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Material Culture Review Revue de la culture matérielle

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ELENA NESI

Independent Scholar

Review of ARTISSIMA. Turin, Italy. 4-6 November, 2022.

Every year in the fall, the city of Turin, Italy, celebrates art week. Artissima is the most famous and the most important contemporary art fair in Italy. Since 1994, the fair has attracted hundreds of galleries from all over the world, which show the works of their artists. In 2022, for its 29th edition, 174 galleries from 28 different countries with almost 1500 artworks participated in the art fair. Artissima is divided into seven sections, each of which explores a different subject.

The Main Section brings together renowned galleries and artists from the international art world to offer the highest quality art. Monologue/Dialogue presents emerging galleries applying with either a monographic booth or with a collaborative work by two artists. New Entries, as the name suggests, is reserved for emerging galleries that have been open for less than five years and are participating in Artissima for the first time. Art Spaces & Editions is a special section reserved for galleries and non-profit spaces. Present Future, curated by Saim Demircan and Maurin Dietrich, showcases emerging artists, preferably less than 40 years old, to show new talents of the contemporary art scene. Back to the Future presents solo projects on great pioneers of contemporary art. This section

gathers artworks created from 1960 to the present and aims to bring international artists who have played a fundamental role in contemporary art back into the limelight. Anna Gritz and Balthazar Lovay curate this section. Finally, the last section, curated by Irina Zucca Alessandrelli, is Drawings. This is the only section among all art fairs in Italy dedicated to this ancient medium.



Figure 1 Artissima 2022, Photo credit: Perottino - Piva - Peirone / Artissima

Apart from the main sections mentioned above, you can walk through other parts of the art fair that explore different themes that are explained in an audio guide available only, unfortunately, in Italian. Following the main theme of the 2022 edition, "transformative experience," the sections

in Artissima raise issues such as discrimination, gender diversity, freedom of expression, and exploitation. The American philosopher L. A. Paul theorized transformative experience in 2014, a concept which debates the importance of this kind of experience in our lives. According to Paul's theory, the most important things that happen during our existence unexpectedly change our way of thinking and being. It doesn't matter if they are conscious decisions, like getting married and starting a family, or unintentional situations, such as distress; both transform us into different human beings (2014). This experience could cause us to question things that we were sure of. As a result, the uncertainty could frighten us. This very moment of shock is the turning point towards something new, unknown, scary, but new. For this reason, opening up to something different can be potentially beneficial in the long term. L. A. Paul wants to make us think about the importance of moving our focus from the fear of changing to the value of changing, to consider the importance of never being static, to contemplate the value of being vulnerable, and to understand the best of every alteration.

Amid global crises, pandemics, and war, it is essential to meditate on things that enable us to face the problems and resolve them effectively. It is not about a passive acceptance of the flow of events, but about conscious participation, which requires realizing what it is about to face these events without undergoing them or letting them dominate us. This is an uncomfortable, difficult, and courageous stance, one that it is important to reaffirm now as never before. In our small way, immersing yourself in something like an art fair or an exhibition can make a difference, as an encounter

with art can be a transformative experience. We enter an unknown world when we engage with artworks that are mostly incomprehensible without the artist's explanation.



Figure 2 Artissima 2022, Photo credit: Perottino - Piva - Peirone / Artissima

We can have a double experience of confrontation with the work of art. The first is purely instinctive and concerns what an art piece, an installation, or a performance communicates to the viewer without them knowing the artwork's meaning. This lack of knowledge leads our brains to make assumptions based on the pure sensations that art transmits to us. The second experience comes after the artist's revelation, based on which we can rationally compare what we initially felt with the author's explanation of the meaning of their work, placing the two readings in a continuous dialogue. This approach extends a welcoming invitation to broaden our minds, urging us to release our attachment to initial perceptions and embrace the inherent fluidity of meaning within a work of art.

Or not to consider it a mistake, but just a different viewpoint that enriches our perception of a virtuous circle.

Because there are too many works in Artissima to talk about in this short review, I decided to mention just the winning artists and their prizes from this edition of the fair:

- Peng Zuqiang, Antenna Space gallery, Shanghai, illy Present Future Prize.
- Nohemí Pérez, mor charpentier gallery, Parigi and Bogotà, FPT For Sustainable Art Award.
- Teresa Giannico, Viasaterna gallery, Milano, Vanni Occhiali #artistroom
 Prize.
- Kate Newby, Art: Concept gallery, Parigi, Ettore e Ines Fico Prize.
- Oroma Elewa, In Situ gallery Fabienne Leclerc, Parigi, Tosetti Value award for photography.
- Vasilis Papageorgiou, UNA gallery, Piacenza, Matteo Viglietta Award.
- Anna Perach, ADA gallery, Roma, Carol Rama Award.
- Dala Nasser, Deborah Shamoni gallery, Monaco, winner of the first edition of Isola Sicilia 2022.
- Alex Ayed e Nona Inescu, ZERO... gallery, Milano e Spazio A gallery, Pistoia, ex aequo winners of the second edition of "ad occhi chiusi ..."

Although Artissima is the most important event, it is only one of the many artistic events in Turin at this time of the year. On the art fair's website, there is a full agenda of events that one can visit around the city. Therefore, for every aspect that has not been possible to explain here, as well as to

view the artworks with the relative comments, I recommend taking a virtual tour at https://www.artissima.art.



Figure 3 Artissima 2022, Photo credit: Perottino - Piva - Peirone / Artissima

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TOLA PORTER

Lowe Art Museum, University of Miami

Review of

Kelly Kristin Jones. NWL. The Luminary, St. Louis, Missouri, United States of America. October 8 – December 10, 2022.

The critical assessment and removal of Confederate and colonialist monuments in America is a long-term effort. The movement gained traction in 2015 after the murder of nine Black members of South Carolina's Mother Emanuel Church by a Confederate-flag-toting white supremacist. To combat the racist ideology that the killer espoused, activists called for the removal of Confederate flags and monuments. Then came the 2017 Unite the Right rally in Charlottesville, VA and the 2020 murder of George Floyd, incidents that galvanized the movement and resulted in a significant change. Many states removed their Confederate monuments (BeenVerified 2020). Despite this progress, there is more work to do. According to a Southern Poverty Law Center analysis, more than 2,000 memorials to the Confederacy still exist (Southern Poverty Law Center 2022).

The labor of organizing protests and offering alternative strategies for monuments has predominantly been taken up by BIPOC individuals and groups, the same groups directly impacted by the unspoken logic behind racist images, to uphold white male power and privilege. For example, St. Louis-based artist Damon Davis has been commissioned to create Mill Creek Valley Monument for the city's Brickline Greenway. The public artwork will commemorate the once-thriving Black neighborhood that, in 1959, was bulldozed in the name of urban renewal. There are white artists, too, who contribute to the critique of public images. Krzysztof Wodiczko, a U.S.-based Polish artist, projects images and videos of immigrants onto public statuary to diversify the monument landscape and raise the profile of the immigrant experience. Even so, the imbalance of labor in the effort to dismantle white supremacy - whether it be in the landscape of monuments or within our institutions and communities – is a significant problem.

The examination of whiteness by white people has long been identified as crucial to completing the understanding of how systemic and institutionalized racism works. Voices as disparate as James Baldwin, Wendell Berry, bell hooks, and Tema Okun point to the imperative for white people to be critical of the damaging effects of white supremacy on people of color and to recognize the wounds white people inflict on themselves by upholding racist structures, narratives, and

implicit biases (Baldwin 1964; Berry 1998; hooks 2009; Okun 2022).

The imbalance of black and white participation in working toward solutions to racism led Stephanie Koch, Interim Executive Director of The Luminary, and Simon Wu, Co-Curator and Program Manager of TRII, The Racial Imaginary Institute, to ask the question: "How can white people dismantle white supremacy within themselves and their communities, and what would that look like in an exhibition format?" (The Luminary exhibition guide 2022). Koch and Wu invited emerging artist Kelly Kristin Jones, a white woman, to bring this question to life in an exhibition at The Luminary in St. Louis.

The exhibition's title, NWL, is short for nice white ladies, and its premise is that white women have been complicit in, and benefitted from, white male power and privilege. The exhibition features work from Jones's oeuvre and newly commissioned artworks that fall into two broad categories. The first category uses photography to address the theme of monuments. The second category includes Jones's recent foray into installation art using commercial advertising and mass production to make its point. Taken together, the artworks explore the public and commercial representations of white supremacy to critique them through strategies that play with their visibility.

Kelly Kristin Jones's strongest artworks are the conceptually clever and critical photographs that comment on American monuments. The photographs confront public monuments by erasing them using technical photographic techniques. One set of images depicts existing monuments

that the artist wrapped with printed images of the surrounding landscape, camouflaging the monument so that it blends in and is difficult to detect. Another group of photographs features Jones's use of the Photoshop "healing tool," a digital technique that can erase unwanted elements from an image. Jones uses the tool to remove an offending monument while leaving traces of her process for the viewer to see, turning straightforward documentary images into critical artworks. In her Dodging Tool series, Jones constructed an oversized large white geometric shape in the form of a photographer's dodging tool, which is used during an image's development process to block exposure to, and thereby lighten, one portion of a photograph. Jones inserts her homemade dodging tools into the camera frame to block a monument, resulting in an image that lampoons the tool's purpose, to lighten or "white" something out. By obscuring the monument, Jones also sets free the surrounding landscape from the monument's message and presence. There is a drawback in Jones's use of industry insider techniques like the Photoshop healing tool and the dodging tool. Viewers without knowledge of photographic production might not grasp their nuanced implications.

Although an emerging artist, Jones's work in critiquing monuments is well established. Her socio-political focus can be linked to the rich social practice tradition of the School of the Art Institute of Chicago, where Jones earned her MFA. An early interest in documenting abandoned Chicago landscapes pivoted to civil war markers after she moved to the south to serve as Faculty Photography Fellow at the University of Georgia. Jones noticed that the problem with

Atlanta's many commemorative signs is the acceptance of their narrative as the single important historical fact while other facts, such as the seemingly small stories of the generations who live near the historical marker, are left undocumented. Jones saw the hidden agenda behind the Confederate marker's existence, to valorize a war that was fought on the Confederate side to retain the institution of slavery.

The exhibition's second category of artworks use as their media commercial advertising and mass-produced objects. Broadly speaking, this group of works explores white Western culture's obsession with a whitewashed, anglicized version of "classical" Greek and Roman empires from 400 BCE to 800 CE. That obsession was largely constructed in the Eighteenth Century by Johann Winckelmann, often considered the father of art history, who defined Greek and Roman art as the pinnacle of human achievement.

Jones enlarged a catalog image of an Urban Outfitters candle in the shape of a Roman column. Another image shows a Roman bust next to a Pantone swatch of skin tones. In some cases, Jones overlays cutouts shaped like Grecian urns over her photographs of monuments. The largest and most prominent installation is a colonnade of sorts made from white plastic urns that Jones sourced from eBay and other second-hand sources. The flimsy white plastic urns had been used to decorate domestic spaces, spaces that are still the purview of the feminine. In the gallery, urns are stacked one atop another, from floor to ceiling, in multiple columns as a critique of the Greco-Roman props of (white) consumer culture. These cheaply made objects of a throw-away

culture are repurposed into modern-day Readymades that would make Duchamp proud. The logic of this installation works well if one understands the sources of Jones's materials, the historical references, and the connection to the traditionally feminine realm of domesticity. Some of these notions are mentioned in the exhibition guide. But to casual visitors who don't examine the guide, the urns may read as too general a symbol to attach to white feminine complicity with white male power.

Often, the indirect strategies of Jones's artworks on display verge on being so subtle as to be elusive, a problem if the point of the exhibition is to contribute to the discourse on dismantling white supremacy. There are curiously few nice white ladies to be seen in this exhibition despite its title, NWL. This discrepancy leaves one with a sense that the exhibition evolved during the installation process. One artwork, "Impulses of the Mob," is a photography installation described in the exhibition guide as "cutout images of white women's hands as they hold on to various contested monuments" (The Luminary exhibition guide 2022). However, this work does not match that description. Instead, we see an arrangement of five pairs of photographs juxtaposing one photograph of a Black person's arm with a photograph of a white person's arm. Curiously, the above description more closely resembles a key work in Jones's oeuvre called "white women and monuments" which, disappointingly, is not included in the show. For this work, Jones built an archive of over 500 images of white women (including her grandmother) posing with monuments around the U.S. The images document the strategy of white women to commemorate

their connection to white patriarchal power by posing with monuments to white men. The collection, which reflects the exhibition's purpose more explicitly than the artworks on view, can be seen on her website and has been displayed elsewhere.

Despite the challenge that some viewers may have in grasping the point of the artworks on display, the exhibition's premise and motive stand as an inspiring example of curators and artists striving to advance racial equity. The programming that accompanied the exhibition is especially notable for contributing to the resonance of the curators' vision. The gallery offered a twelve-week workshop featuring readings of literature by BIPOC writers, writing prompts, and group exercises. Organized by *Undo Bias*, the workshop helped attendees consider, recognize, and begin to undo their own racial biases.

Together, the exhibition, programming, and gallery guide advance the effort to dismantle America's racial hierarchy by addressing the history of complicity, the idea that whites benefit from the racist imbalance of power even if they endeavor to not contribute to its perpetuation. A self-aware vigilance is required for whites committed to racial justice (Applebaum 2008). Although Kelly Kristin Jones's art is not overt, in combination with the exhibition's curatorial premise and programming, the show is able to help visitors examine the ubiquity and normalization of white privilege through symbols in the public and commercial realms and recognize how that normalcy and ubiquity is part of the problem.

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STEPHANIE WEBER

Concordia University

Conceptualizing Nation in the Glass of Canada's Crystal Palaces

The long nineteenth century saw space in Europe and its colonies reorganized on a mass scale. This new figuration of space, especially during the period surrounding the Industrial Revolution, was in part a function of revealing – of making visible. It is no coincidence that this era also saw the birth of technologies that allowed the widespread integration of expansive glass surfaces into more and more of its architectural space, so much so that the glass surface, and its architectural corollaries, have become visual emblems of the era. New structural types such as the Victorian museum and Parisian "arcades," utilizing glass and allowing visibility, were solidified (Mitchell 1988, 7). The Industrial Revolution is often conceptualized in the glimmering shadow of the Crystal Palace, the sprawling paradigm of nineteenth-century engineering that prompted almost immediate global fascination and replications. Both literally and metaphorically, glass in the Victorian era allowed a new immediacy between seer and seen.

In Canada, plate glass saw a similar trajectory, being increasingly inlaid in urban shopfronts in industrializing cities, maintaining visibility for commercial spaces, and constituting large structural areas of

the buildings constructed to house exhibitions of industry and agriculture throughout the Dominion. Canadian society, like that of England, was restructured as a result of the industrial revolution, but its industrialization, like its identity, was coloured by its status as a colony (Spence and Spence 1966, 13-16). This pattern occurred during a period that saw both sweeping changes in the organization of the Canadian economy and built landscape, shifts that drew a variety of reactions from Canadians. This paper examines the mythology of the Crystal Palace in the Canadian context, and considers some examples of Canadian exhibition structures inspired by London's Crystal Palace, focussing in particular on representations of the glass that featured heavily in their design.

Victorian conversations around Canadian nationalism were complicated by the way that Canada's identity was still, for many, inextricable from its connection with Britain (Berger 1969, 1-2). Though Carl Berger's classic argument that Canadian's imperialism was simply "one form of Canadian nationalism" has been challenged effectively from a variety of perspectives, it remains true that ideals of nationalism and imperialism in Canadian history

often overlapped and intermingled within parties, across decades, and even in the changing philosophies of individuals (Berger 2013, 259; Carr 1982, 91-99). The vast array of representations of Canadian crystal palaces in Canadian periodicals, similarly contradictory and inconsistent, are reflective of this political and social ambiguity. I suggest that glass's physical capacity for dualism is an apt metaphor for the contradictory nature of the ideals it signified. I seek to explore the hypothesis that in the Canadian context, the paradoxes encompassed by the developing cultural imaginaries around glass are mirrored by the paradoxes of Victorian Canadians' ambiguous and conflicting relationships with nationalism, modernization, and imperialism.

This paper engages with glass as a material because of the way it can embody a multiplicity of functions simultaneously: as glass reveals, so too does it protect the objects behind it, and as it facilitates an experience of visual immediacy between the spaces on either side of it, it also negates the transfer of sensory experience other than sight by its material solidity. If it is transparent in one instant, in the next it might refract light, shooting rays off its surface and glinting in the sunlight, or appear to glow from within, casting a wash of light from its interior to observers. If the light changes, a surface may suddenly reflect the image of the onlooker in it rather than reveal what lays beyond. The capacity of glass to embody a symbolic ideal – of commodity display or house of curiosities, of nationhood or modernity is complicated by its ambiguity. If the role that glass plays can literally change in an instant, the metaphorical or philosophical meanings that have been ascribed to it are necessarily in a constant state of tension.

I will engage with this tension, suggesting that glass would have embodied a multiplicity of symbolic and referential meanings in an era characterized by shifting political alignments, competing visions of national identities, and a complicated and fluctuating relationship with the concept of "Canada" itself.

Depictions and descriptions of crystal palace exhibition buildings are one place in which the tension between the metaphorical significances of glass in nineteenth-century Canada comes to the fore. Following the erection of Joseph Paxton's renowned Crystal Palace in London's Hyde Park 1851, imitations were constructed throughout the world, and Canada was no exception. Over a dozen exhibition structures termed "crystal palaces" were completed in Canada by 1891, the first four of which were in Kingston, Toronto, Hamilton and Montreal. These structures, built for agricultural exhibitions, came to be recognized as "the appropriate symbol for the improvement of agriculture through technology" by encapsulating technological achievement as well as recalling the symbolism of Paxton's glass structure: its "modernity, clarity, lucidity, order and sense" (Graham 1994, 7; Teukolsky 2007, 88). This signification, however, relied on Canada's emulation of its imperial origins, highlighting the manner in which Canadian nationalism was often articulated in tandem with its imperial connection. At the same time, Canada's structures never matched the original in size or proportion of plate glass because of the country's climate, so coverage and depictions of Canadian structures often either obscured their material condition to praise their success or were critical of their perceived inferiority. Plate glass thus became,

paradoxically, a marker of both Canadian national progress and Canada's short-comings. The dualistic metaphorical quality of glass itself – transparent and reflective, bright and clean yet reminiscent of its less-than-pristine origins – was thus drawn into that larger dualism of national independence and imperial allegiance that characterised the English Canadian political imaginary at this time.

Method

In one sense, my approach to this history is aligned with that of material culture since one of my focuses is on the utility and physical presence of one material. Historians such as Karen Harvey suggest the utility – even the necessity – of scholarly attentiveness to physical traces of the past for what they can offer as points of access to historical moments. By beginning investigations with physical objects, one can start to reconstruct the visual culture of an age, connecting fragments of ephemera to suggest what people were seeing and experiencing during particular periods. As Arjun Appadurai describes, attentiveness to the "lives" of historical objects can also reflect important revelations concerning their exchange value, and thus to question and reveal the political relationship between exchange and value (Appadurai 1986, 3-4).

