environment, to cleanse our keyboard or telephone with a disinfectant wipe, perhaps. Instead, we are invited to target our own hands in the haptic circuits of labour (and presumably by extension, daily life, given the corresponding use of many of these technologies for unpaid labour and leisure). This campaign turns our attention to the surfaces we encounter in daily life and to our interaction with those other skins through the particular surfaces of our hands.
This theme figures the encounter with (other) skins, not only those of other humans but also the surfaces of the inanimate objects around us. All are rewritten as fomites. Our world is, we are told, teeming with everyday objects whose surfaces are, in the words of the Alberta Health Clean Your Hands Workplace campaign, “gross” (see Figures 6, 7, and 8). This campaign ran between 2010 and 2015 and was part of a kit circulated to workplaces in Alberta. The employee responsible for activating the campaign in a particular worksite was invited to print a brightly coloured magnified image of a virus on sticker paper and then cut it out and attach it to the contaminated objects in question. The poster’s movement from a general to specific mode of address amplifies its persuasive value. The discernment and focused action of the person who places the sticker on the microwave enhance the message’s salience for that workplace and suggest the possibilities of both abstract and particularized judgement as a consequence of not embracing, or at least being seen to embrace, the message.

This campaign’s arresting headline in larger font teases viewers, inviting them to read on as they stand at the photocopier, wait for their lunch to warm in the microwave, or stand outside a meeting room (see Figures 6, 7, and 8). The text offers scientific information about the levels of contamination of everyday surfaces. Numbers are used to particularly persuasive effect, revealing what is otherwise invisible, and impressing with their large size.

“Sharing more than information?” targets the communal table. We are told that the average desk has 20,961 germs per square inch and invited to imagine the astronomical numbers that must live on a shared table of that size (see Figure 6). Workers
are invited to clean their hands before participating in the rituals of work in the boardroom. The sticker on the office microwave reads, “Don’t think I am clean because you wipe me. I am covered in germs because everyone in this office shares me. And still over 34% of you don’t wash your hands before you eat” (see Figure 7). “We” are then exhorted to wash our hands, to “lather up.” The poster tells us that sharing is conta-

Figure 6: Alberta Health, “Clean Your Hands” (Sharing more than information?)

Figure 7: Alberta Health, “Clean Your Hands” (Microwave)
gious, that casual cleaning is ineffective, and that many of our co-workers are dirty (and there is no way to know who). “Office equipment” informs us of different contamination levels of both shared and personal office equipment: 69 microbes per square inch on the photocopy machine and 3,295 in the same size space on one’s computer keyboard (see Figure 8). “Think about all of those germs transferring from one machine to the other”: touch makes these entities mobile. Hand-sanitizing instructions are included to intervene in the cycle of microbe circulation produced in the regular activities of executing one’s job, and upon our hands as viral media. This is a visually arresting poster campaign, despite its text-heavy nature, and it is designed to literally intervene on the technologies in situ, acting on worker-viewers while they are in the process of encountering the very skin under scrutiny.

The environment of dirty skins theme targets any complacency viewers might have about their quotidian environment and their interactions in and with it. Our environment is constituted as a series of unavoidable encounters among contaminated skins, our own and those of the entities around us, animate and inanimate. The long-standing intimate relation between touch and contagion is thrown into high relief.

Among the several meanings of the word “contagion” — all of which are deeply negative in their import — is the notion of a disease process spread by touch, or even by proximity. We understand that a contaminated object is one to be avoided or kept at a safe distance, lest we too become affected, our bodies opened up to the forces of disintegration. (Shildrick, 2001, p. 154)
Past public health strategies proposed avoiding contagion through the enactment of buffers between the self and the “other.” A prophylactic logic reigned supreme. It is not a new governmental move to fear the skin of the other, to render its contaminability in scientific lingo, and to link it to regulatory regimes, but in pandemic culture, the range and diversity of others expands to include inanimate objects, and even our selves. Touch is the currency of these filthy encounters, and no skin is benign.