Though I borrow from these ideas, this paper also differs significantly from these avenues of approaching history. I access glass as a material, in the context of Canadian crystal palaces, through that which illustrates or describes it, not through the examination of any physical artefacts. I explore the possibility of mapping a cultural imaginary of glass in Victorian era Canada in order to begin to define a

nation-specific visual culture of glass. My use of the "cultural imaginary" draws from one anthropological use of this heterogenous term, which defines the "shared mental life" of a culture, an ethos held in common by a people with shared formative experiences (Strauss 2006, 322-323). The literary critic Chris Brooks suggests the term "symbolic realism" for the way Victorians comprehended their visual culture, a manner characterized by the tendency to understand architectural material and elements for their "real" or physical functions simultaneously with, and inextricably linked to, both their symbolic and referential meanings (Brooks 1984, 149). Brooks argues that the boundaries between these meanings were barely perceptible in subjective experience, so the clarity of transparent glass might be understood by contemporaries both according to its literal function of conducting sight and light, and simultaneously through any cultural associations with clarity, including cleanliness, morality, or truth. Because many of these concepts were later fundamentally embraced by twentieth-century modernists, many seminal texts of architectural history have tended both to focus on glass as a material characterizing these later modernist efforts, and to see the glass-heavy Victorian structures that I examine in this essay as precursors to modernist designs, early examples of the forms which came to dominate the zeitgeist some decades later. This paper, however, seeks to address these structures, and the glass within them, on their own terms and in the particular context of Canada in the nineteenth century.

London's Crystal Palace in the Canadian Press

Global emulation of the Crystal Palace was likely in part a result of the proliferation of romantic mythologies around the technologically unequalled Paxton palace in Hyde Park, narratives that are well documented throughout the abundant literature on this structure. Contemporaries marvelled at the colossal scale of its nine hundred thousand square feet of sheet glass, suggesting the relationship of its gigantic curtain walls to space not just beyond the structure itself, but beyond the physical realm (Hardison 1997, 283). Lothar Bucher's much-cited 1851 account of the Crystal Palace, for example, speaks to its spectacular, even dreamlike effect: "incomparable and fairylike," Bucher wrote, it is impossible to see "the actual size or distance" of the structure from inside, as "all materiality" of the building "blends into the atmosphere" (in López 2014, 106; Weston 2003, 76).

These narratives were similarly prevalent in Canadian publications, which emphasized the importance of the London structure for its technical innovation and its symbolic connection with industrial progress. Anticipating the opening of the Hyde Park Crystal Palace in 1850, the Toronto Globe immediately praised "Mr. Paxton's huge transparency" as a "wonderful advance," highlighting the "triumphs of skill" and engineering of "a structure composed entirely of iron, wood, and glass, without a square for brick or an inch of mortar" ("The Crystal Palace in Hyde Park" 1850, 598). The fascination in Toronto papers on the doings of empire reflects the fact that it was by many accounts "a steaming cauldron of Imperialist sentiment" compared to the rest of Canada (Carr 1982, 96). Prior to Confederation, however, many anglophone Canadian subjects both inside and

outside Toronto understood themselves as essentially British, and Canada's connection to Empire was, according to Phillip Buckner, a "source of pride to most English-speaking Canadians" (Buckner 2006, 183-185). To echo awe for the technological triumphs of Britain from the colony underscored the sense of imperial loyalty pervading the English-speaking citizens of the dominion. Such pride in Empire persisted even following Confederation and as intellectual movements toward defining Canadian nationhood took hold.ⁱⁱ Indeed, decades later, in 1889, the Ottawa Journal remembered the relocated palace as a "marvel of skill" for which "no less than 240 plans were drawn, examined and rejected" before the great "tropical garden under glass" could be constructed and inspire a subsequent "epidemic of exhibitions" throughout the world ("Her Centennial Exposition" 1889, 3).

The palace was not only lauded by Canadians for its technical and architectural achievement, but also invited interest for the ways it embodied and prioritised visibility through its total transparency. Architectural theorist Anthony Vidler argued in 1992 that "modernity has been haunted, as we know very well, by a myth of transparency," a modernist ideal of "transparency of the self to nature, of the self to the other, of all selves to society" that was both represented and actively constructed in the "universal transparency of building materials" from the late eighteenth century until the early twentieth (Vidler 1992, 217). Further, Victorian scholar Estelle Murail has proposed that nineteenth-century modernity, in particular, was "pervaded by a scopic dream [...] aimed at making all surfaces transparent" (Murail 2013, 2). This ideal emerges in an

1850 Globe article which notes the "many splendid points of view" that would be afforded as well as the "extraordinary facilities for an illumination" resulting from the transparent walls and roof of the Crystal Palace ("The Crystal Palace in Hyde Park" 1850, 598). In an article in the Journal of Education for Upper Canada, which proposed that the palace "combined recreation and instruction," great detail is lavished upon a description of the "spectacle of unequalled splendor and brilliancy" of the vast, open structure. The article alludes again to the palace's brightness, which might "throw over" the "faculties" of viewers confronted with "the flood of light, which enters its walls of transparent crystal," lined with "the rich products of human skill and ingenuity" ("The Sydenham Crystal Palace" 1855, 121).iii

The popularity of the London Crystal Palace in Canada is also significant specifically for its symbolism of imperial power. Exhibitions brought products from a vast area into one concentrated spot, enacting a collapse and concentration of space and time. The philosopher William Whewell remarked at the time of the Great Exhibition that "by annihilating the space which separates different nations, we produce a spectacle in which is also annihilated the time which separates one stage of a nation's progress from another" (in Miller 1995, 54). This experience was brought directly to Canadians with a panorama exhibition of the Great Exhibition, which was introduced to Torontonians in 1852 by the famed American showman and businessman P. T. Barnum. In advertisements that appeared throughout the Toronto Examiner in August 1852, the public was encouraged to visit St. Lawrence Hall, a large

exhibition gallery on the corner of King East Street and Jarvis Street, in order to see a "Monster Panorama of the Crystal Palace" (figure 1). iv These advertisements describe a panorama of "the whole exterior and interior of the renowned CRYS-TAL PALACE; the Royal Procession; the grand speeches by Queen Victoria and the British Court;" alongside several views of certain exhibitions and "a bird's eye view of the Crystal Palace and the West End of London" ("Monster Panorama" 1852a and b, 3). Panoramas, large paintings on a circular canvas that surrounded viewers on all sides, had spectators look out upon the massive picture which functioned to place them, illusorily, in the midst of a scene (Oleksijczuk 2011, 1). They often required specific infrastructure: purpose-built structures that accommodated an uninterrupted cylindrical photorealistic painting and a platform at the centre. Historian Denise Oleksijczuk notes that early British panoramas "solicited viewers ideologically," suggesting the dominance of the British Empire by bringing depictions of British military victories in far-away places into viewers' immediate proximity (Oleksijczuk 2011, 173-174).^v

That the Great Exhibition was presented through the medium of the panorama is doubly significant considering the philosophical consequences of both platforms. Media theorist Anne Friedberg has observed that panoramas, like other visual technologies that gained popularity in the Victorian era, could be considered detemporalized and derealized "machines of virtual transport" (Benjamin 1999, 5-6; Friedberg 1993, 4). She notes the way that panoramas condensed time and space virtually, mirrored in the way that changes in transportation were altering

industrializing landscapes physically (Friedberg 1993, 4). The Great Exhibition was another moment at which space and time were concentrated, moving products from the world over into the field of vision of visitors to the industrial exhibition, a movement facilitated by the railway system (Miller 1995, 53). The subject matter of the Toronto panorama, then, acted as mirror of the poetic consequences of the panoramic medium itself. In addition, the experience of both subject and medium were layered with the reverberations of imperial power and colonial participation, and these implications of power and vision had echoes in the experience of the architecture of exhibitions.

Such interest in the achievements of the Imperial centre in Canada underscores English Canadian's identification with Britain, as reflected in newspaper coverage and attendance at the panoramic displays. As Phillip Buckner and R. Douglas Francis describe in the introduction to their volume Canada and the British World, "many English Canadians," especially since many were British immigrants or their direct offspring, "had the sense of having two homes" in the mid-nineteenth century, feeling that "Canada was essentially a 'British' nation" (Buckner and Francis 2006, 1, 7; Buckner 2008, 72). By the end of the twentieth century, although English Canadians by then largely described themselves as "Canadian," loyalty to Britain was held simultaneously with a loyalty to Canada, and these citizens, according to Buckner and Francis, "did not perceive any conflict in being loyal both to the Empire and to Canada" (Buckner and Francis 2006, 7; Buckner 2008, 72-73).



Figure 1 "The Monster Panorama of the Crystal Palace" Advertisement, *The Toronto Examiner*, August 25, 1852, 3, Newspapers.com.

Canadian Exhibition Palaces

Canadians were not just viewing the Crystal Palace from afar, however; they were also building their own exhibition palaces, so the same architectural orientation toward display and visibility was being undertaken in the colony. Canadian exhibition buildings were explicitly derivative

of Paxton's structure, echoing the original both in purpose and iconography, and usually known, either officially or unofficially, as "Crystal Palaces." Considering Canadians' fascination with the original palace, these buildings seem to suggest an almost direct line of influence from the imperial centre to Canada. Because these structures served to articulate a certain nationalism by putting the products of national industry on display, it is useful to note the way that they articulated Canadian nationalism by emulating Britain. Buckner's contention, that many Englishspeaking Canadians had a "strong sense of British identity" inextricable from "a strong commitment to the British Empire," aligns with the idea that Canadians may have been articulating a "colonial nationalism," in which the strength of the Empire was felt also to mean the strength of Canada (Buckner 2006, 184-185). Like the original Crystal Palace, Canadian structures eventually acted as central symbolic icons, metonyms for the exhibitions themselves. Images of the palaces appeared on the exhibitions' posters, pamphlets, admission tickets, entry forms, and were even emblazoned on commemorative medallions (figures 2-3). Their significance was underscored by the way they laid claim to the moniker "crystal."

The architects of Toronto's 1858 Palace of Industry were Sandford Fleming and Collingwood Schreiber, who designed it for the Board of Agriculture for Upper Canada as a permanent structure to house an annual provincial exhibition of agricultural and mechanical products (Crystal Palace 1858?, 13). The glass of the Toronto walls was imported from Chance in Birmingham, the same suppliers of the glass of the London palace ("The

Thirteenth Exhibition" 1858, 2). In 1879, it was dismantled and moved to a new site on the Provincial Exhibition Grounds, reusing the majority of the woodwork, roof, columns and iron work, sashes, and glass, and remedying problems with the floor, which had rotted, while enlarging its interior and making the space more conducive to introducing natural light ("The Provincial Exhibition" 1879, 2). The glass from the old site was reused and re-cut before it was installed in the new structure ("The Provincial Exhibition" 1879, 2).



Figure 2 Crystal Palace Medallion, 1880-1882. C4-0-1-0-2, acc #1981-127. CNE Archives, Toronto, Ontario, Canada.

Montreal's palace, designed by the Montreal architect John William Hopkins, was inaugurated in 1860 by the Prince of Wales where it was "feted by the citizens within its glass and wooden walls" as "The Provincial Exhibition Building and Museum of Canadian Industry and Art," though many newspaper articles referred to it simply as the "Crystal Palace," especially as the nineteenth century

progressed ("The Provincial Exhibition Building" 1860; "From the Ashes" 1896, 3; Unattributed, "The Crystal Palace"). The glass that made up this structure was German, so like Toronto's, its glass plates were imported from Europe (Hawkins 1986). It was originally located on St. Catherine Street West on the block surrounded by University Street, Cathcart, and McGill, on a location owned by the University. Like Toronto's palace, it was enlarged and moved some years after it was originally constructed. In 1878, it was moved to the "Exhibition Grounds," between Avenue du Parc and De L'Esplanade, at some cost to the city following a legal dispute between the building owners and the property on which it stood ("The Crystal Palace Grant" 1878, 4; untitled 1878, 2; untitled 1879, 1). There, it hosted "every exhibition in the city" in an expanded structure with new space surrounding it ("From the Ashes" 1896, 3).



Figure 3 "Admission ticket to the inauguration by H.R.H. the Prince of Wales, 1860" Montreal, 1860. M14327, McCord Museum

The non-domestic origin of the glass in Canada's vernacular palaces is worth pursuing further. As in England, many Canadians were involved in the project of constructing a narrative of progress and civilization, and if glass had come to ideologically encompass modernity throughout the British empire, its presence and manufacture in Canada's leading urban centres may well have suggested a country coming into its own as a self-sufficient, industrializing nation (Armstrong 2008, 1). Canada's position as a colony of Great Britain meant that it was expected to be both an exclusive market for manufactured English goods and a supplier of England's raw materials, but not to manufacture its own industrial goods (Spence and Spence 1966, 16). Attempts at establishing a colonial production of this industrial product were thus hindered by British policy and affected by trade and tariff agreements with Britain (Pacev 1981, 38). vi Colonial production thus remained inferior to that of the imperial centre and importation of plate glass remained the norm in Canada for the entirety of the century (Pacey 1981, 33-47).

The function of these structures is also significant for its connection to the identity-making of the nation. In international exhibitions that featured Canada, the British government promoted products and raw materials from the colony, demonstrating that it was a "land of abundance and promise" (Buckner 2008, 79). On the domestic scale, these buildings were used for a variety of fairs and exhibitions displaying "a total representation of colonial society, from farmers and fisherman to manufacturers and mechanics," which were funded by Provincial governments, often with an explicitly didactic purpose, "to measure and affirm

national identity" (Heaman 1999, 85). These fairs, particularly when they began to be held annually in these purpose-built structures in the late 1850s, attracted large crowds, and there were often multiple fairs each year in cities across Canada. The 1858 Toronto Exhibition was reported to have attracted "upwards of twelve thousand persons" by train and steamboat from Hamilton, Collingwood, Montreal, Ogdensburg (New York State), Niagara, and St. Catharines ("The Visitors and the City" 1858, 2).

When exhibitions were held in these structures, visibility was the primary function of the architecture; glass played a facilitating role, literally and metaphorically, for this experience of perception. Exhibitions were sites of spectacular displays and competition intended for widespread visual consumption, and the ability of the palaces themselves to facilitate this sustained gaze of exhibition visitors is encapsulated by the physical transparency of glass. At once, palaces provided an unadorned backdrop for the display of objects and acted as objects of wonder and advancement themselves. Many newspaper articles emphasized the ways that exhibitors "placed their goods in allotted places, so as to show them to the best advantage" ("The Union Exhibition" 1859, 2). vii Small glass cases also proliferated throughout the interior of the spaces. In an 1862 description of that year's Provincial Agricultural Exhibition in Toronto, the wares of Thomas W. Poole, a doctor, were listed in full in the Globe, with the paper nodding to the containment of all the specimens "in glass bottles, collected and arranged by himself" ("Seventeenth Annual Exhibition" 1862, 1).

Despite being described as direct descendants of the original palace, however, Canadian exhibition buildings were not simply smaller palaces of glass and iron as one might assume. The Montreal structure was largely constructed of white and rose-coloured brick, its roof was tin, and the frames of both the Montreal and Toronto buildings were composed of timber as well as iron. viii The Toronto structure was built on a foundation of brick, and though its sides and roof contained large panels of glass, its frame was trimmed with light green, making it not entirely clear or even unadorned, and the spandrels of its roof were criticized in the Globe for appearing "unnecessarily heavy looking," a stark contrast from the lightness so often emphasized in the original structure ("The Provincial Exhibition" 1878, 8; "The Thirteenth Exhibition" 1858, 2). The author suggested that this heaviness must mean that the structure was "of course, all the more substantial," but wished that more expense had been spared to have the glass walls elevated, and the "solid massive roof" broken up, in order to "heighten the effect of the building considerably" ("The Thirteenth Exhibition" 1858, 2). Significantly, the glass that made up the Toronto structure seems not to have been fully transparent; the vertical windows are often referred to as "obscured glass," and, inside, the building was painted with "light colours," and ceilings "light blue and studded with gold stars" ("Exhibition Park" 1878, 1). An 1864 newspaper article even recommended certain renovations to Toronto's palace, including "thoroughly painting" the "whole of the interior and the glass" (Crystal Palace 1858?, 12; "The Provincial Exhibition" 1858, 2; "The Provincial Fair" 1864, 1). ix Upon the inauguration of the Canadian Exhibition Building, the

Globe even argued that though it had been "erected on the general plan of the Sydenham structure," it "[could not] lay much claim" to the "appellation" "Crystal Palace," "a great portion of the material being wood." "The French name – Palace of Industry' – seems for many reasons the most suitable," the author argued, subsequently referring to it as such ("The Provincial Exhibition" 1858, 2). Pride in these sites of nationally significant architecture thus sat uneasily with disappointment in their inadequacy to the original.

Scholars such as Fern Graham reason that these material differences necessitate a framework that would allow historians to consider Canadian crystal palaces as individual, nation-specific articulations of a certain building type (Graham 1994, 4-12). Applying such an understanding would necessitate a shift in emphasis from the glass panelling to the other materials that made up the structures, since masonry and tinning is what made Canadian palaces distinctive. Indeed, even those Canadians who emphasized their connection to Britain sought to indicate that they were "British, not merely British," or "British, but on their own terms and in their own way" (Buckner 2008, 74). In one respect, an argument for nationalistic individuality seems to have teeth, particularly in sources following Confederation, when intellectual movements that sought to establish and solidify a "Canadian" identity gained force and popular support (Hastings 2006, 92-95).^x Consider, for example, the nationalistic thrust of an 1880 report on Toronto's Dominion Exhibition of that year, which complained about the lack of visibility of the Canadian flag: "This is a Canadian exhibition, and Canada has a flag, but it was

conspicuous by its absence," wrote the author, going on to emphasize that "all these are the productions of Canada, the raw material is Canadian, that the hands that have fashioned them are Canadian, and [...] to Canada belongs the honor and credit of the exhibit" (E.W. 1880, 6).

The use of these buildings further suggests their symbolic role in reifying Canadian national identity, for in addition to their role as homes for Provincial exhibitions, these structures were also often used for politically significant nationbuilding events. Montreal's palace saw celebrations of the birthdays of influential public figures, served as a concert hall for singers, provided the site for troop promenades of the Rifle Brigade, and was the sleeping quarters for 1,048 attendees of a celebration of Saint-Jean-Baptiste day in 1874 (untitled 1863, 1; "From the Ashes" 1896, 3). Toronto's palace was used for industrial and agricultural exhibitions on both the provincial and county scale, but also for unrelated fairs and other large gatherings including speeches, luncheons, banquets and concerts (figure 4) (Crystal Palace 1858?, 13; "Crystal Palace Luncheon Rooms" 1881, 1-4; "The Celebration in Toronto" 1875, 5). Exhibition "spectacles" were another major example of the use of crystal palaces as backdrops for the reification of national identity. At these events, held during industrial exhibitions, the process of nation-making was central. These shows acted out historical events using elaborate sets, ensembles of actors and even firework displays, and were intended to draw crowds to the expositions and entertain them in masses. The Canadian historian Karen Stanworth has suggested that these spectacles served both as entertainments and as codifiers of "cultural narratives about citizenship, empire, and Britishness" (Stanworth 2015).