This theme adopts a new logic: dirty surfaces and contaminated skins are now a constant in our (epidermal) environment. We are not invited to disinfect these surfaces—they are always already contaminated—instead we must target our own bodies, understood as inextricably embedded in the haptic interconnections of everyday life. Our work and leisure contexts are figured as comprised of relations of touch, inevitably cutaneous, always infectious. The posters interrupt us, visually, in the midst of that very environment, at the moment of our touching. As Mark Paterson, Martin Dodge, and Sara MacKian (2012) note, “touch is relational, is co-produced, is co-constituted in a series of configurations between human and (non)human, and people and spaces alike” (p. 12). These posters (and others similar to them) mediate contagion as a condition of contact, a consequence of inter-acting surfaces, an outcome of skins as intermediation. Bashford and Hooker (2002) recognize the implication of skin in the production and circulation of contagion.

The social management of contagion involves processes of differentiation and identification which are often conceived spatially: as quarantine, as isolation, or as containment within one’s bounded body where skin is the protective barrier and the movement of bodily fluids through that barrier needs heavy regulation. (p. 9)

But it is important to note, as this theme reiterates, that the skin no longer simply protects. As Sarah Ahmed and Jackie Stacey (2001) suggest, skins can be conceived of as more about exposure than containment. “Skin opens our bodies to other bodies: through touch, the separation of self and other is undermined in the very intimacy or proximity of the encounter” (p. 5). The posters articulating this theme invite us to imagine our hands as (dirty) skins (inevitably) in touch with other (dirty) skins, and thus requiring constant cleansing so that they are disempowered as agents in communicating disease.

Theme three: From envisioning to feeling

A number of handwashing poster campaigns invite us to look at our hands—again—to specifically change the scale of our seeing. The point of view of the camera mimics our line of sight but adopts a scientized, and usually microscopic, gaze. The recognition of our diseaseability is mediated through visualized technoscientific techniques and practices. These campaigns envision the germ, not as the animated critter of other public health representations (such as those discussed above) but with scientific accuracy. They offer audiences a visual rendering that cannot be experienced without the doubled mediation of technoscience and the poster itself. The scale changes. We can “see” what is invisible to the unmediated eye: the various bacteria and viruses living on our skin. Lenore Manderson (2010) suggests that images of microbes contribute to “the
imagination of the unseen” (p. 14), and this theme manifests in a number of different design concepts across Canadian handwashing campaigns.

The Ontario Hospital Association tells its employees that “Clean Hands Protect Lives” (see Figure 9). The graphic does not represent the hand but the traces of touch, the imprint of a dirty hand colourized to evoke microphotography, or the image of the hand visible in alternative lights. There is clearly more to the hand than meets the eye. The Region of Peel (in Ontario) deploys the graphic of a magnified spot on the surface of the hand with a photographic image of an unnamed virus or bacteria highlighted (see Figure 10). The implication is, of course, that the entire surface of this hand is seething with such microorganisms. The use of the circle enframes the disease, mimicking the ocular perspective of the microscope. The magnified image reveals; the poster’s scene allows us to see two realities at once.

Figure 9: Ontario Hospital Association, “Clean Hands Protect Lives”

Figure 10: Region of Peel, “What are you doing for the next 15 seconds?”
Taking the technoscientific gaze one step further, the Saskatoon Health Region developed an award-winning line of posters in its Germsmart campaign. The series features a gloved hand holding one of four different petrie dishes of actual germ cultures grown to portray simple graphic patterns: a single hand, a human wiping their head, a human vomiting into a toilet, and a human sitting on the toilet (see Figures 11, 12, 13, and 14). The poster entitled, “Congratulations, You’ve Gone Viral!” tells viewers simply, “Germs make you sick. Wash your hands.” The elaboration in the fine print reads:

Okay so we had some fun here, but these germs are real — we know because we grew them ourselves with actual samples from the Saskatoon area. Doorknobs, cell phones … you name it, we swabbed it. We did it to illustrate that 80% of all infections are spread by hands.

The good news? Proper handwashing can reduce illness by up to one third.

Remember ... clean hands stop germs!
The campaign traffics in the authority of scientific realism by showing us “real” germs from our everyday life, in a specific locality. But again, we cannot see these germs on our cell phone until a scientist applies their envisioning techniques.

Despite our incapacity to see them, despite the inadequacy of our naked (unmediated) eye, the images resonate, utilizing as they do the already circulating cultural repertoire of the visual representation of microbes, viruses, or bacteria. Despite the fact that viruses are smaller than the wavelength of light and are therefore colourless, the microbes are always colourized. Further, the viruses are abstract. They are framed as real, but viewers of the poster are not advised what virus it is. Mireille Rosello (1998) notes about the visual representation of HIV in 1990s popular science:

> We all know that this is the supposedly realistic — but in fact highly stylized — representation of the HIV virus and the fact that we can “recognize” it is due less to our increased scientific knowledge than to the existence of a code of visualization that has become intertextual, international and culturally compulsory. (p. 338).

While Rosello (1998) is suggesting the emergence of a shared visual repertoire for a specific, hyper-mediated virus, her argument can be extended into the contemporary disease mediascape. We can begin to recognize a set of visual codes that repeat and re-circulate in multiple sites of popular culture and that represent virus, in general. In other words, we can recognize that what we are seeing is a virus, probably a real one, and we can credibly act on that recognition, even if we have no idea which virus the poster is suggesting might be on our hands.

This line of posters invites us to look at our hands (again) (and differently) (see Figures 11, 12, 13, and 14). They act as visual aids to our otherwise inadequate sensorium. In changing the scale of one sensory register—specifically enhancing the visual to sense the microscopic—the images proliferating in this theme invite a response from a different sensory register. They invite our skin to itch, to tingle (see Connor, 2004). We do not just see, we are meant to imagine, to extrapolate from the seen to the unseen, at the level of embodied affect. In these posters, the envisioning has synaesthetic effect: optics provoke haptics.

There is an interesting line of scholarship exploring the haptic affects of visual texts. Rebecca Scherr (2013), in analyzing Joe Sacco’s graphic novel, *Palestine*, borrows from film scholar, Laura U. Marks (2000), the notion of “haptic visuality,” namely “a vision that is not merely cognitive but acknowledges its location in the body” (p. 132). Haptic visuality captures the ways in which viewers are involved in the world of the representation, rather than assumed to be always distanced (Marks, 2000). Haptics is not limited to literal touch but encompasses the complex interaction of feeling and emotion. Haptic visuality is an emotional engagement experienced as bodily feeling. Scherr (2013) argues: “haptic visuality can be understood as a connective readerly address incorporating sensation and emotion in its communicative reach” (p. 21).

This analysis is particularly engaging given that the text she is analyzing gives significant attention to the human hand, as do the media explored here. She suggests that human hands often bear an emotive quality (Scherr, 2013). In this corpus, the
overwhelming dominance of the hand as a visual sign calls us into a haptic encounter. Scherr (2013) claims that,

we can think of images of hands as visual metonyms for haptic visuality because the affect of hand imagery depends upon both visual apprehension and tactile understanding; our visual apprehension of these hands leads us to feel, on some level, what these hands themselves are depicted as feeling. They move us from purely visual apprehension to a more corporeal realm. (p. 23)

Yet the affect produced from the haptic visuality of the texts explored here is very different than that of Scherr’s. The mode of seeing that structures this corpus is an outcome of technoscience, and implicates, as noted above, shifts in the scale of our looking, and writing our skin as a vital environment. Steven Connor (2004) recognizes the role that changes in visual practice—specifically “microscopy and apprehension of littleness” (p. 48)—shape the experience(ing) of skin. In his words, “microscopy both acquainted the eye with its ordinary limits and taught it new ways of seeing feelingly” (p. 48).

These posters operate to overcome the limits of the visual, calling us to feel what we cannot see. They do not merely inform us in cold, scientific language just how many bacteria are (re)populating the surface of our body. They show us. They represent the bacterial, and in doing so, envision contagion, always on our hands, those most dominant/intimate of tactile body parts. This casts the viewer as one who sees feelingly. These posters show us our skins teeming. By locating viruses (any viruses) on our hands, by representing them as both tiny and multitudinous, and by anchoring that representation in scientific truth claims, the posters address the haptic as much as the visual, suturing the senses together in a synaesthesia of creepy. We are invited to “feel” the germs on our skin, and to want to wash them off. Now.

Conclusion
These three visual themes—embodied pedagogy, an environment of contagious skins, and from envisioning to feeling—repeat consistently across the much larger corpus of American and Canadian public health handwashing posters examined in the larger project on which this article is based. Together they interrupt the comfort of our daily routines and habituated body-ways. They make visible that which was previously invisible; they push us to be more aware of ourselves as beings in touch; and they constitute our environment as irremediably contaminated and ourselves as ever contagious.