Figure 4 "Military Lunch at the Crystal Palace After the Review on the Queen's Birthday," June 7, 1879, BANQ, Patrimoine Quebecois, 0002733062.

One acutely political example of the multi-use of these buildings, an 1870 illustration of "Volunteers Drilling at the Crystal Palace, Toronto," depicts the use of the structure for military organization (figure 5). In the image, small crowds of people look on toward Toronto's crystal palace, gathered in groups to take in a scene that suggests a spectacle. Here, however, the palace is not the object of their gaze: it forms a backdrop for a gathering of militiamen forming in preparation for the Red River Expedition to quell the Métis rebellion led by Louis Riel.xi In the image, the material of the palace itself is uncertain. The parts that were transparent are darker than the roof, which seems to suggest that the interior is darkened, so the ability of the structure to let light enter and leave it is not emphasized. Indeed, according to an 1864 article, when used by troops, the palace was an "unseemly object," "partitioned off into rooms and darkened" ("The Provincial Fair" 1864,

1). However, its presence in this drawing is significant: the architectural details of the building are related in exacting detail, despite the focus of the image, and an accompanying caption is sure to note that the building was "principally composed of cast iron and glass" ("Volunteers Drilling at the Crystal Palace" 1870, 505). That the palace is constructed of glass is thus underscored, suggesting the symbolic power of the material, despite the fact that its materiality did not lend itself to this use. Crystal palaces, then, both housing these events and seeming to encapsulate in themselves Canada's newest industrial technologies, would have been associated with national pride and imperial belonging, as well as development and progress. That these spaces were also used for military purposes is significant beyond the pragmatic consideration of their physical ability to shelter a large number of people. The structures, providing the backdrop for nation-defining events, act both as testaments to Canada's technological ability to construct an architecturally complex endeavour using modern materials and symbols of events literally held to demonstrate technological, agricultural, and artistic success for audiences throughout and beyond the nation. In both instances, nationhood is key.

Yet nationhood is only part of the picture of the Canadian crystal palaces, and indeed there is a risk that emphasizing the physical distinctiveness of the Canadian buildings and the role they played in nationalistic discourse skews our historical understanding by ignoring the manner in which Canadians most often depicted their structures: as echoes of their Imperial progenitor. On close examination, it becomes clear that images in Canadian

sources, both before and after Confederation, often downplay the material differences in the service of illustrating the crystal palaces as though they functioned like the original. The argument for Canadian specificity, while clarifying the material makeup of the structures, might thus also blind us to the visual culture that was developed to mythologize the buildings, which is central to a visual historical understanding of what they meant culturally. Many of the textual sources that describe these structures align them with the original palace, both by means of direct comparison and by description that seemed to imply more of a resemblance than was the case. Toronto's Exhibition Building was praised for its "admirable likeness to its great prototype of Hyde Park," a descriptive letterpress from its opening explaining that "the outline is very nearly the same, and the transepts are produced in miniature with excellent effect," and that its architects had "successfully reproduced a good copy of the great original" (Crystal Palace 1858?, 12). "The walls are chiefly cast iron and glass," described a report in the Globe ("The Thirteenth Exhibition" 1858, 2). A transcription of an address from Queen Victoria in the Montreal Gazette, promising the attendance of the Prince of Wales for the inauguration of the first Toronto palace, called that structure "similar in design, but of smaller dimensions to those of London and Paris" ("The Queen and Canadians" 1858, 2).



Figure 5 "Volunteers Drilling at the Crystal Palace, Toronto," *Canadian Illustrated News* 1, no. 32, June 11, 1870, 505. Library and Archives Canada.

Even more often than being directly compared to the London palace, Canadian versions were described with romantic language that linked them to the original structure. A collection of poetry by the Canadian writer C. W. Picton, dating from 1864 and addressed to the Mayor of Kingston, includes verse on the small palace in that city, which, positioning the architecture in some romantic celestial light, refers to the "enchain[ment]" of one's eye induced by "all the sparkling light/That from afar is shewn in colors bright," so much so that the speaker "forget[s]" whether he is "in earth or heaven" (Picton 1864, 17-18). In 1878, the Globe called Toronto's structure an "exceedingly beautiful and commodious building," noting its purpose to "furnish simple accommodation for the advantageous exhibition of goods" ("The Provincial Exhibition" 1878, 8). The Globe also admired the "plentiful supply of light admitted not only through the crystal walls of the building but through the roofs" of the Toronto palace. According to the Gazette, the Montreal palace was similarly "possessed of every convenience possible for

admission of the great desideratum, light" ("Our Exhibition" 1880, 4). It would seem that visitors to these buildings experienced a feeling similar to those awed observers who reported on the Hyde Park Crystal Palace's ability to flood its halls with a sense of wonder afforded by total transparency.

Some Canadian images of these buildings similarly depict it as an ethereal, transparent mass comparable to the London palace. In one postcard depicting Toronto's exhibition grounds, the Crystal Palace appears in the background of a scene of fairgoers congregated around an outdoor festival (figure 6). In the image, the structure itself appears faded against the dark tones of the gathered guests and the foliage in front of it, and its lightness makes it appear ethereal, almost ghostly. In keeping with the romantic descriptions of the structure that appeared in the city's newspapers, this image lightens the structure by physically depicting it with lighter ink. Here, the faded, indistinct quality of the structure also leans into the mythology around the original Crystal Palace, which was often described as "fairy-like," of "fairy fabric" or part of an "enchanted scene in fairy-land," enabling a "spectacle of unequalled splendor and brilliancy" ("The Crystal Palace" 1880, 73; "The Sydenham Crystal Palace" 1855, 121-123). Brooks' contention, that in Victorian architecture viewers might find "a synthesis of what the world is like in imaginative terms, with what it is in concrete terms," suggests the significance of such romantic imagery: in expressing realistic imagery, illustrators and writers also sought to communicate the romantic symbolism it would be understood to entail (Brooks 1984, 157).



Figure 6
"Exhibition Grounds, Toronto." n.d.
Postcards. Toronto City Archives,
Spadina Records Centre, Box 158722,
Folder 37, Series 330, File 272, Sheet 1,
Toronto, Ontario, Canada.

The depiction of how the palaces conducted light also differs greatly between illustrations. In a July 1879 image of the Montreal Crystal Palace published in the Canadian Illustrated News, the structure is situated in its new location on the "Dominion Exhibition Grounds," presentday Parc Jeanne-Mance (figure 7). In this image, the ability of glass to transfer light, casting a glow that reaches the area surrounding the structure, is central to the way that the scene functions. An accompanying image of the interior published alongside it depicts a crowd of people within the palace, gathered both on its ground floor and on balconies within the structure (figure 8). In the image, light streams down, seemingly through the roof of the structure, falling in beams and illuminating the heads of those in the crowd not sheltered by the rafters. The beams themselves, articulated with defined lines, serve to highlight the function of the structure: to illuminate its interior. The glass panels on the Montreal building thus assume primacy in these images despite the presence of other materials in the actual structure: here, the entire

building appears to be lit from within, and the whole of the structure conducts light with immediacy and lucidity. Because of the material conditions of the Montreal structure, this could not literally have been true. In less stylized images of the structure, the roof often appears heavier and the interior darker and more crowded. A William Notman photograph, taken from the interior of the structure in 1874, shows light streaming into the main thoroughfare, primarily through the façade, while much of the space in the cloistered areas is thrown into shadow (figure 9). An 1882 drawing for the Canadian Illustrated News by the architectural illustrator Eugene Haberer accurately darkens the ceiling and side walls of the building, so the promenade space of the exhibition appears not airy or fairylike, but interior and even slightly cramped in some areas (figure 10). More common, however, were the romanticised illustrations that visually aligned Canadian palaces with the imperial original by means of their illustration.

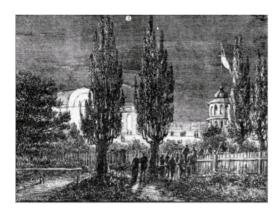


Figure 7
"Crystal Palace, Montreal, by Electric Light – Incidents of the week," *Canadian Illustrated News* XX, no. 3, July 19, 1879, 40. Library and Archives Canada.

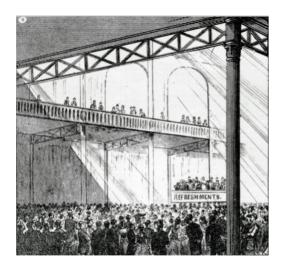


Figure 8
"Interior of the Crystal Palace, Montreal – Incidents of the Week," *Canadian Illustrated News* XX, no. 3, July 19, 1879, 40. Library and Archives Canada.

In visual images and printed descriptions, Canadian palaces also seemed to adopt the centrality and dominance of the original palace, which housed all sections of the exhibition in its comprehensive casing. At Canadian exhibitions, by contrast, attractions would have been spread across the grounds in multiple buildings, but in many of these illustrations, other structures are not visible, and the palace occupies the singular visual focus. The centrality of these main exhibition buildings is echoed in this description of the Toronto palace in the Globe: "during the day the city presented a very busy appearance, the streets being crowded with well dressed persons, male and female, wending their way to the great centre of attraction – the Crystal Palace" ("The Visitors and the City" 1858, 2). Though Canadian exhibition grounds would have featured multiple buildings and significant outdoor portions, the symbolic power of a

central, dazzling glass structure was apparently just as true for writers on the Canadian structures as it was for those who wrote about the original palace with fervour.



Figure 9
Batt, H., "Interior of the Montreal Crystal Palace decorated for the St. Jean Baptiste Day, 1874," 1874, photograph. Library and Archives Canada, PA-028714, https://www.bac-lac.gc.ca/eng/collectionsearch/Pages/collectionsearch.aspx?q=jean%20baptiste%20montreal%20crystal%20palace&

In many representations of the Canadian palaces, then, the mythology of their glass is consistent with that of the original 1851 Crystal Palace in London. Despite their material differences, in illustrations and in popular press descriptions, the palaces appear as the spectacular object of the gaze of viewers, a central anchor for the exhibition, and as transparent channels for the unmitigated transfer of light.

Images and descriptions in Canadian periodicals communicate the structure's spectacular role as both object of and backdrop for the spectacle of provincial exhibitions meant to draw crowds, demonstrate Canada's technological advancement, and engender feelings of collective pride and identity.



Figure 10
Haberer, Eugene, "The Montreal Exhibition – Interior of the Main Building," ink on paper – photolithography, *Canadian Illustrated News*, September 30, 1882. McCord Museum, M994.104.1.26.217. http://collections.musee-mccord.qc.ca/en/collection/artifacts/M994.104.1.26.217

Conclusion

The tension between the distinctively Canadian appearance and role of these exhibition buildings and the consistent effort to align them with the legacy of Britain's

is directly tied to the presence, quality, origin and ideal of glass in these structures, and this tension is encapsulated materially by glass, which could behave in two ways at once. Canadians' fascination with the glass of the London Crystal Palace, as indicated in their print culture, is indicative of a colonial loyalism bound up in the narrative of imperial power. Attempts to recreate this structure on a smaller scale follow this trend, but also indicate an effort to distinguish the nation. Theoretically, an impressive glass structure, designed, sourced and erected by a new country, might serve as a central symbol of that nation's independence and modernity, particularly as glass architecture came to signify that modernity. If these structures were emblematic of the success of the nation, however, it is also significant that the glass that made these structures modern and distinctive was sourced from outside of the nation, along with their stylistic inspiration and the nature of their function. The structural changes necessary for architectural adaptation to Canada's climate also made direct emulation impossible, and writers and illustrators responded in a diversity of ways: variously concealing or misrepresenting the true amount of glass in the palaces in order to align them with London's or assert their success, or describing their appearance accurately with either pride or criticism, but all the while continuing to place them at the centre of symbolically significant national events.

As historian Douglas Cole has noted, nineteenth-century Canadian nationalist movements were directly rooted in British cultural and racial identity, so the attempt to assert Canadian national success by emulating London is consistent with the manner in which imperial and

national identity were often affirmed simultaneously, however paradoxical their concurrent thrusts of independence and allegiance might have been (Cole 1971, 165-166). The cognitive dissonance implied by the prevalence of narratives or images that overstated or misrepresented the presence of glass in order to both align Canadian exhibition buildings with the original and articulate Canadian independence is significant. The paradoxical dualism of glass, a material bound up in architectural articulations of this national success through emulation, is thus indicative of a larger duality, one in which Anglo-Canadian nationalism was inextricable from British imperialism.

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own industrial goods. Even after the enaction of the Jay Treaty in 1796 allowing trade with the United States, British trade policies remained the most influential force on Canadian industry.

¹ In the eighteenth century, Canada's position as a colony of Great Britain meant that it was expected to be both an exclusive market for manufactured English goods and a supplier of England's raw materials, but not to manufacture its

- ii The Canada First movement, founded in 1868, for example, though explicitly a movement championing the creation and promotion of a national identity, championed Canada's voice and influence through the Imperial Federation Movement, which would allow autonomy through participation in Empire.
- iii In July 1885, the same *Journal* described the reconstructed palace at Sydenham in detail, suggesting its interest as an educational site. See "Description of the New Crystal Palace at Sydenham," *Journal of Education for Upper Canada* 7, no. 17 (Toronto: Lovell and Gibson, July 1854): 123.
- iv The building was moved to this site in 1850, and is still standing in this location. See "St. Lawrence Hall National Historic Site of Canada," Canada's Historic Places: A Federal, Provincial and Territorial Collaboration, Administered by Parks Canada, https://www.historicplaces.ca/en/rep-reg/place-lieu.aspx?id=7527.
- ^v For an examination of the recurring subject matter of panorama displays, see Oleksijczuk, 2011.
- vi The period between 1845 and 1865 was one such period of economic strife, a recession catalysed by the laissez-faire Whig policy in the British Parliament. The 1849 repeal of the British

- Navigation laws was also a shock to Canada's economy as preferential trade agreements with Britain had shaped the colony's economic and industrial structure.
- vii The cited article covers the "united" exhibition of the Toronto Horticultural and Electoral Division societies.
- viii The descriptive letterpress for the Toronto structure additionally notes that the "essential part of the building is constructed of cast-iron." See *Descriptive Letterpress* (Toronto?: 1858?): 13.
- $^{\mathrm{ix}}$ The Dublin Exhibition Building also used "obscured glass."
- x For example, editors and writers of the monthly periodical *The Anglo-Saxon* (1887-1900), as Paula Hastings (2006) identifies, sought to construct a specifically Canadian identity and distribute such ideas through literary means. Its writers believed in the superiority of and necessity for Canada to privilege the singularity of white, English speaking and Protestant identity.
- xi Given the focus of this paper on articulations of Canadian nationalism, it is significant many British-descended Canadians understood Metis as an "other," and constructed the identity of "Canada" and "Canadian" in opposition to such "others." See Buckner 2008, 75.

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Material Ways of Looking: A Methodological Proposal for Visual and Material Culture Studies

Material ways of looking privilege the knowledge and experiences of the objects contained in a visual or material representation - from the contents of a work of art, book illustration or statue, to a vase, advert, or puzzle – as well as those of the objects' producers and their identity-related and cultural contexts. By drawing material culture into the realm of visual culture, we attempt to overcome an evident flaw in western visuality -that it has been created primarily by and for white men, at least until recent decades – by associating identity with material objects represented within a book illustration, painting, and so on. Such an approach fundamentally requires us to ask new questions of visual representations. In tandem, its methodological moorings from anthropology, cultural studies, and critical race studies complicate visual objects in novel ways that allow us to make visual culture of the past more inclusive and relevant to a broader range of demographics.

This essay explores several material ways of looking so to demonstrate methodologies that can be brought to any work of art or visual representation while forging critical pathways that help overcome the whiteness of western visual culture, particularly in the past.

The Beneficiaries of Visual Culture

Whether in a gallery devoted to renaissance art or a park filled with commemorations of a country's founding fathers, in visual and material culture studies we as scholars tend to limit any assessment of identity to the demographic represented by the work's human subject or that of its creator. Until recent decades, entire demographics were excluded from or only featured in particular moments of representation, for example, Black people performing labour in a nineteenth-century engraving or women posing for the male viewer. As a consequence, we have trouble seeing marginalized groups in positions of power, asserting knowledge, or dominating those who have marginalized them. As Ananda Cohen-Aponte has observed, it can also be difficult to trace information about marginalized peoples' contributions to producing art objects, for instance the labour conditions under which colonial Andean art was produced and how Indigenous and mestizo artists engaged in their creative and professional practices (Cohen-Aponte 2017, 67-94).

Instead, we tend to see the final product – the colonial-era cathedral with its baroque-style paintings, hybrid façade, and locally-sourced building components, all of which serve as a beacon for Catholic faith. The focus on Catholic infrastructure hides the more complex cultural and ethnic identity of the building's creators.

For bell hooks, providing marginalized groups with the tools required to produce images increases their ability to contribute to and shape visual culture, leading to its decolonization. She notes that "Before racial integration there was a constant struggle on the part of black folks to create a counterhegemonic world of images that would stand as visual resistance, challenging racist images" (hooks 1995, 57). In addition to mythologies that shape visuality, which predispose white men in their fulfillment and performance of heroic or leadership roles in visual contexts, the exclusion of diverse groups as the producers or subjects of book illustration, photography, painting, cinema, and advertising inherently limits our ability to study visual culture trans-historically because until recent decades people of colour have not been celebrated as image producers or considered worthy of being depicted in an array of contexts. These limitations also restrict the history of western visuality accorded to any demographic group other than white men.

Many attempts to find and see diversity in visual culture rely heavily on skin-deep assumptions that usually require the presence of marginalized groups, or objects overtly associated with them, in the frame. In his 2005 book, *Sight Unseen: Whiteness and American Visual Culture*, Martin A. Berger insists that we must look more deeply at images: "Genre

paintings depicting white farmers, landscape photographs of the western frontier, fine arts museums, and early action films were made intelligible in part through racialized viewing practices of which European-Americans were utterly unaware. [... We must] probe beneath the narrative surface of images [...] to comprehend, and potentially dislodge, [racial] power in American culture" (Berger 2005, 7-8). In this light, object-based inquiries lay bare the interconnectedness of different parts of the world through global production and transmission processes that existed hundreds of years ago, much as they do now. Globalization and commodification play important roles in connecting one part of the world to another, and many objects reify these connections and allow us to draw into a composition some discussion of and context for marginalized presence. By thinking about objects within the frame differently, we answer Berger's call to look more deeply at images so to see people otherwise obviated by the image.

Images and objects imply beneficiaries, who are their implicit and incidental audiences whose gaze is attracted and with whom the images and objects interact. Until recently, that audience was conceived as white and usually male. Building on James Gibson's theory of affordances, we can understand visual culture as being structurally shaped by and for white patriarchy, adjusted to suit his tastes, needs, and worldviews, as "an affordance points both ways, to the environment and to the observer" (Gibson 1986, 129). Until recently, the male gaze has significantly impacted our visual culture, which has ensured that much of our research centres on what he sees and from what he benefits. Nowhere is this clearer than in a

national gallery anywhere in the western world where images of white male leadership project from the curated walls of institutions that often serve a second purpose as reflections of national identity (Said 1978, 141-142). Joining them are cohorts of women in various states of undress, in contrast to how men tend to be presented, and almost always absent are people of colour, except in certain predictable ways as servants or "losers" in the shadow of white greatness (Mirzoeff 1995, 3). In 1989 this reality gave rise to the New York-based protest art titled "Do Women Have to Be Naked to Get into the Met. Museum?" (Guerrilla Girls 1989). Through this project, the clothed state of museum-goers' contrasts against the propensity to nudity women and not men, and to denude women of humanity by casting them as allegorical concepts (John Gast's 1872 painting, American Progress, being an excellent example). White coded objects, such as a European crown, explored in due course, also exhibit valued qualities or characteristics of whiteness (Berger 2005, 57). Similarly, the white gaze expects to see Black or Indigenous peoples performing certain tasks and not others. Black labour and its products, statuesque women whose appearance pleases his eye, male leadership domestically or abroad in the propagation of the settler-colonial enterprise example visual categories that also serve as affordances to white men that pervade western visual culture.

Seeing Presence

From a material perspective, however, and by working with thing theory as a means of understanding object-human interactions, we can propose new methodological approaches to visual culture

that allow us to see marginalized presence through an object's biography and its affordances with humanity (Brown 2003). Of interest here is not only how an oriental rug that sits under my feet insulates me from the cold through its material composition - or in the case of Miss Zélia serves as a species of platform that both marks her place and displays her to the viewer - but also the consideration of how the carpet's existence affords its creator his or her livelihood or status as its producer (figure 1). Objects that are commodities have an array of entanglements that result in many affordances (Hodder 2012, 115). By defining an object as having both external and internal relationships with humanity, moreover, we broaden the spectrum of questions being asked of visual objects (a lithograph, a carpet) and their contents (the stools that elevate the male acrobats, the carpets depicted under their feet, the weaving techniques used to create the carpet). Informing ourselves about the knowledge and use vectors that intersect with things, whether objects and manufactured goods or flora and fauna, will allow us to challenge the ways our visual culture excludes.1

Our intention to focus on objects intersects with the viewer's capacity and desire to gaze. The western appetite for looking considerably grew from the eighteenth century to today, as evidenced by the creation and institutionalization of places where the gaze could consume objects and people, whether in the form of recreations of life-size people to model ethnic types or craftspeople creating traditional objects, which later become protected as museum culture and even educational material. Supriya Chaudhuri observes that "Objects of material culture,

denuded of social context and use-value, were accessible for consumption as spectacles" (2018, 59) in world fairs or exhibitions, as well as museums, art galleries, and in both public and private spaces. Miss Zélia's performance poster demonstrates how commercial venues increasingly made use of similar objects to attract the gaze of clients and spectators. This form of displaying sometimes quotidian, other times culturally specific objects, commoditized them and their producers as exotica or preternaturalia to western eyes.

Things and Their Biographies

There are many benefits in considering the biographies of the objects in the frame. Objects such as cloth, as well as cloth production, signify specific populations as their producers. India clothed the nineteenth-century western world, and specialized products such as brocades required the expertise of craftsmen from that country as well as raw materials for the cloth trade such as cotton. At world exhibitions, however, these forms of industry found themselves non-industrialized and their labour relegated to the exotic crafting of objects deemed material culture worthy of looking at but not categorized as fine art (Chaudhuri 2018, 63). Objects displayed at exhibitions, such as those that gave rise to the trend of chinoiserie, and which made their way into museums, were trafficked by the colonial officials who obtained vases, pieces of furniture, and silks, and then traded them as commodities, which even today has cemented them into a circulating display network as objects move from one institution or place to another. These objects are usually portrayed as old, traditional, or representing lost knowledge, which rarifies them and increases their value in western eyes (Chaudhuri 2018, 65-66). It is this linkage with exoticism and the concept of a rare spectacle that oriental rugs become a seemingly natural pedestal for Miss Zélia and her companions.

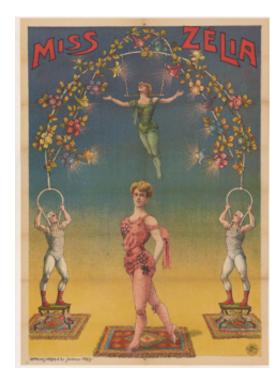


Figure 1
Miss Zélia (Paris: Affiches Faria, c. 1890-1900). New York Public Library, Billy Rose Theatre Division, b20732857. This lithograph publicity poster for the aerialist displays her and her co-performers upon small oriental rugs.

The frame containing the engraving's contents, just like the edges of a photograph, defines the venue of our gaze's consumption of the work, and the people and things it represents, much like the cabinet or museum gallery. Many objects in illustrations are displayed, held aloft by individuals, or positioned on surfaces

designed to display objects, such as a platform or table; for Miss Zélia, it is she who is on display as an objectified woman and performer. This practice of attracting the gaze, of enabled looking, characterises visual culture in general as manifested in any medium that technologizes the gaze. The posture involved in display ensures a form of feedback loop between the viewer and the object. The act of looking may stimulate pleasure in some, but not in others, being one of the affordances that the artist programmed into the image. The image producer, by attracting the gaze and along with it the consumer's wallet, enjoys an entirely different affordance, as do the image producers, which range from the artist and engraver to the publisher and colorist.

Beyond these relationships between image producer and consumer, we must contemplate the colonial careers of objects held in museums or featured in images, as objects of this variety tend to exhibit ruptured biographies and transforming affordances as the relationship between object producer and the viewerconsumer evolves. Objects such as the oriental carpet exist in regimes of value that fluctuate over time and space. In the western world, regimes of value have become associated with groups of people; this assessment gave rise to burning witches and enslaving Black people predicated on the belief that certain humans have less value than others. We can ask ourselves how objects associated with people exist within this commoditized regime of identity as more or less valued within western society. The production of objects, moreover, requires supporting industries, their materials, and producers, which points to a network of things that comprises an ecosystem enveloping one

or more of their socio-cultural biographies. To better understand the value of things, Arjun Appadurai advises that "we have to follow the things themselves, for their meanings are inscribed in their forms, their uses, their trajectories. It is only through the analysis of these trajectories that we can interpret the human transactions and calculations that enliven things" (1986, 6).

Being less interested in how humans imbue things with significance and value will allow for a reorientation of research centred on the visual and material world by considering, from a methodological perspective, how things shine light on humanity. In this way, "The commodity situation in the social life of any 'thing' [can] be defined as the situation in which its exchangeability (past, present, or future) for some other thing is its socially relevant feature" (Appadurai 1986, 13). We can study a thing's social life as a commodity, but also its life before becoming a commodity, in addition to the environments in which the thing was traded or groomed for trade. After about 1500, objects, once commodified, existed within commodity ecumenes covering most of the world: cotton for British clothing coming from India and North America example the intercontinental and connected social worlds of things whose chrysalis is, in this case, the British empire. When we see muslin in the frame modeled by a white woman who is meant to attract not only the female but through her the male gaze (figure 2), chances are we think about some gendered or client-customer relationship, and not the international source of the good and its affordances.

As we have observed with respect to movements for social change, the early modern period experienced economic, political, and philosophical ruptures that gave rise to the middle class, ended feudalism, elevated the individual's free will, and eventually this extended to human rights for many of the otherwise unempowered demographics. Increasingly during the modern period, "fashion became a driving force for the upper classes, satiated only by ever-increasing quantities and ever-differentiated qualities of articles for consumption" (Appadurai 1986, 36-37). With the rising middle class, this thirst for things ranging from muslin to oriental carpets expands exponentially, buffeted by capitalism and industrialization. Beyond luxury goods, which themselves comprise status symbols pointing to race, gender, and certainly class, commoditized goods originating from outside of the west, and once exposed to its gaze, become machined by their status as new, innovative, or exotic, which propels the viewer-consumer's desire to see and potentially obtain them. To be considered a commodity, the object must be subjected to one or more conditions: its price or law restricts who can obtain it; the item can be difficult to acquire due to scarcity or obstacles to acquisition; the item emblematizes significant cultural codes (as silk does in fashion); and specialized knowledge might be required to use, assess the value of, or consume the item. Complex commodities exhibit distance between their producers and their consumers in terms of the region or country from which they originate (Appadurai 1986, 38-45). When the distance between them shrinks, an object's exclusivity as a signifier of class or luxury becomes replaced by its authenticity.



Figure 2
"Wm. H. Burns & Co. Manufacturer of Corset Covers and Muslin Underwear," c. 1887. Library of Congress, Washington, DC., Prints and Photographs Division. This clothing advertisement features muslin as the fabric used for the model's underskirt.

Historically, western illustrations of elsewheres, and publishers' choice to provide them in books and magazines in order to entice consumers to purchase their publications, depend upon the commodity of distance. These faraway lands, peoples, and things, the phenomenon of the armchair traveler in an era in which extensive travel was both costly and dangerous, made the use of book illustration and the venue of the published book an ideal product through which the world could

be seen from the comfort of one's home for those who could afford to buy books or knew someone who could.2 Both the book and its illustrations, as well as their contents, gave the reader access to (claims the publisher) authentic and novel knowledge about lands they would never see themselves. Increasingly, book titles helped to brand their contents by claiming that travel relations and descriptions of non-western peoples and cultures were authentic and true, and the images 'taken from the life.' Middle and upper-class readers desiring to know more about the world were enticed by this quality of authenticity, as opposed to exclusivity, although the book trade also operated on that premise by offering leather bindings, gilded pages, hand-colouring, among other ways a book owner could make his acquisition distinct from others.

From a more recent perspective, a class of objects appears in western visual culture that comprise cultural signifiers of the non-western world and which have nonetheless been appropriated by the west and commoditized in some fashion. As bell hooks points out, "Within commodity culture, ethnicity becomes spice, seasoning that can liven up the dull dish that is mainstream white culture" (hooks 1992, 21). Blackness and the exotic other easily make their way into western visual culture as a means of highlighting whiteness, as background scenery, as providing the supporting context so that white people can indulge in an exotic world. hooks points to advertising campaigns such as Tweeds launched by clothing company United Colors of Benetton for characterizing Black people and in this case Egyptian scenery as unmodern. The campaign employed rural backgrounds upon which to feature the latest fashions adorning white models that collectively synthesize a sense of cultural alterity meant to encourage the consumer to purchase these articles of clothing in order to experience, possess, or exude a similar exotic air (hooks 1992, 28-29). Absent from the advert in question is a mutual moment of connecting between Black and white people, exampled by making eye contact and equal moments of touching. Rather, the campaign contrasts shots featuring Black women in traditional clothing and white women in Benetton's latest offerings; their proximity betrays a power imbalance exemplified by a white model holding a Black child aloft and through the contrasting dress of white and Black women. At the same time, the clothing itself implies a global chain of production that draws in producers, labourers, materials, and spaces in China, Taiwan, Vietnam, Bangladesh, India, among other locations.

The study of how things can illuminate the presence of people who themselves are excluded from either the contents or production process of visual objects merits serious attention. Consider the example of human slavery through which individuals have their utility often as labourers evaluated and then commoditized, while their social identities become layered upon new ones in the enslaver's culture. The association of enslaved or trafficked people with commodities yields no novel observation by itself, as scholars have well studied this form of dehumanization. Yet, the association of trafficked people with commodities reinforces their humanity by affirming their lived experiences through those of the things with which they interacted.³ Put another way, when certain identities are excluded from the frame, as they have been in the images

considered thus far and which feature carpets and muslin, objects nonetheless inhere their presence. Human trafficking and low wage labour make the cotton industry possible throughout the modern period, which points to a particular set of affordances that benefit the colonizer and western world in general.

We already associate things with the life trajectories of people, for instance while describing inheritance and the passing of real estate and possessions from a parent to their child. These objects possess biographies that document where the objects spent time, who interacted with them, but also how much they cost to produce, from whom and where did they originate, what sort of lived conditions sustained or imperiled their existence, what became of these objects after their original functions cease, and what was their status as things in the context of a society's complex identity matrix. Using the example of a hut, Igor Kopytoff outlines its creation to house a family, and as it ages, the shelter's use adjusts accordingly, first becoming a guesthouse or a place for the children's leisure time, then a kitchen, and finally a place for chickens and goats, after which the structure collapses. Housing a visitor in a hut used for the kitchen comments on the visitor's status (Kopytoff 1986, 66-72). Things, therefore, have nuanced and plural biographies that account for their lives from financial, technical, political, and ownership perspectives.

When analyzing the contents of an image, we might also think about the things that are missing. Like Kopytoff's hut, the role of objects evolves over the course of an image's existence. For Miss Zélia, the page and not a carnival or stage forms the background of the image; we and not a

group of paying spectators are the audience. These decisions were intended to convert us into paying spectators, to transform the page into the stage where her performance would be experienced and viewed. For the muslin underwear advert, which features quotidian objects that are usually hidden away from plain sight, the underwear is meant to obscure what lies beneath, making the image a multi-layered composition with different states, as we know that a human body will be found under the clothing on offer in the advert, and that a dress will be layered on top of the corset featured on the model's bodice. For the Tweeds campaign, the average Egyptian's experience of the landscape is obviated, as is his or her presence; to western eyes, the landscape shown behind the models could be from any undetermined location made exotic by the western gaze – only the presence of Black women wearing traditional clothing anchors an elsewhere to somewhere (but nowhere in particular) in Africa.

Objects can also be cleaved away from the commodity chain as singularities that visually symbolize status, for example when monarchs reserve their right to collect certain animal products, such as ivory, and exclude others from doing the same, or in the case of a cherished family heirloom that one could not imagine selling. Therefore, some objects are coded to reify certain groups of people and not others, and they are valued differently than commodities such as an oriental carpet (Kopytoff 1986, 73-80). The oriental carpets shown beneath Miss Zélia and her companions provide a curious example of an object that, once othered as an exotic rarity, becomes a commodity that in medieval and later times denoted its

owner's status. Today, it has transformed into an object that can be procured cheaply in mass-produced form, or more expensively as a hand-made speciality item with natural, as opposed to chemical, dyes, or even as an antique. Global markets further entrench this variety of carpet as a product of Asia, which reinforces the geographical and essentialized character of the carpet's origin story. They appear in works of art, such as painting, can be found in private collections and in museums as examples of art or historical (treasured) objects, or in a wide array of stores designed for a similarly broad range of budgets. Yet, as a floor covering, stomped on and abrased by our dirty shoes or feet, the oriental rug compels us to consider the identity-related complexity associated with its varied lives as an object of display, a status symbol of varying sorts, and its range of other affordances. For the carpet's creator, the object represents his or her source of income and means of supporting a family, whereas for the carpet's possessor, it either performs a practical or symbolic function.

As Brian Spooner observes about the oriental rug, in its transit to the west from Pakistan or some place in the unspecific "eastern" world, the carpet itself does not change much, yet it arrives divorced from its social, economic, and historical origins, appearing in western visual contexts in this state. The context and story that arrives with it can be reinterpreted for each transaction, for instance from dealer to client and from museum curator to spectator, and its function as a stage prop or an element of a lithograph also changes through time. This ability to reinterpret the object also can result in affirming the object's authenticity and

cultural history as a means of increasing its value as a commodity (Spooner 1986, 198). By recognizing the origin of this variety of rug, we see Pakistani presence in the frame, which is one element of the analysis that will result in diversifying the questions scholars ask of images.

Eschewing the skin-deep identities expressed in an image offers other benefits. As bell hooks observes, in western visual culture, and despite the achievements of the Civil Rights and related movements, the representation of African Americans continues to reinforce and even perpetuate white supremacy. In part, she theorizes, white image producers or Black ones who configure their output through the lens of whiteness can be held responsible for the enduringly problematic visualization of Blackness. To deal with centuries of trauma and a seeming lack of control over how Black people see themselves represented in visual contexts, "progressive black people and our allies in struggle must be willing to grant the effort to critically intervene and transform the world of image making authority of place in our political movements of liberation and self-determination (be they anti-imperialist, feminist, gay rights, black liberation, or all of the above and more)" (hooks 1992, 1-4). She calls for a revisioning of how we write and think about images in order to redress this critical issue, to move away from a positive-negative binary of what images mean. This positive-negative binary goes beyond freedom-enslavement or white-Black; it also applies to presence-absence, such that Blackness and enslavement are thought to explain why Black and other marginalized groups are excluded historically from or present in limited ways in western

visual culture. A similar corollary extends to women and other people of colour. While we cannot understand the origin of the carpets that inspired the image producer, in the case of Miss Zélia, we can nonetheless perform an analysis of how oriental carpets feature in images. Such a case study – an inquiry for another day – would allow us to compile an object-centred biography through overlapping linkages that emerge from such a dataset: are oriental rugs present in overtly feminine images; are other signifiers of the 'Orient' present in the frame; what colours are most commonly seen in representations of oriental rugs; are carpets racialized and gendered in some way; and who benefits from the rugs internally (within the image) and externally (in the context of a rug or image's production). Object analysis can be relatively difficult to perform due to the interdisciplinarity required to study its production (and the technologies, methods, skills, workers, and materials that go into this process), the image-object's lifespan, its design (from an art historical or applied perspective, which implies the contributions of artists, producers, machines, as well as some appraisal of an object's aesthetic and practical functions, and the histories of these, not to mention the target and eventual consumer), its intellectual history and trajectory, including the economic and political or legal knowledge needed to analyse its value, and its social impact, all of which can undergird local, national, and international trade. Objects may convey status, but they also point to the status of a range of people.

Curiously, this relationship between the object's producer and their creation attracts greater attention for particular lines of work, for example painters such as

Picasso, where the profession has gained an ascendency in western culture associated with name recognition. While having 'a Picasso' increases the status and demonstrates the financial means of the painting's owner, the object also signifies the painter's fame and perceived talent in his field. The status of object producers is not always easily apparent, particularly when we tend not to consider, in the case of a carpet, its producer. While an oriental rug also points to the status of its owner in complex ways, the western viewer would not normally meditate on the status of its creator while gazing upon a painting, engraving, or photograph that contained this object. In Turkmen society, like painting in the west, the carpet also has social value as an esteemed furnishing and thus its producer, whether male or female, enjoys an elevated social status that remains entirely disconnected from the object once acquired or reproduced by westerners. Spooner observes that imitating and assimilating the designs of oriental carpets reflect past trends in eighteenth-century imitations of Chinese designs. The tension between authentically produced products and ones manufactured by the non-traditional makers of the product, signals the decreasing quality and value of the product the farther its producer gets from its original making context and the lower the status of the non-traditional makers (Spooner 1986, 209-215). In the end, these non-western producers influence western visual and material culture in significant ways, giving rise to styles of production such as chinoiserie that become broadly imitated and incorporated across the visual spectrum. Appropriation when it comes to objects involves the acquisitive procedures of commodification and its significance for our identities. At the level of the

object associated with our identities, therefore, appropriation takes the contradictory form of either colonization or inclusion.