In an interesting study with acute care nurses and their practices of hygiene, Sheryl L. Chatfield, Rachael Nolan, Hannah Crawford, and Jeffrey S. Hallam (2016) acknowledge “the difficulty in intervening to impact how individuals perceive the tactile dimension of hygiene” (p. 7). Keeping in mind the broad notion of haptics that is adopted from Paterson (2007), the posters considered here and the many others in their genre do much visual, cultural, and symbolic work to meet the challenge from Chatfield et al. (2016) to impact how we perceive and even feel the haptic dimension of hygiene. The skins of others become not a sudden threat but an inevitable medium in the ongoing circuit of contamination that is our daily life, because we are in touch, constantly. Our hands then are framed as a specific site of bodily regulation and man-
agement, and we are invited to disrupt our old habits and dispositions toward this specific body part, to learn “new” practices, or old practices anew. The pedagogy of the habitus of hygiene is, in part, literalized as sets of instructions. We are instructed to recognize our hands as the active media they are and to understand them as in need of continual attention. Lifelong habits are represented, reframed, and re-enacted. At the same time, the goal of the work requested is not purification but rather greater awareness of our diseaseability, its constancy, and its embodied and gestural consequences. New dispositions are articulated and new norms promoted. This orientation is reinforced by the widespread and ongoing nature of these campaigns, as much as in the messages themselves. Because, in the contemporary habitus of hygiene, no matter what we do, our hands are always dirty.

Acknowledgements
I would like to thank the anonymous reviewers who challenged me to both hone my argument and make clear my intellectual stance. I give my ongoing appreciation to all of the members of the “Mediating Disease Cultures” research group. Penelope Ironstone was a rigorous, thoughtful, and generous editor at a challenging time, and Tamara Banbury and Scott Mitchell were outstanding research assistants.

Notes
1. While the private sector, and more specifically the pharmaceutical industry, are also thoroughly implicated in the promotion of self-governance through visual media focused on handwashing—indeed it can be challenging to distinguish between private- and public-sector visual texts—for the purposes of this analysis, the focus is on public-sector campaigns.

2. For example, surveillance medicine traces a shift in public health focus from ill patients to the “normal” healthy population. We have now shifted again to a state where normal is sick or inevitably going to get sick.

3. Mark Paterson (2007), drawing on the work of Merleau-Ponty, offers the useful notion of body schema. Body schema are “the systems of possible movements, bearings and comportments which effectively invite the sensory and motor aspects of the body” (p. 22).

4. Charlene Elliott (2005) makes an interesting argument about how we see colour in advertising through an embodied practice of scanning, while Laura U. Marks (2000) suggests the language of glancing rather than gazing may be more accurate to describe how we engage with visual haptic media.

5. The focus here is on paper posters rather than programmable screens, which are a radically different medium. Posters are a relatively low-cost medium that frequently requires the exercise of local agency; they are subject to age and environment-provoked decline of quality and even material existence. They are more common for this type of messaging than screens and have a historical continuity that shapes their cultural resonance.

6. This choice is consistent with my interest in the longer history of public health focus on the hands of the other in an uncontrollable public domain (“the labourer,” “the immigrant,” “the child,” and so on). The pleasures of cosmopolitan life that accrue to the privileged in a particular society are regularly disrupted by the democratic impulse of public spaces and institutions that enable inevitable embodied (if not always physical) contact with the “unwashed masses.” Peter Stallybrass and Allon White (1986) offer a cogent analysis of the ways in which public spaces were becoming “promiscuous” at the end of the nineteenth century through the mixing of different classes.

7. The site of public washrooms includes, though there are differences between them, washrooms in public locations designated as open to all and bathrooms in locations such as the workplace, shared by large numbers of non-intimates, non-familial bodies.
The notion of “handwork” being developed here is indebted to the work of Deborah Schiffrin (1974) based on her use of Erving Goffman.

There is an interesting conversation to activate between the amputation/fragmentation occurring in these representations and the long history and debated status of bodily fragmentation in feminist scholarship (e.g., Gatens, 1991). Unfortunately, that conversation is beyond the scope of this article and the gendering of the hand in these images is not necessarily self-evident.

A range of contemporary scholarship challenges the notion of skin as surface whose primary work is containment (see, for example, Connor [2004] and Lafrance [2018]).

Website
Centers for Disease Control, http://www.who.int/gpsc/5may/tools/9789241597906/en/

References