An object-centred approach to institutional collections is not a new method of contextualizing art or cultural objects stolen or procured along the networks of colonization and introduced into the western world as artifacts of another, sometimes bygone culture. Curators and researchers in recent years have attempted to decolonise how exhibited materials are viewed, studied, and displayed, which entails disenfranchising objects from colonial power structures and replacing them with new structures that give agency to and even empower their original cultural context. By recontextualizing these objects, new stories radiate from them (Giblin et al. 2019, 471-486). By being sensitive to the curatorial and art historical challenges arising from decolonization, we can focus on the collected object's life, why and how it came to reside in the museum's collections or in an image, who made it and their reasons for doing so, as well as the material composition of the object, whether it is a vase, a painting, or a table. Here we are taking this approach one step further so to recontextualize the contents of an image in a similar fashion.

Objects and Intermediality

Ekphrasis comprises another way of studying the biography of an object as described in textual form. When John Keats published "Ode on a Grecian Urn" in 1820, his 50 lines of verse analysed the images found on a particular vase located in the collections of the Louvre as represented in an engraving published in

Henry Moses's A Collection of Antique Vases, Alters, Paterae, Tripods, Candelabra, Sarcophagi, etc., from Various Museums and Collections (1814) (figure 3). The Sosibios vase dates from approximately 50 BC and was confiscated from the French monarchy after its late eighteenth-century fall. Readers of Keats's poem learn about the vase's material structure, about the scenes featured on it and his narrativizing interpretations of them, and the value of the urn as an art historical object. The poem positions the reader as both the viewer and aesthetic assessor of a material object that we know the poet viewed in absentia through an engraved simulacrum. At the same time, Keats questions the artist's ability to represent truly a real urn, having himself prepared a drawing of it based on the engraving, which dismisses any interest in the object's existence while inscribing art as part of the object's identity. In doing so, he invents narratives that go bevond the content featured on the urn, for instance by creating characters for the bodies represented on the vase, giving them names and identities, along with an agency otherwise not associated with the vase by its creator, Sosibios.

This process of *ut pictura poeisis* examples how material existence, in this case in the form of the vase residing in the Louvre's collections, anchors to visual (engraved and sketched) and textual (poetic) interpretations of materiality. The poem and engraving furthermore define in absentia the vase's existence but only scratch at the surface of another story that bears witness to that existence – that of the vase's creator and his cultural context, as well as the object's biography as it made its way to the Louvre and found itself reproduced over the course of nearly two millennia. Keats's poem now forms part

of the vase's biography, and as an object its affordances have also transformed over time: from a container for holding things to a prize unmoored from its original location to a treasure emblematic of empire and later into an art historical object deemed worthy of preservation and display. Second order affordances also exist depending on the viewer's perspective – the vase may issue ripples of shared or national identity when viewed by a Greek person who understands the object's history and sees it as a material projection of her own, experiencing nonetheless some sense of loss while standing in the Louvre in Paris where the object remains today.

Ian Hodder points out that the meaning of objects, whether everyday or culturally specific ones, signify meanings based on the individual who views or interacts with them: were a bottle of whiskey featured in a painting, a recovering alcoholic's senses might respond to seeing it or someone imbibing this substance; the bottle elicits a physical and emotional response from that viewer that his companion may not experience (Hodder 2012, 18). Using the example of a photograph of an empty bed that exposes through the vacancy of its occupants their presences through the rumpled sheets they left behind that emphasise their absence, hooks further demonstrates how material objects assert different meanings for the viewer depending on their lived experiences through the bed as a place of shared human experience: grief for loved ones, waning passions or love, a feeling of loss or hope. The empty bed signifies a range of stories, and its own biography will change depending upon its occupants and the viewer's perspective (hooks 1995, 51-52). It is this action that Keats

performed when he expanded the vase's biography so to include stories about the otherwise unknown people featured on its surface. By examining objects as sites of shared human experience, we embrace a range of human diversities that exceed the limits of skin-deep analysis.



Figure 3
"A Vase in the Musée Napoleon," in Henry Moses, A Collection of Antique Vases, Altars, Paterae, Tripods, Candelabra, Sacophagi, etc., from Various Museums and Collections, Engraved on 170 Plates (London: Henry G. Bohn, 1814), pl. 38. This copperplate engraving reproduces the Sosibios vase located in the Louvre Museum (then called the Musée Napoléon) in Paris; Keats drew a sketch of the engraving and used the sketch to prepare his poem.

Other questions can be asked of objects that function as projections of our

identity. Franz Fanon points to the serum of denegrification whose properties convince users that their skin can be lightened through some beauty ritual, but also through other whitewashing products or activities typically associated with white people, as opposed to Black (Fanon 1986, 111). A Black man holding a crown might example how the serum of denegrification works and its process of signification through the crown as a symbol of white patriarchy and regal power. These are, for the most part, silent discourses that bubble beneath the surface of images; they example identity-guided interpretations that have become inscribed within western visual culture and associated with objects.

Stuart Hall identifies an ambivalence about how cultural or identity-driven stereotypes such as the white crown are viewed by white people, particularly in mass media. While positive and negative attributes associated with mediatized representations of Indigenous and Black peoples, or object-based projections of them (bows and arrows, teepees, and plantations), get updated through the ages, Hall argues that each of them nonetheless contributes to an historical archive of objects that is known to the viewer. This 'ancient grammar' informs persisting worldviews that prevent inclusion and limit the range of objects associated with marginalized groups in visual culture, reinforcing the disassociation of the rug from its Pakistani producer or its presence in the bedchamber of a Black woman represented in an image (Hall 1995, 22). From another perspective, common objects such as beds and rugs are used by nearly everybody, yet in western visual contexts over the last few hundred years, white people

overwhelmingly depicted using or benefiting from these objects, even though the affordances they offer humanity are universal.

Carolyn Dean and Dana Leibsohn's definition of hybridity allows us to contextualize this grammar and reorient the reception of western visual culture through a material focus on its contents and the conscious decision to locate marginalized people. They posit that "contrary to common presumptions, hybridity neither inheres within, nor describes, specific objects or activities. Rather hybridity is produced and enacted when particular kinds of things and practices are brought together that in some way challenge presumptive norms" (Dean and Leibsohn 2003, 6). Hybridity in this way is borne of intolerance and discrimination; it applies to the exception and not the norm for the purpose of recognizing difference - the European-style crown held aloft in a Black rather than white man's hand; an Indigenous woman reclining on a fourposter bed rather than on a mat. Hybridity requires assumptions that can be essentializing and steeped in stereotype.

In theory, hybridity allows objects to live multi-dimensional lives, much as Keats's Grecian urn takes on a literary life with new steps in its biographical trajectory that were not reflected in its sketched or engraved lives nor in the original object's life as it came to rest at the Louvre. The object's duality as an artifact of colonization and an artwork in multiple modalities underlines the complexity of hybridity from an identity perspective. By locating objects within a painting or a field of vision and considering them images or pictures with stories of their own, we alight on what W.J.T. Mitchell terms a

metapicture, an image that refers to itself and offers up its own metalanguage, being "a second-order discourse that tells us – or at least shows us – something about pictures" (Mitchell 1994, 38).

Time further complicates the significance of an object, much as it does the valuation of a commodity. Art historical categorizations and the practice of tracing styles and their origins (and intercultural mixes) in architecture and painting point to this problem. Consider the rhetorical impacts of casta paintings, an eighteenthcentury genre intended to document the origins of interracial mixing in the Spanish Americas by making visible the result of interracial sexual relationships (figure 4). These works objectify racialized people, associate objects with them that reflect their class and position in society, and were meant to dissuade interracial mixing. They did not make their way into the average Latin American household; rather, only the wealthy – who were usually white - could possess them, and so we can imagine servants gazing upon these paintings and seeing themselves reflected in strange and haunting ways. Using text, the paintings also affix definitions to each racial typology, which has ever since linked textual and visual denominators of race. Dean and Leibsohn find the way this genre of painting is categorized problematic because the racialized ordering of people from casta paintings is reinforced through the art historical categorization of the genre whose creators were themselves mixed (Indigenous, African, and/or European). Recognizing hybridity under these conditions does not reflect how people living in the culture that produced the art objects under study viewed these objects or their ekphrasticly objectified racial categories,

suggesting that objects with heterogenous influences or origins did not merit comment because they were unremarkable and acceptable at the time. To modern viewers, however, this mixing catches the eye and seems pronounced, hence attracting a discipline's need to categorize and label its difference.



Figure 4

De español, y Morisca: Albina, by Miguel de Cabrera (casta painting #6 of 16 casta paintings), 1763. Los Angeles County Museum of Art. Cabrera's painting features the offspring (an albino girl) of a Spanish man and a mixed blood woman as a means of disincentivizing interracial relationships.

The painting as an object also points to greater and authentic forms of diversity, for its creator, Miguel de Cabrera, was *mestizo* (mixed blood), his godparents *mulatos*; they lived in a highly stratified society where one's blood quantum usually

determined his or her lived experience. Unlike 'a Picasso,' which materially embodies the creator through a work of his art, Cabrera's work does not signify him even though his painting style is also distinct. He undergoes some process similar to Fanon's denegrification; as a painter, he enjoys today a status that seems separate from his mestizo identity. Yet, the painting itself comprises a significant affordance to Cabrera in the socio-cultural context of eighteenth-century New Spain despite the prevailing racism of its contents. From another perspective, paintings such as this one were not intended for people who already possessed mixed backgrounds, even though they portrayed different racialized couples that excluded white people altogether, for instance a Black and Indigenous couple. And for anyone who has walked the galleries of the Museo de América in Madrid, the overwhelming array of uncontextualized casta paintings located in the former metropole serves as a reminder that these works of art continue to reify Spanish identity as a former global empire.

While our object analysis within the frame may linger on hybridity and betray our recognition of difference, we must also consider how marginalized groups produced, supported, used, and destroyed the quotidian objects in the frame. Even more significant is that this recognition of difference seems to pervade and has resulted in an exclusionary visual culture in the western world. Textual records about possessions of mixed origins owned by Indigenous people offer no comment about the status of these objects whereas Europeans actively collected and found objects with non-European influences fascinating. They associate their acquisition and display with their value, moreover, while excluding the presence of their creators or distancing the objects from the cultures from which they were obtained. Hybridity in this way reinforces the armature of colonization by engaging orientalism with collecting and display practices, on the one hand; and by reproducing this model in scholarly contexts in ways that intensify the binary between the visibility and invisibility of an image's contents, on the other (Dean and Leibsohn 2003, 12-13). Our questions about the people behind an image and its objects allow us to understand, through people otherwise obviated from the image, a thing's biography, and the people with whom it interacted.

The visibility of difference can also be obscured by western style categorizations and the presumptions that they inscribe. Transatlantic trade introduced commodities from the Americas that transformed European society, from the tomato to indigo pigment. An analysis of commodity origins provides another means of diversifying an image. Similarly, colonial buildings erected by Indigenous labourers using their traditional materials, technologies, and architectural practices have their Andean character effaced by Spanish masons who ensure the building conforms better with the look of a European church, being a deception of visibility. For the western gaze, hybridity represented by the building's Andeanness has been erased from the church and the Indigenous contribution goes unacknowledged. Art historical evaluation of works as Indigenous or hybrid favours the final appearance of the object and tends to ignore the processes of its creation, silencing the homogenous Indigenous manufacture of art objects in favour of the heterogenous appearance of the final

creation whose affordances almost entirely exclude the people who built and maintained the structure, or who manufactured pigments used to colour an image (Dean and Leibsohn 2003, 16-19). Hybridity is also often assessed, in the case of the Americas, when pre-invasion qualities are detected; their absence obscures the object's hybridity, which erroneously means that Indigenous people in the Americas tend to be characterized by pre-European visual signifiers. When these signifiers are absent, Indigenous peoples disappear even though they thrive.

Final Considerations

Materiality offers an intriguing way to decentre heteronormative masculinity in our visual culture over time and space because objects are not necessarily made by or intended for men, even if they were conjured into the visual realm by male producers, artists, sculptors, photographers, and graphic designers. When brought into dialogue with efforts to support diversity and inclusion, moreover, studying the material culture of the world around us offers us a unique opportunity to see more than male power and dominance over the last five centuries. Objects exert powerful influence over all viewerspectators; they transform into sources of desire or loathing according to one's perspective, as informed by their identity; their valuation fluctuates according to the eve of the beholder and their socio-cultural reality; and some objects develop gendered and racialized characters.

Lurking below the surface of any object included in an image, regardless of the appearance of its cultural origins, are the complicated identities of painters, sculptors, architects, builders, labourers, textile makers, among others, even more so in the colonial and imperial milieux where outward and authentic signs for marginalized groups can easily be censored. By considering and accounting for the affordances tying these objects to people who are marginalized both from within and outside of the frame, we will discover presence in the same visual work that otherwise may only example colonialism or white patriarchy, or their effects. The diversity behind these objects often goes undetected. While this discussion focuses on art objects located within the frame, scholarly attention must be brought to the production processes of objects so to challenge us to look at nonart objects featured in works of art and visual culture more generally to interrogate hybridity and otherwise to detect obscured presence. This approach engages with what Walter D. Mignolo calls the "loci of enunciation" (Mignolo 1999, 238-239), a concept that helps tie together the politics of location with colonial difference against the grain of both prevailing and marginalized epistemologies.

As we have explored, the study of objects, whether material ones or their representation within the frame, promises a rich archive of knowledges and experiences beyond those of white men, particularly from a historical perspective where the presence of marginalized groups is difficult to trace in visual materials. Objects imply commodity chains, with complex networks of affordances, and themselves embody ecumenes that can stretch across continents yet become moored to an image in ways that include marginalized people, but not necessarily through essentialized objects and skin-deep

presence. This methodological shift will entail interdisciplinary research, but it will also yield incredibly important insight into marginalized presence, especially in the settler-colonial milieu.

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¹ This approach, but not our general definition of what is implied by "thing," presumes that objects are entities and is inspired by Hodder (2012, 10).

² I borrow the term armchair traveler from Kagan (2000, 71).

³ This approach has been used elsewhere to understand, through the accounting books that list and contextualize expenditures, the lived and material experience of slaves in the early modern period according to the objects with which they interacted. See Beck (2018).

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The Material Culture of Exiled Families Housed in Hotels: Tensions between Settling in and Instability

Material Culture, Poverty, Exile

It may seem oxymoronic to describe the material culture of the poor. Poverty is often thought to signify deprivation and, in some cases, destitution – but always exclusion from consumption. Their destitution would be even greater when these poor people are migrants because they could not take much with them during their dangerous exile. Why, then, take interest in poor people's material culture? Whilst the poor live in need and deprivation, at a closer look, they nevertheless surround themselves with objects that accompany them in their daily lives: indispensable household objects, second-hand objects, objects bought cheap or objects that were either donated or found in the rubbish. In other words, objects that matter to them. Poor people evolve different means of using these objects, demonstrating initiative, inventiveness, and creativity under difficult living conditions.

This article combines the topics of material culture, poverty, and migration. It describes the material culture of families exiled in France who are illegal immigrants, living without resources and without independent accommodation. It focuses on the form of migration that tends to be labelled 'irregular,' or sometimes 'undocumented' or 'illegal.' According to

Christine M. Jacobsen and Marry-Anne Karlsen, "these terms refer to people who enter or dwell on state territory without formal authorisation, and comprise a wide range of situations, including those who remain on state territory after having overstayed their visa, having had their residency revoked or asylum application rejected or never having applied for residency or asylum. (...) The boundary between 'regular' and 'irregular' in particular socio-historical contexts can often be overlapping, fluid and contextual" (Jacobsen and Karlsens 2021, 1). This is why even though the people I have met are mostly illegal migrants, I prefer the more inclusive term 'exiles' to emphasize the experience of exile. Families I met come from West Africa, Eastern Europe, North Africa and Central Africa. Under the constraint of threats, violence or extreme poverty, exiles had to leave a country where they could not assert their rights. Exiles also expresses wandering and deep uncertainty that these people encounter in France while waiting for a protective status. Exiles are migrants whose presence on state territory is somehow contested and/or legally precarious.

Once in France, some families are put up in budget hotel rooms by social services, often staying for several years. How do

these families of three or four live in their hotel room? What objects do they surround themselves with? What does the accumulation of objects mean to these families? What are their spatial practices with these objects? The fate of these illegal migrants is to wait because they have been waiting for several years for their situation to be regularized, which would mean being able to get a job, job training, economic resources, and independent accommodation. Following other researchers, I stress that waiting, "temporal insecurity and conflicts in time [are] a crucial element of migrants' experiences of (im)mobility and inequality" (Jacobsen and Karlsen 2020, 2).

This article starts with the objects of migration so as to arrive at an understanding of the conditions of these subjects in exile (Alexandre-Garener and Galitzine-Loumpet 2020). The geographer Nicky Gregson has shown how, in conventional accommodation, being at home consists of cohabiting with things: accommodating - and thus homemaking - is a "constant reciprocal process of accommodation, involving houses, people and the things within them" (2007, 24). I want to focus here on what "living with things" means in the specific circumstances of exile, poverty and hotel accommodation. My article describes the domestic arrangements and daily gestures that this accommodation renders difficult. In particular, it addresses the dual problems for these families exiled in France of storage and clutter - an important aspect of material cultures (Cwerner and Metcalfe 2003).

Sophie Woodward explored "how the moral dilemmas clutter presents occur in the context of familial and domestic relations" (2021, 1215). In particular, she explained how in rich societies "the popularity of de-cluttering has created a normative sense of what people 'should' do with their stuff - keeping what is useful or loved – and where it should be kept" (Woodward 2021, 1218). This normative approach is reflected in programs like that of Marie Kondo (Ouellette 2019). Woodward nevertheless demonstrated that people are able to negotiate 'with themselves' and to manage the tensions between accumulation and frugality, clutter and de-cluttering. In other words, there is no dichotomy between storage and clutter in ordinary housing. I assert in contrast that this dichotomy structures exiles' domestic life. Most of them cannot really choose what they keep and where it should be kept.

By analysing storage spaces, I will show how families constitute for themselves a material culture of habitation as they await their official status. Generally, the families own cheap consumer goods (household articles, clothing, secondhand objects or gifts). These are the objects of daily life or those linked to their cultural practices. Hotel rooms are interesting to examine as storage spaces. They are minimal spaces (nine square metres), inhabited by families of three or four. There is little space for storing their possessions. The room is often dilapidated and does not belong to the family since they are housed by social services for several years. Appropriation is therefore difficult. How are objects stored in 9 m²? What storage spaces do the families invent?

Finally, I will show how the accumulation of objects and the attachment of families to their possessions reinforce kinship, which is weakened by precarious living conditions.

These storage spaces are the interface between migrants and society. The flow of objects gives us clues as to the place of exiles in society and the space that society allows them to occupy. The dual problem of storage and disorder creates a dialectic between settling in and instability. The exiles intensify their presence by accumulating and appropriating objects. They organize their family life without being able to guarantee the true putting down of roots that a regular status and an actual right to accommodation would confer.

Methodology

This research has been funded by PUCA (Plan Urbanisme Construction Architecture). This interministerial French service develops research programmes as well as experimental and innovative actions in town planning, housing, construction, and urban and architectural design.

The article is based on an ethnographic survey conducted over 18 months, from September 2018 to February 2020, mainly in four hotels in the Paris region.ⁱⁱⁱ I followed some 20 families and met the hotel managers. A large part of the survey took place in the hotels' fovers, corridors and shared kitchens, where I observed the exiles as they moved about, stopped and chatted. Sometimes, I was invited into their rooms to talk or drink tea. The research material primarily consists of these observations and informal discussion with the exiles. I also conducted more in-depth interviews with some of them and with the hotel managers. Some of the case studies are accompanied by realist photographs of objects and arrangements.

This kind of ethnographic fieldwork "behind closed doors" (Miller 2001) deals with intimacy/privacy. I was inevitably intrusive by visiting exiles in their room sometimes sitting on their bed for lack of space, by looking closely at their personal belongings. Daniel Miller notes this risk but justifies these studies "even where they were clearly experienced as intrusive" (Miller, 2001, 1). Miller challenges political correctness compromising the value of research: "an anthropology that thinks that sensitivity about being too intrusive is demonstrated by remaining outside and respecting the distance of conventional social proxemics is a dead anthropology" (2001, 15). In other words, sociologists and anthropologists must assume this intrusion into intimacy/privacy and dare to enter into relations with people in order to better understand their domestic life with objects.

In comparison with the people Miller and his research group met, the situation of exiles I met is very different. In his book, Home Possessions, Miller explores the homes of the middle and sometimes working classes. In my study, the fieldwork in hotels was situated within radically different social context. Undeniably, intrusion took on a different meaning because the families and I very pragmatically soon felt cramped for interview in such a small room, to the point neither they nor I would prolong the conversation. It is worth mentioning here that the residents were subject to intrusions and inspections of their rooms by the social worker or the manager to see if everything is in order. With time I was able to gain the trust of some families who invited me to their room. I was careful not to stay too long so as not to disturb them too much and visited when not all the family members were home. I took these precautions because I nevertheless believe that shedding light on the domestic and material lives of poor and exile people is important. Ethnographic texts may be a resource for their public existence, to make their problems visible and to show they are fully involved in society. This article proposes a contrasting narrative of supposed 'radical alterity' (them w us) by underlining the shared aspects of exiles' material culture.

My research followed the ethical standards of research practices that apply at the École nationale supérieure d'architecture de Paris-Belleville. The main ethical problem concerns the protection of exiles who spoke to me during the fieldwork and who often complained about their living conditions, rooms unfit for habitation, incompetent social workers, restrictive rules in the hotel, or discriminatory behaviours of the managers. Also, some of them explained to me how they broke the rules by cooking in their room, furnishing the room with their own furniture, or working on the side. Their status is precarious because they are housed by a social service that can evict them overnight or shunt them around from hotel to hotel if the exiles are too vindictive, make troubles or break the rules. The most important thing was to not harm their case and not put them at risk by doing my research.

Consequently, I made several ethical commitments. During my encounters with the exiles and hotel managers, I explained to them the framework of the research, which is funded by PUCA, a

public body that is independent of social assistance institutions. I guaranteed their confidentiality. The names of people, hotels and towns have therefore been rendered anonymous. I obtained oral consent from all persons mentioned in this article for sharing the survey results, including photos, in an academic setting. The logbook and images are securely stored on my work computer. Interviews were not recorded other than by taking notes.

Fieldwork: People and Sites

Due to the lack of space in emergency shelters in the Paris region, social services have since the late 1990s been paying for houseless exiles to stay in budget hotels for one or more nights and, in some cases, for several months or even years. These hotels make it possible to both take some of the strain off shelters and reunite members of the same family who may be scattered, and to avoid contact between different users of emergency shelters (for instance, the houseless or families with children) (Le Mener 2013). Over 10 years, recourse to hotel accommodation has jumped by 360% (Fondation Abbé Pierre 2018, 298). According to the Fondation Abbé Pierre's 2020 report, "L'état du mal logement en France," around 50,000 people were put up in hotels every night in 2019, which represents a 7% rise over the previous year (Fondation Abbé Pierre 2019, 14). In 2018, half of those being housed in hotels were children (Fondation Abbé Pierre 2019). Over 85% of these hotel nights are concentrated in Greater Paris. Families make up almost the entirety of those housed in hotels: parents with child(ren) or a single parent with child(ren).

Who are the families I met? Of the twenty families in my sample, ten come from West Africa, five from Eastern Europe, four from North Africa and one from Central Africa. All have lived in the current hotel for over six months, and all had been put up in other hotels before. Some were in the same hotel for seven years; others have changed hotels ten times in three years. Overall, 44% of families being housed in the Paris region have been housed for over two years (Fondation Abbé Pierre 2020; 16).

Most of the families are irregular migrants, although several families have been regularized for a year but have not been offered social housing. The latter are housed under the childhood protection system ("Aide sociale à l'enfance"), which in France is managed by the départements.iv Considering homelessness as a danger to children, the institution may give shelter to irregular migrants. The conditions are nevertheless restrictive and vary greatly from one département to another. For example, in the Greater Paris region, the Val-d'Oise département funds hotel nights for pregnant women or women with children under three years old who are single parents and have parenting-related needs. The accommodation can, in theory, be prolonged until the family is given housing. The département can also terminate accommodation if the accommodation contracts are not adhered to. Each household is asked for a financial contribution (of 10% of its total resources).

What are the hotels like in which they are put up, and where are they located? The "budget hotel" franchises (Formule 1, subsequently called F1; Première Classe; Lemon; Etap Hotel; etc.) were built in the

mid-1980s on the periphery of towns and close to the main traffic arteries. Originally, they were intended for business travellers or holidaymakers travelling by car who wanted a stopover. In France, this was an entirely new concept." The hotels' budget economy is founded on austere service and austere rooms. Each room's surface area is thus reduced to the absolute minimum: 9 m². It is furnished with a single sink, a double bed on the floor and a single bunk bed. This room for three looks like a cell. Some have a shower and toilet. The layout has been calculated so that a cleaner spends only half the time cleaning the room compared to a traditional hotel. Another factor in the hotels' profitability is their inexpensive construction: the concrete cells are built, furnished in the factory, transported by truck and assembled by module; the prefabricated panels are assembled on site, where the water and sewage pipes have already been installed. Common areas (fovers, corridors, in some cases bathrooms) are reduced to a minimum. In 1996 the chief executive of the Formule 1 Group summarized the strategy as follows: "We are the everyman's hotel in the same way that McDonald's is the everyman's restaurant."vi

The hotels are located on the periphery of large towns only a few minutes from major traffic arteries and have large carparks. In the 1990s they were mainly meant for car users. The location of the hotels did not take into account the lack of public transport. In the mid-2000s and especially the 2010s, the hotels fell into disuse. They no longer met clients' expectations and were too far from tourist sites. Many rooms were empty. The hotels were thus an opportunity for social services, which needed to accommodate houseless

people. The owners grasped this unexpected economic opportunity. Today the hotels are full. They house exiles without any modification to the architecture: minimal common areas, narrow corridors, small rooms of 9 m² with maximum use of the habitable area. Their location in neglected parts of town forces exiles to make return trips to the city centre (for shops, public services, etc.). But how does one live in 9 m²?

1. The Art of Stacking

The ethnographic fieldwork results are presented here in narrative form. This "narrative turn" (Geertz 1980) seemed the best way to describe together the layout of the sites, the motions, daily objects, histories and hotel life of the people involved. Our approach here is akin to narrative anthropology (Reck 1983) and to narrative sociology (Laé, Madec and Murard 2016). Narrative anthropology and sociology are part of the long tradition of thinking about reality through writing. Narrative is a weapon to give back flesh to words and people. Through variations of meaning, by evoking emotions, narration exerts a reflexive force on thought: an interpretative feature, a material culture, a particular insight, a social posture. Its sensitive quality embodies a communicable modality: the discomfort of imposed collective life, the atmosphere of a small home, the relationships between people and their home, the family links, the fear of being evicted and made homeless.

Nadia in her room

Let us explore domestic life at the hotel through the case of Nadia. This young Moroccan woman invited me into her room for a cup of tea. She lives with her husband and five-year-old daughter in this 9 m² room in a hotel in Villiers-le-Bel (Val-d'Oise). They have been living here for a year, after spending two years in another hotel a few kilometres away.

To compensate for the austerity of her room (a double bed, a single bunk bed, no wardrobe), Nadia explains that she has "laid out her room like a house." The space looks bigger than her neighbours' rooms – she has put in a sofa bed, and the manager has taken back the bedstead and mattress (figure 1). She can fold up the bed during the day: "I've made room so my daughter can play!" She bought the sofa bed for 100 euros from a woman she used to clean for cash in hand. It was worth 450 euros. Nadia calculates the savings. She asks me to sit down next to her on the sofa in front of the coffee table where the family eats all its meals. The TV is on a high shelf on the wall opposite. Under our feet is a beige and black rug, a gift. At the head of the sofa bed is a child's bed with cuddly toys: Winnie the Pooh has been with the little girl since the first hotel.



Figure1 Nadia's room, 2020, L. Overney.

The bunk bed, still too high up for the little girl, is used for storage (a duvet, blankets, an iron, a roll of paper towel, some carefully folded clothes, drawing materials). Underneath, plastic boxes are stacked up that contain the child's clothes and, next to them, a suitcase with clothes for Nadia. Next to the clothes boxes are two other boxes for toys (figure 2). The couple also has a small table (70 x 70 cm) covered in shiny cloth. Underneath it are the husband's clothes stored in a travel bag and their rolled-up prayer rug. Nadia also has a small table with two folding plastic chairs, bought at the discount supermarket opposite the hotel. The room has a booth, a sort of prefabricated polyester shell measuring 1.5 metres by 1.5 metres, with a shower and sink, where dishes can be done.vii

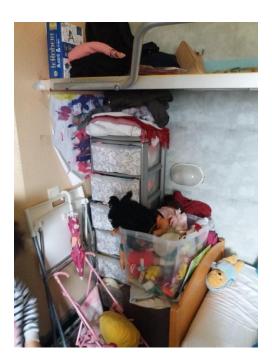


Figure 2 Boxes in Nadia's room, 2020, L. Overney.

Living in a single room does not mean living in a single space (Rosselin 2002). Like other exiles living in hotels, Nadia tries to work on her space by arranging the domestic objects. She has divided up her 9 m² and defined distinct living spaces: the bedroom area with the baby's bed and the couple's sofa bed for the night; the living and playing area with the sofa bed and the low table during the day. Each member of the family has a corner to store their clothes.

To go with the tea, Nadia offers me cakes, which she has baked herself with her daughter. This is the opportunity for her to show me her kitchen corner (figure 3). Officially, cooking in the bedrooms is forbidden, as is having a refrigerator there. But since the hotel's shared kitchen is too small to allow everyone to cook their meals (see below), the manager has finally turned a blind eye and even installed the refrigerators on the upper floors himself. Next to the small window is where Nadia has hers. She has put an electric mini oven on top. There is also a table with an electric hot plate and a microwave oven; underneath it, all the ingredients and kitchen utensils are carefully stored in plastic drawers on wheels. The mini oven comes from the flea market organized one Sunday a month in the car park of the discount supermarket. An extension cable runs along the wall: the hotel room only has one outlet. Nadia is constantly confronted with kitchen smells; only a few centimetres separate her kitchen from the living area. The smells are difficult to ignore, even when she is concentrating on the TV news or ironing clothes on the sofa, her back to the kitchen.



Figure 3 Nadia's cooking corner, 2020, L. Overney.

The household functions according to the gendered breadwinner model: the husband goes to work; the wife looks after the house and household (Potucheck 1997). Managing the money is a job for Nadia: she has to skimp at all times, buy second-hand articles, and not spend too much (Pahl & Vogler 1994). Nadia's husband has undeclared work, he carries the boxes to the market. He gets up early and when he returns at 3 pm, Nadia goes to the park with her child to let him rest. In only 9 m², physical contact between family members is continuous. The single room contains several areas, but since everything happens at the same time, the olfactory, noise and visual disturbances are permanent.

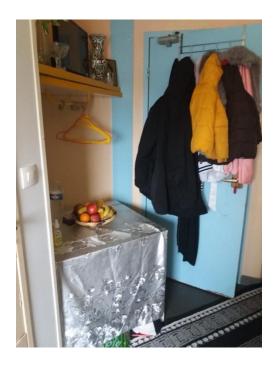


Figure 4 Nadia's front door is difficult to open completely, 2020, L. Overney.

The family washes, sleeps, cooks, plays, eats and prays in 9 m². But they keep going. Photos of the child are on the walls. Everything is perfectly tidied, cleverly organized, everything has its place, nothing spills over in these 9 m². The room door only opens partway, blocked by a suitcase or trunk – this is the case in all the rooms I saw (figure 4). You slip into the room rather than enter it. This configuration forces the residents to be very disciplined about tidying up every day. The woman of the household must keep an eye on domestic order. There is perpetual stacking and storing - e.g., provisions and utensils under a table/ microwave/hot plate/cutlery trays. Clothes must be carefully folded to prevent piles from collapsing. These piles structure the household's equipment for months.

Contending with Ephemeral Objects, or: Plastic Rules

What is the temporality of domestic objects? Some are made to last, like a wooden wardrobe, a wooden trunk from the Middle Ages or a silver piece of cutlery. This heavy furniture is a symbol of proven solidity; they will be passed on as heirlooms and contain part of the family memory (Gotman 1988; Chevalier 1996). The importance of the physical properties of objects, their affordances (the weight, textures and tactilities of the material world) are almost impossible to neglect. Objects such as wooden wardrobes are spaces of intimacy, as Bachelard explains (2009, 79-91). They are filled with "objects of affection" (Dassié 2010). In contrast, what domestic objects accompany exiles in transit? Exiles furnish their rooms with sideboards; plastic drawer units on wheels; plastic or cardboard boxes that can be stacked to the ceiling; wheeled suitcases temporarily transformed into linen baskets; small folding tables and chairs; 50 litre plastic laundry bins. Made of light, often translucid materials, this inexpensive occasional furniture is meant for temporary use (figure 2).

In the long term, the storage is reminiscent of the metal "locker" found in accommodation for migrant workers or in factories: a cloakroom locker, at times with a padlock, for temporary, functional and logical use. These are provisional furniture and objects for provisional residents (Sayad 1980).

In some cases, a sofa bed like Nadia's transforms the situation: the room is a bedroom by night and a living-room by day. Objects transform space. The objects of exile are also often

reappropriated objects. For example, one resident has turned a rice cooker bought from a famous French second-hand website into a slow cooker to heat canned food in their bedroom. On the way back from food handouts, baby buggies are used as trolleys to carry provisions. Many women still do small handwashes in a plastic bowl under the shower; the rest is washed at the laundromat once a week. These precarious arrangements last a long time.

2. The Itinerant Kitchen

Mrs. Efoui and others

Let us now consider other practices of cooking through the case of the Efoui family. While Nadia cooks in the privacy of her room and suffers from kitchen smells that spread through her sleeping space, Mrs. Efoui externalizes this practice in the collective kitchen and is watched by other women. While Nadia's experience is typified by the constraints of cooking in a small space, Mrs. Efoui must move her kitchen within the building.

Saturday afternoon, shortly after 1 pm: Mrs. Efoui is finally alone in the kitchen - the only kitchen for 57 families - and takes up position in front of the six hot plates. The space had been occupied all morning by other residents; she had to wait her turn, as she does every Saturday. Today she starts by broiling five pieces of fish and boiling rice (figure 5). Next to her, on the work surface, are two large, thick plastic bags. They contain everything she needs for her recipes: fresh tomatoes, pieces of chicken, spices, fresh peppers and chillies, canned spinach, shrimp and dried fish, tomato concentrate, garlic, rice, a five-litre bottle of sunflower oil, and stock cubes. Each ingredient is wrapped in a small plastic bag that the cook opens and closes with care. These bags are her larder. In her bedroom, they are stored under a little table, stuffed in between the suitcase containing her daughter's clothes, her son's trunk of toys and her husband's safety boots.

Mrs. Efoui cooks once a week. She works in a Paris hotel as a cleaner and leaves home at 7:30 am to return towards the end of the day. She takes the bus, then the train, a journey of an hour. During the week, she just has the time to cook rice or pasta and serve them with the sauce prepared in large quantities the previous Saturday. Everything is pre-planned. She bought her fresh produce the day before, and she often does a bit of shopping in Château Rouge, a Parisian neighbourhood with a good number of African food shops. In her bags are also a stewpot, a frying-pan, two saucepans bought at the discount supermarket 300 metres from the hotel, a good knife for cutting raw meat, a sieve, wooden spoons, an electric mincer for shredding the shrimp and the dried fish, and above all, many plastic boxes for storing the prepared food. They will go into the small refrigerator in her bedroom. Everything she needs is in her bags. She has her cooking habits: she has been living in this hotel for five years.



Figure 5 Mrs. Efoui cooking in the collective kitchen with all her utensils, 2020, L. Overney.

Mrs. Efoui is now working on the sauce; she is making two big pots. Then she wants to fry chicken pieces.

A young woman, Mariam, enters the kitchen, puts water on to boil and goes back up to her bedroom.

It is almost 3 pm, and one of Mrs. Efoui's sauces is ready. She fills a plastic box and returns to her bedroom... But the sauce spills, and the tiles of the entrance hall are splattered red, the stairs as well... A few minutes later, she comes back down, cleaning as she goes. She fills another box that her daughter takes to their bedroom. No drips on the floor this time. "Up, down, up, down," sighs Mrs. Efoui.

A few moments later, Mariam comes back down. She is careful now. Last month, she put eggs on to boil, went to her bedroom and forgot. After 45 minutes, everything exploded in the saucepan.

Now it is Mrs. Diop's turn to take her place in front of the work surface. Well organized, she has a plastic basket filled with utensils and ingredients in one hand, her own hot plate in the other. She has brought it down from her bedroom. Like Mrs. Efoui, she has everything she needs in her portable larder: the meat, onions that she has already peeled in her room, garlic, stock cubes, chillies, rice that she has already rinsed, a saucepan, a big knife, a wooden spoon, and a frying pan are all in place.

For Mrs. Efoui, the afternoon of cooking nears its end. It is 5 pm. After four hours in the kitchen preparing dishes, waiting for them to simmer, putting them in containers, exchanging a few words with the neighbours, washing the utensils, and storing them in her plastic bags, she can return to her bedroom. Her daughter helps. But it still takes six return journeys to clear the kitchen. Mrs. Efoui has cooked for four hours and made all the week's meals.

The Blurring of Private and Public Spheres

Preparing meals in the shared kitchen of a hotel is a form of ambulant cooking. The practices involved are akin to those of street vendors in the informal economy, who carry their shops and merchandise single-handedly. They reveal both a profound unease and the many ways in which people must adapt to their material conditions to be able to cook in spite of everything. Piles of utensils and plastic bags are used to make the return journey between the bedroom and the shared space of the kitchen. This practice of ambulant cooking blurs the borders between private and public spheres. Culinary practices and tastes, supposedly intimate and familial, are revealed in public when having to cook food watched by other women and when sharing utensils; when plastic containers let their aromas escape in the corridors; and when plastic bags strain to conceal their contents in the shared refrigerator.

This scene of mobile cooking takes place once a week. At the hotel, only one meal is cooked, dinner – nothing else. Children frequently skip lunch, except when they go to the school refectory. Saturdays and Sundays, lunch may be one tin of food for three people, donated by a charity and heated in situ, in the room's last free square metre. The one meal of the day has no fixed hour. Sleep is snatched irregularly night and day. The irregular lives thus produced cause physical problems diagnosed by doctors. There is a shortage of space, meals, and sleep.

3. Flow Dynamics

Storage, clutter, overflow

The space of exiles is saturated by objects, which provoke daily struggles with hotel managers. In some hotels, the rules are radical: no decoration, no posters and "NO CLUTTER IN THE ROOMS. ONE SUITCASE PER PERSON ONLY," according to the regulations posted in the foyer. The manager insists on being able to clean easily and, above all, to prevent the families from settling in completely by stockpiling their possessions. In other establishments, managers make do, turn a blind eye and try to facilitate things. For instance, one installed a sort of container on the parking load to relieve the congestion in the bedrooms: bikes, large suitcases and cardboard storage boxes accumulate there. For access, residents have to ask him for the key. A second, accessible container has been placed by the hotel entrance, with a notice stating that "this space is exclusively reserved for pushchairs." The container is a temporary construction that accompanies the transit of exiles, from "humanitarian camps and shelters" to the hotel. The manager's most recent initiative is a second-hand clothes cupboard in the reception area for clothing for children and adults, stuffed animals and other toys left by departing families or donated by associations — a help-yourself charity cupboard.

The manager also tolerates the six cars in the car park, which are no longer used and serve as storage space to relieve the nine square metres of certain families. In them are mattresses, chairs, bags full of clothing, a reserve of toilet paper bought on special offer, kinkelibaviii branches for tea, spare mechanical parts and salvaged pots of paint. The disused cars help to gain space. Are objects saved for future accommodation? The inhabitants resist such dreams. Some families leave objects with close friends or family while waiting... The cars also enable people to sit down for a few hours in summer. Men especially come in search of a breath of fresh air and sit down to listen to the radio.

Moving

Whilst 44% of families housed by social service in Greater Paris have been housed for more than two years (Fondation Abbé Pierre 2020), their situation remains uncertain. Where will they be in a month or a year? The hotel is provisional – the successive moves and nomadism will continue.

Take the example of Françoise. She has just learned that she will be leaving the hotel for an apartment several kilometres away. The next day in the foyer she takes new clothes from the charity cupboard, and she leaves others. She has three suitcases and two bags and is angry: "It's not possible to move from one place to another like this! No, it's not possible to take the bus like this!" Françoise does hair braiding; she is worried about her losing her clients by moving away.

During the survey, I witnessed several of these removals to another hotel or, in some cases, to more stable housing. They were accomplished using plastic bags and usually by the women alone; under their breath, they muttered the same words: "We'll get used to it," said in a tone suggesting "it's so long and difficult."

Another day, Marvelous, who left the hotel five days earlier, is visiting. She has come back for bags waiting for her in the foyer – five large plastic bags. She won't be able to carry it all on the bus! She calls a friend, Constance, and asks her to bring down a bigger bag. She is leaving her a bucket and sponge. The manager, Katia, checks the size of the bucket: "That's OK," she says. Marvelous has to leave quickly, go to the town hall and then come back to the shelter, all by bus and carrying enormous plastic bags.

The following month, in the Oise *département*, Leonard, 39, is resignedly waiting outside the hotel with his son. "This is already the seventh transfer for us," he says. He and his family arrived from Albania two years ago. After eleven months in this hotel, they are about to return to a different town, where they have been before. "It's not OK!" Leonard says angrily.

"What a disaster!" sighs his partner Aurela, who is sitting on the luggage. By bus or on foot, these removals from accommodation to accommodation disrupt the exiles' trajectory: the wobbling objects and clothes spilling out of bags echo the trembling families, who will be forced to rebuild an equilibrium elsewhere.

Conclusion

The objects and uses thereof that this article describes constitute the material culture of exiles. They are indicative of ways of living while waiting for regularisation. They are characterized by both instability and the determination and efforts deployed by the exiles to find a certain measure of stability. Wardrobes on wheels, suitcases that become linen cupboards, transparent boxes, plastic bags, ambulant kitchens: these seemingly ephemeral objects support a daily life that has a wealth of practices. The material culture established over the years of waiting in hotels is a dialectic between settling-in and instability. The exiles intensify their presence without being able to obtain true settled status, in other words regularisation, social rights, the right to work and to housing.

Material life occupies the minds. The crucial accumulation of reserves monopolizes all energy. This is above all the task of women, who look after the space and manage the household's meagre resources. As in other poor families studied by anthropologists, managing money is itself a job. These women are more or less hanging on, in an unstable equilibrium.

Exiles' relationships with things in their home are more than just cohabiting and homemaking. How can they create and maintain family links under these conditions of hotel life? "Living with things" means preserving memory and family links, taking pleasure at home. To fight back against the void of waiting, Nadia takes the time to pass down to her daughter the pleasure of cooking and baking, a family tradition that cannot wait. Mrs. Efoui often suggests to her daughter that they cook together. Like them, other exiles also take pleasure in putting together a full set of kitchen equipment, in cooking for a long time, in surrounding themselves with objects they like. Accumulating and using these objects ensures a more pleasant daily existence. Whilst the objects have little economic value (being second-hand and old, and often damaged), they are precious for people because they improve life at the hotel. An old, second-hand, electric mini oven can change someone's life. Storing these objects also means preserving family values: traditional recipes, domestic practices, religious practices, school memories, memories of childhood spent in hotels. A place, however minuscule, has been reserved for them. Such is the life of the exiled families who accrue here. As N. Gibson has already demonstrated for ordinary housing, this survey reveals how material practices (the organisation of the room, the decoration, tidying, storage, cooking) maintain family relationships as well as relationships with the country of origin and the host country. Ethnographic fieldwork results underline the shared aspects of exiles' material culture despite the specific circumstances of exile, poverty, and hotel accommodation.

However, objects pile up without any certainty as to the future, without the "domestic fossilisation" (Dassié 2009, 134) that characterizes family wardrobes

where nothing has been touched for years. In contrast, in a hotel, objects are moved and tidied away almost every day. The manager has the right to inspect everyone's possessions. And when a family is directed towards another hotel, everything must be moved again. What will come after the hotel? Housing? A different hotel? The street? The issue raises many fears and questions. Anyone taking an interest in the spatial and material anchorage of exiles can see the extent to which the enforced mobility of exiles is reflected in their furnishings.

Dichotomy between storage and clutter structures exiles' domestic life. In most hotels, families live in such minuscule spaces, closely controlled by hotel managers that they are not able to negotiate and to manage their own practice of storage and cluttering. They live under pressure despite arrangements. Exiles had better not be noticed through clutter or with too many objects as their legal status is precarious – they are just temporarily housed. Being housed by a social service is a fragile right. In other words, they are not allowed to settle in.

Storage for objects is rarely foregrounded in ethnography. This may be because, in ordinary housing, such spaces are not initially very visible, but rather hidden. In budget hotel rooms, by contrast, they take up almost all the space and are very apparent. Taking an interest in these storage practices provides a new way of making visible the spaces inhabited by the poor and by exiles. This survey emphasizes people's capacity for finding solutions to tidying away their possessions, accumulating objects, transmitting practices to their children, and maintaining a daily life that is as stable as possible. It

also emphasizes the role of material culture in social relationships, especially within the family.

Contemporary material culture studies should focus on the poor: what about domestic life in conditions of deprivation, dislocation, where the norms and rituals of the everyday are disrupted?

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ⁱ A small backpack is the emblem of the destitution of the exiles. The International Rescue Committee (NGO) asked refugees in a shelter in Lesbos (Greece) to share the contents of their small bags and show what they managed to hold on to from their homes. Their meager belongings are exhibited here: https://me-dium.com/uprooted/what-s-in-my-bag-758d435f6e62

- ⁱⁱ For thoughts on the material cultures of migrants in museums, see Edwards, Gosden and Philips 2006.
- iii The fieldwork was conducted with Jean-François Laé, Professor at the University of Paris 8-Saint-Denis.

- iv France is divided into 101 départements. Each is run by its own local council, the « conseil départemental ». In particular, this institution is in charge of social and health policies (care in old age, disability, childhood protection system etc.)
- ^v Previously, cheap hotels had been small, family-run, city-centre establishments.
- vi Cited by Bourgois J-F, Jallat F. 1994. "Histoire d'une innovation de service réussie: le lancement de Formule 1," *Décisions marketing*, (2) 34.
- vii In other hotels, sanitary facilities are shared.
- viii A West African medicinal plant that grows on branches about one metre long; the leaves of this shrub are used to make herbal tea.

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Crawling Glazes on Mid-Century Modern Maritime Canadian Studio Pottery: Shared or Re-Created?

Studio pottery can be defined as unique ceramic wares hand-produced in small quantities by individuals or small groups who are involved in all aspects of its production. As such, it is distinguished from mass-produced pottery made on an industrial scale by factories. Excluding aboriginal pottery (e.g., Owen et al. 2014, 76; 2016, 231), which has been produced by indigenous peoples (Eastern Woodlands cultures) in central and eastern Canada for millennia, the production of studio pottery in this country dates to the early 20th century. Some of the earliest studio potters worked in the Canadian Maritime provinces (New Brunswick, Nova Scotia, and Prince Edward Island), an area largely blanketed by clay deposited in glacial lakes (e.g., Lake Shubenacadie; Stea et al. 2004, 14) following the last ice age. These deposits no doubt attracted the attention of those working with this medium, and indeed some of these clays are suitable for throwing on a potter's wheel directly from the ground. Others, however, had to be processed and/or mixed with other clays before being thrown or moulded into pottery and then successfully fired (Home 1944, 74; Owen and Boudreau 2008, 27).

Erica and Kjeld Deichmann, immigrants of Danish extraction, are commonly considered to be among the first producers of studio pottery in Canada to have made their living from their craft (Inglis, 1991, 11). The Deichmanns moved to Moss Glen, on the north shore of the Kennebecasis River east of Saint John, New Brunswick, with the hope of establishing a hobby farm, but the discovery of red clay on their property inspired them to make pottery. Funded by an inheritance, in 1933 the couple spent a year in Europe indulging their Bohemian interests. While in Denmark, Kjeld learned how to build a kiln from a former classmate (Inglis 1991, 12). The Deichmanns returned to Moss Glen in the spring of 1934 to set up their own studio, building a large, woodfired kiln, and initially used local clay to make pottery. Although they lived in an isolated, rural hamlet, by no means did the Deichmanns work in a vacuum. Over time, they networked with other potters both in the Maritimes (e.g., Eleanor and Foster Beveridge and Nita des Barres; Crawford 2005, 37) and abroad, eagerly seeking out expertise from giants in the field such as Bernard Leach, the renowned pioneering British studio potter.

The Diechmanns were active from Aug. 1935 until Kjeld's death in 1963. They produced utilitarian wares and figures, the most well-known of which was a camel-like creature they called a "goofus" (figure 1), whose image often appeared on their plates, bowls, and pin dishes. Other figures included female busts and birds (see Owen and Boudreau 2008, 8), but goofus figures are by far the most common. Notwithstanding initial setbacks related to overfiring in their homemade kiln, they soon met with success and by 1937 were exhibiting their wares nationally and internationally. With this, their fame grew to the point that their studio in Moss Glen - the Dykelands Pottery – became a mecca for visitors. In 1956, they moved to nearby Sussex to escape the throngs. Erica Deichmann decorated and glazed pots thrown by Kjeld. She is said to have experimented with over 5000 glaze recipes over the years." The most prominent of these was arguably her "Snow on the Mountain" (SOTM) glaze, a type of crawling glaze (see below) with ameboid "islands" of thick, snow-white glaze separated by patches of the ceramic substrate iii (red-firing earthenware, pale tan stoneware or a thin layer of slip^{iv}). Its appearance has led some admirers to refer to it simply as a "pebble glaze."

Other potters were already active in the Maritimes by the mid-1930s (see Crawford, 2005, 21-25). For example, Alice Hagen (1872-1972) set up her own pottery at age 60 in Mahone Bay, Nova Scotia in 1931, where she trained others in pot-making. Like many other women in the late 18th/early 19th century, including noted Nova Scotian artist Edith Smith



Figure 1 Deichmann goofus figure in red-firing clay (13.3 cm tall; signed *Erica*/cojoined *KD*/*NB*).



Figure 2
Porcelain blank decorated by artist Edith Smith (27cm tall; signed *Edith A Smith 1921*; factory-stamped *B&Co/France* [L. Bernardaud & Co/Limoges]).

(1867-1954), Hagen honed her painting skills by decorating porcelain blanks. An elaborate contemporary example by Edith Smith can be seen in Figure 2. Although Hagen created a wide variety of ceramic wares which often had florid colours, her signature work involved throwing bowls made from clays she tinted different colours (figure 3). She marketed these as "Scotian Pebble." The earliest dated piece of apparent studio pottery from the Maritimes of which we are aware is a small, unglazed redware creamer incised on its base "Acadian Pottery/Enfield," with the phrase "Souvenir of Halifax, NS 1911" written in nowfaded ink on its side (figure 3). High-quality red clay from the Enfield area is still used today by local potters and in the brick-making industry. The longest operating (c. 1880-1925) commercial potworks in Nova Scotia was established by James Prescott in Enfield. He produced all manner of utilitarian wares, from milk pans to chamber pots and drainpipes, but also decorative terra cotta plaques. One such plaque is signed with a cojoined "HP," evidently referring James' son Henry, and "Acadian Pottery/ Enfield N.S." and stamped "W.S. & C/H." This likely denotes the Halifax distributor Webster, Smith & Co. (Maclaren 1972, 16-22). It seems that Acadian Pottery produced these decorative wares on behalf of James Prescott & Son, so it may not have met the criterion for studio pottery sensu stricto.



Figure 3
Early pieces of Nova Scotian studio pottery. A "Scotian Pebble" bowl (*left*; 13 cm diameter) by Alice Hagen (unsigned, but similar bowls are marked A. Hagen/M-NS; the "M" signifies Mahone Bay), and (*right*) an unglazed, hand-thrown redware creamer (12 cm tall; incised on the base Acadian Pottery/Enfield; "Souvenir of Halifax, NS 1911" is written in faded black ink on side).

Some historical potters produced wares simply for their own gratification, but others sold their pottery. Among the latter, many participated in regional craft shows. This not only allowed them to market their wares to the public, but to interact directly with other craftspeople. This made historical potters both colleagues and competitors. It also begs the question as to whether knowledge about how striking features, such as the SOTM glaze, were produced was shared by competing colleagues, who then created their own versions of it, or whether potters simply copied one another without direct technical knowledge of their competitors' method. Certainly, many Maritime potters were influenced by the pottery forms produced by others. For example, influential Nova Scotia potters Eleanor

("Sandy") and Foster Beveridge of Mader's Cove (near Mahone Bay) produced figures in porcelain, but rather than "goofus" tetrapod creatures, they made models of birds and stylized human figures quite different than those fashioned by Erica Deichmann." The Beveridges commonly decorated their porcelain tableware and figures with cobalt blue sprigs (figure 4), a motif unique to them. Their thinly potted and sgraffito decorated porcelain bowls (figure 5) resemble some of the pottery made by renowned Austrian/British potter Lucie Rie (1902-1995). After initially producing small stoneware pots, the Beveridges later produced substantial stoneware and redware pieces of very high quality, with few if any visible flaws. Starting in 1967, they worked exclusively with porcelain bodies (Holtz 1999, 2). Sandy Beveridge is known to have discarded many of her early pieces (Holtz 1999, 3) and is anecdotally quoted to have said that "a hammer is a potter's best friend." Evidently, Foster Beveridge's employment as a naval engineer allowed them the luxury of maintaining this high standard of production.

Alma and Ernst Lorenzen began making pottery as hobbyists in the mid-1940s in Dieppe, NB. Ernst was employed at the Moncton airport at the time. The Lorenzens' work soon attracted the attention of Lloyd Shaw, owner of Shaw Brick, a multi-generational family business now centered at Lantz, NS. VI Shaw sent the Lozenzens some red-firing local clay and was so impressed with their work that he encouraged them to move to Lantz. With his financial backing, they moved there around 1950 and their hobby became a full-time vocation. Today, the Lorenzens are best-known for sculpting in clay

detailed models of native mushrooms, although they also produced tableware (Owen et al. 2012, 93-107). Carrie Mackenzie, a less known but highly competent potter from Saint John, NB, made, among other forms, knobbed dishes that closely resemble the "Kish" bowls produced by the Deichmanns (figure 6). On occasion, the Beveridges, Lorenzens, and Mackenzie made use of crawling glazes, with one of the Beveridges' versions being, at least visually, a close replica of the Deichmanns' SOTM glaze (cf. figures 7 and 8).



Figure 4
Cobalt-blue sprigged decoration on porcelain humanoid figure made by the Beveridges (22 cm tall; stamped with an encircled "B" and signed Beveridge/NS).

It is hardly surprising that some of these potters produced similar forms of wares and glazes – imitation is, after all, the

highest form of flattery. But one wonders just how much specific technical information potters shared about the production of their ceramic bodies and glazes, including details such as ingredients and their proportions or firing conditions and duration. This issue is addressed here using compositional data for crawling glazes produced by four the Maritime potters/potting couples described above.

Crawling glazes

A glaze is a glassy coating on a ceramic substrate, whether earthenware, stoneware, or porcelain. With some exceptions, glazes are water-based mixtures of quartz (the main glass former), a flux (e.g., alkali compounds, boron, or lead), and a stiffening agent such as alumina to increase the molten glaze's viscosity during firing. In some instances, colourants such as base metal oxides and carbonate minerals, as well as opacifiers with very high melting temperatures (e.g., tin and zirconium oxides), are added to the glaze mixture. Ceramic objects to be glazed generally are either dried at room temperature or, in the case of soft-paste porcelain,vii kiln-fired at high temperature (e.g., ~1200°C, depending on its composition) before being glazed and refired at lower temperature (e.g., ~1000°C; e.g., Owen and Hanley 2017, 92). The glaze mixture melts during kiln firing and quenches to form a glass when heat is dumped from the kiln. Objects to be glazed can be dipped in the glaze mixture or sprayed. Stoneware traditionally had a salt glaze, produced by tossing rock salt into the kiln as stoneware objects are being fired at very high temperature, but silica-based glazes can be used instead (as is the case in Deichmann samples D3 and D4).



Figure 5
Two Beveridge porcelain incised and pinched bowls. They are thinly potted and decorated with vertical sgraffito lines, suggesting the influence of famed Austrian/British potter Lucie Rie. Diameter of each bowl ~13 cm.



Figure 6
Knobbed "Kish" bowls (shown inverted) produced by (*left to right*) the Deichmanns (9 cm diameter and 6 cm diameter, respectively; both are stoneware and signed *Deichmann*/cojoined *KD/NB*), and Carrie Mackenzie (13 cm diameter; redware; signed *Carrie Mackenzie*).



Figure 7
Analysed Deichmann pottery. *Left to right:* Deichmann creamers/pourers D1, D2, D3, and D4 (all signed *Deichmann* and "*DK*" except D4 [cypher only]). Largest creamer is 9 cm tall.

Glazes that separate into discrete beads or blebs ("islands") during kiln firing are referred to as crawling glazes. The glaze blebs are separated by irregularly shaped patches of the substrate. Glaze crawling is generally considered to be a flaw, but in some instances this effect is produced deliberately. The intentional creation of crawling glazes dates back to late 16th century Japanese Shino wares. viii Glazes that are viscous and have a high surface tension when molten are prone to crawling (Hamer and Hamer 1997, 87). Molten glazes with a high alumina (Al₂O₃) content are relatively viscous and the presence of opacifiers tends to increase surface tension (Ibid). Carbonate minerals break down (dissociate^{ix}) over a range of temperatures as they are heated.x Thus, provided this process overlaps partial melting of the glaze mixture, their use in glazes can lead to an increase in viscosity as CO₂ bubbles^{xi} form and impede flow of the molten glaze. Enriched in these and other ingredients, such glazes can have unusual compositions. However,

the crawling of glazes with less radical compositions likely occurred due to conditions prior to firing, especially poor adhesion between the dried glaze and its clay substrate. This can happen because of greasy or dusty areas on a pot's surface; incomplete drying of a pot after being sprayed or dipped into the glaze mixture; applying the glaze thickly; or overgrinding of glaze materials.xii Potters seeking to produce crawling glazes can ensure poor adhesion by coating their pots with a slip or an initial glaze ("underglaze") prior to glazing (e.g., Hopper 2013; see for example Deichmann sample D3, figures 7) with the mixture they intend to crawl.

Crawling can be initiated along pre-firing cracks formed in the dried glaze. This can result from a surfeit of clay or other material in the glaze mixture, causing it to absorb water and allowing excessive shrinkage and cracking in the glaze as it dries (Berneburg 2015). Alternatively, insufficient clay or other very fine-grained material to ensure good contact, and therefore a strong bond with the substrate, facilitates crawling of the glaze during firing. Used in excess, however, very fine-grained material promotes excessive shrinking of the glaze during drying, which can result in crawling during firing.xiii

Sample Description

Eight pottery samples with crawling glazes were analysed: four Deichmann creamers/pourers with SOTM glazes^{xiv}; one Beveridge mug with a crawling glaze that resembles Deichmanns' SOTM glaze; one of the Beveridges' flower frogs, on which the glaze failed to retract into separate "islands"^{xv}; one Lorenzen mug with a pale grey glaze that dripped and

separated over a black underglaze; and a Mackenzie bowl with a brown crawling glaze.

Two of the Deichmann samples (D1, D2) are redware, whereas the others (D3, D4) are stoneware (figures 7). The Deichmann redware samples have tiny (<1 mm) black glassy beads on the clayeyxvi surface, between the white glaze blobs and in bands of non-crawling glazes on the interior and exterior of these vessels. Two narrow (5-10 mm) bands on D2 one in the top interior of this creamer, the other separating the crawled uncrawled-glaze on its exterior - have a pinkish cast. There are pink patches in some of the crawled glaze "islands" immediately above the pinkish band on the exterior of this sample. Sample D4 has a pale tan body, whereas D3 has a paperthin brown stoneware slip covering a very pale grey and glassy (i.e., well-vitrified) stoneware body. The crawling glaze on D3 is vesicular (i.e., contains bubbles), forming a 3 cm x 0.6 cm patch where it has dripped and thinned over part of the slip-covered top interior of this pourer.

The Beveridge mug (figure 8) is made of redware. Its crawling glaze is confined to vertical panels separated by dark brown glazed panels that extend into the interior of the mug. In contrast, crawling glazes encircle the Deichmann samples (figure 7). Smaller glaze "islands" on the mug have discrete brown speckles that form patches on larger "islands" in the centre of the crawling glaze panels. The crawling glaze has begun to drip over the upper edge of the mug, clearly coating the dark brown underglaze. The flower frog (figure 8) has a stoneware body. Its sides are coated with a thin layer of slip over which the glaze, confined to the top of the piece,

failed to drip. It has a mottled brown/greyish-white colour. The lower edge of the glaze is thick and intersects the underlying slip at a high angle, a testament to its viscosity during kiln firing.



Figure 8
Analysed Beveridge pottery. *Left:* mug (14 cm tall; signed with incised *E.&F./Beveridge/N.S.*); *right:* flower frog (9 cm tall; signed with incised *Beveridge*).

The body of the Lorenzen mug (figure 9) is cream-coloured, unvitrified, and slightly gritty to the touch. It is likely made of stoneware rather than porcelain, sensu stricto. The crawling glaze was applied to the interior and exterior of the mug but not its base. The mug has a black underglaze that was no doubt applied to ensure crawling of the overglaze and to add colour contrast. A lidded stoneware vase with the same glaze is shown in Crawford (2005, 40). *vii

The MacKenzie bowl (figure 10) has a redware body. Its brown crawling glaze shows a variable degree of retraction (i.e., "beading"). The entire bowl except for the base is glazed. Crawling occurred mostly on the exterior surface. The glazed interior has crawled only within 5

mm of the rim and on one $\sim 5 \text{cm}^2$ surface. Glaze crawling is extensive on the exterior but there are patches that remain smooth. Many of the glaze "islands" are hollow and have popped (figure 10). The exposed clay body between the crawled glaze is brown, whereas the bottom of the bowl is reddish-brown. Use of a 10x hand lens reveals the presence of white rectangular crystals up to about 1 mm in length in the glaze. The Beveridge mug bears their early mark ("E & F Beveridge" incised in script) rather than their later encircled "B" stamp, with "Beveridge," so the mug is dated to approximately 1960. xviii The flower frog has "Beveridge" inscribed on its base.

Results

Ceramic body and slip compositions are given in Table 1. Analytical methods are described in the Appendix. In addition to the samples described here, an analysis of the Acadia Pottery unglazed redware creamer (figure 3), along with the composition (from Owen and Boudreau 2008, 9) of unwashed clay from the Moss Glen clay pit used by Kjeld Deichmann, are also included in Table 1. The Beveridge and Lorenzen mugs were too tall to allow in situ analysis of their bodies, which are exposed only on the base. The body of Deichmann stoneware pourer (sample D3), exposed on a broken edge, was analysed by SEM/EDS; the slip coating the entire vessel was analysed by XRF (Table 1).

The compositional characterization of pottery and character of its raw materials need not rely on a plethora of components. The most abundant elements (commonly expressed as oxides) include silica (SiO₂), alumina (Al₂O₃), lime (CaO),



Figure 9 Analysed Lorenzen mug (10 cm tall; signed with an inscribed *Lorenzen*).



Figure 10
Analysed Mackenzie bowl. *Left:* Bowl (10.7 cm diameter; signed 71 B [likely a glaze number] / Carrie Mackenzie/'54); right: detailed photo shows popped glaze blebs (see text).

		[Deichmann	samples		Beve	ridge	Mackenzie	1911 Enfield	Moss Glen	
				SEM/EDS		Flower frog		bowl	creamer	clay***	
	D1*	D2	D3 (slip)	D3 (body)**	D4	slip/engobe	body				
SiO ₂ (wt%)	63.1	59.1	57.5	61.8	54.4	55.3	62.6	58.8	57.9	62.5	
TiO ₂	0.9	1.3	1.4	1.1	1.1	4.3	1.8	1.2	1.0	1.1	
Al_2O_3	25.2	23.0	31.5	30.1	34.6	16.5	24.9	16.3	20.3	19.5	
Fe ₂ O ₃ (t)****	3.5	4.9	2.6	1.8	2.3	10.5	3.8	8.3	8.3	8.2	
MnO	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	<0.1	0.1	0.2	0.1	
MgO	0.9	0.9	0.9	<0.1	1.5	2.5	1.4	1.8	2.6	2.4	
CaO	0.7	1.4	0.5	0.4	0.9	3.7	0.9	2.6	3.0	1.0	
Na ₂ O	2.7	1.4	3.1	2.9	2.5	1.3	1.2	1.3	1.5	1.4	
K ₂ O	1.7	1.8	1.8	2.0	1.8	2.3	1.9	3.2	4.3	3.7	
P ₂ O ₅	0.4	0.8	0.1	<0.1	0.2	0.3	0.3	0.5	0.2	0.1	
PbO	0.4	0.4	0.3	<0.1	0.3	0.7	0.7	4.8	<0.1	ns	
ZnO	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	ns	
SnO ₂	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ns	
SO ₃	<0.1	4.7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	ns	
BaO	<0.1	0.1	<0.1	<0.1	<0.1	2.0	0.1	0.1	0.5	ns	
Cr ₂ O ₃	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	ns	
ZrO ₂	<0.1	0.1	0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	ns	
Total	99.6	99.8	99.8	100.0	99.7	99.8	99.7	99.9	99.9	100.0	
n=	15	1 (map)	42	12	16	27	25	20	20	1	

*D1 - small creamer; D2 large creamer; D3 - 1955 pourer; D4 - tiny creamer (Fig. 7)

**analysed by SEM/EDS

***data from Owen and Boudreau (2008, 9), presented here volatile-free; ns-not sought

****Total iron as Fe₂O₃

ns - not sought

Table 1 Composition of ceramic bodies and slip (where present).

and alkalis such as soda (Na2O) and potash (K₂O). Glazes can contain fluxes other than alkalis. These include lead oxide (PbO) and, in rare instances (including one of the pots described here), zinc oxide (ZnO), as well as opacifiers and/or colourants. In terms of raw materials, the body of many traditional ceramic wares is dominated by a mixture of pliable ("plastic") clay and an aplastic component ("temper") such as quartz sand (pure SiO₂). Clays comprise a diverse group of minerals, all of which contain silica and alumina. Depending on the type of clay and the proportion of quartz-rich sand mixed in with it, the silica/alumina ratio of pottery bodies can vary considerably.

The Deichmann stoneware bodies have lower silica/alumina (SiO₂/Al₂O₃ [wt.%]) ratios (sample D3 [slip]: 1.8, D3 [body]:

2.1; D4: 1.6) than their redware counterparts (D1: 2.5; D2: 2.6) (Table 1). The higher titania and iron oxide content of the slip on D3 accounts for its brown colour. Apart from that, the slip on D3 has a composition very similar to the pale grey, well vitrified body of this sample (Table 1). The body of D2 contains 4.7% SO₃ and has twice the lime content as D1, implying the use of a calcium sulphate mineral (anhydrite or its hydrous counterpart, gypsum) in its preparation.

Neither sample of Deichmann redware was made solely from local clay, which has an iron oxide content approximately twice that of D1 and D2 (Table 1). This could be lowered by mixing in a substantial amount of relatively iron-free clay, such as kaolin or iron-poor stoneware clay, but doing so would increase the alumina content of the vessels, which is already ~25 rel.% higher than Moss Glen clay (Table 1). Deichmann samples D1 and D2 are therefore interpreted to have

	Deichmann samples*										Beveridge			Lorenzen		Mackenzie
					SEM/EDS				SEM/EDS		underglaze	mug	flower frog	underglaze	mug	bowl
	SOTM1**	SOTM1	SOTM2		SOTM2		SOTM1		SOTM1							
	D1	D2	D3	σ	D3	σ	D4	σ	D4	σ						
SiO ₂ (wt%)	56.8	59.0	53.8	5.3	55.5	1.2	58.1	3.4	60.5	1.6	48.1	44.5	67.2	44.8	56.1	30.1
TiO ₂	0.1	<0.1	0.1	0.1	0.1	0.1	<0.1		<0.1		0.4	0.2	2.0	0.4	0.1	1.5
Al ₂ O ₃	21.6	21.2	22.2	4.0	21.7	0.6	22.1	2.1	21.3	0.9	8.0	13.3	11.1	12.9	16.0	3.7
Fe ₂ O ₃ (t)***	0.2	0.2	0.6	0.7	1.1	0.1	0.2	0.1	<0.1		5.1	2.7	3.6	3.6	0.5	1.4
MnO	<0.1	<0.1	< 0.1		<0.1		<0.1		<0.1		1.2	0.4	0.1	16.8	0.9	0.0
MgO	7.0	6.2	11.6	4.4	11.5	1.6	6.1	3.0	5.2	3.0	1.3	0.5	4.0	3.1	2.3	0.1
CaO	1.3	1.5	1.4	0.3	1.4	0.1	0.9	0.2	1.1	0.2	1.9	4.5	4.0	3.9	4.1	1.2
Na ₂ O	8.5	8.1	6.7	1.4	6.0	0.3	8.5	0.8	7.4	0.9	0.4	6.1	2.2	0.7	1.8	3.5
K ₂ O	3.2	3.0	3.0	0.5	2.6	0.1	3.5	0.3	4.3	0.5	1.8	3.6	3.9	3.6	5.2	0.4
P ₂ O ₅	0.2	0.1	0.1	0.1	<0.1		<0.1		<0.1		0.1	0.2	0.2	0.1	<0.1	0.1
PbO	0.3	0.3	< 0.1		<0.1		<0.1		<0.1		30.6	10.2	0.6	9.9	12.3	46.9
ZnO	< 0.1	<0.1	< 0.1		<0.1		< 0.1		< 0.1		0.8	13.5	< 0.1	< 0.1	<0.1	<0.1
SnO ₂	0.1	<0.1	<0.1		<0.1		<0.1		<0.1		<0.1	<0.1	<0.1	<0.1	0.2	10.8
SO ₃	< 0.1	<0.1	0.2	0.2	<0.1		<0.1		<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
BaO	0.4	0.1	0.2	0.1	<0.1		<0.1		<0.1		<0.1	<0.1	0.8	0.2	0.1	<0.1
Cr ₂ O ₃	0.2	<0.1	<0.1		<0.1		<0.1		<0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
ZrO ₂	<0.1	<0.1	< 0.1		<0.1		<0.1		<0.1		<0.1	<0.1	0.1	<0.1	<0.1	<0.1
Total	99.9	99.8	100.0		100.0	,	99.4		99.8	,	99.7	99.7	99.8	99.8	99.8	99.7
n=	23	12	13		6		39		15		15	15	25	23	21	22

*Deichmann samples: D1 - small creamer; D2 large creamer; D3 - 1955 pourer; D4 - tiny creamer (Fig. 7)
**SOTM1 and SOTM2 are compositional groupings of Deichmann glazes (see text)

Table 2 Composition of crawling glazes and underglazes (where present).

been made from an unidentified source of red-firing clay. It is known that, over time, the Deichmanns gradually abandoned exclusive use of Moss Glen clay, which they felt had a short firing range that contributed to high kiln losses.xix To address this problem, they began to mix high-firing stoneware clay from Shubenacadie, NS - kaolin, quartz and/or nepheline syenite - with their local clay (see Crawford 2005, 36; Inglis 1991, 13). Owen and Boudreau (2008, 27) calculated that the composition of a dated (1939) Deichmann bird figure was consistent with a mixture containing 1 part (by weight) Moss Glen clay with 0.23 parts silica (quartz), 0.25 parts kaolin, and 0.03 parts nepheline syenite (a type of granite).

The stoneware body of the Beveridge flower frog has a composition more closely resembling the Deichmanns' redware (especially sulphate-free sample D1) rather than their stoneware (Table 1). However, it has a beige rather than brick-

red colour. It is also coarser grained, with mineral clasts up to 1 mm in diameter, than either the Beveridges' or the Deichmanns' redware. Clearly, the stoneware clays used by the Deichmanns and Beveridges came from different sources. The brown slip on the flower frog is also unusual because it is iron- and titania-rich (10.5% Fe₂O₃; 4% TiO₂) and aluminapoor (16.5% Al₂O₃). In this regard, it should more properly be referred to as an engobe.^{xx}

The composition of the body of the Mackenzie bowl resembles that of the 1911 Acadian Pottery creamer, suggesting that both were made using the same source of clay, perhaps Enfield. It also resembles the composition of Moss Glen clay, but the Mackenzie bowl contains 4.8% PbO. It is very unusual for significant concentrations of lead to occur naturally in clay deposits. For this reason, lead was likely added to the clay, although its intended purpose is unknown to us now. Lead is usually used as a flux in glazes rather than a constituent of earthenware bodies.

Glaze compositions are given in Table 2. There is reasonably good

correspondence between XRF SEM/EDS data for the glazes on samples D3 and D4 (e.g., the results fall with one standard deviation [σ] of each other; Table 2). Based on the four samples described here, the Deichmanns used two variations of their SOTM glaze, one being more magnesian than the other by a factor of about two. Redware samples D1 and D2 and stoneware sample D4 (figure 7) have similar glaze compositions. They are dominated by silica (~56-60 wt.% SiO_2), alumina (~21% Al_2O_3), magnesia (~5-7% MgO) and alkali oxides (~7-8% soda (Na₂O), \sim 3-4% potash (K₂O)), with small amounts of lime (~1% CaO). In contrast, the glaze on stoneware sample D3 contains approximately twice the magnesia content (11.5% MgO) as the other Deichmann glazes, largely compensated by lower silica and alkalis. Given the huge amount of SOTM-glazed pottery they produced, analyses of other samples of the Deichmanns' SOTM glaze on different types of ceramic and underglaze/slip substrates are required to confirm that the data presented here is representative of a significant proportion of their production. It is noteworthy that we are unaware of any Deichmann porcelain with a SOTM glaze. We surmise that a white crawling glaze on a white-firing body would not have the visual impact that this glaze had on redware and stoneware vessels, which may be why the Deichmanns used other glazes on their porcelain. Evidently, they were not inspired by the Beveridges or Lorenzens to apply a dark underglaze on their porcelain wares to achieve a colour contrast with their SOTM glazes.

The black glassy beads seen in the exposed ceramic patches between the glaze "islands" on Deichmann samples D1 and

D2 are iron-rich, containing up to ~68% Fe₂O₃. Neither their identity nor origin is known. Similar black glassy beads also occur, though in smaller concentrations, on the unglazed base of both samples. This means they may have formed due to pre-glazing (i.e., surface preparation) treatment rather than glazing itself. Alternatively, the iron-rich composition of samples D1 and D2 evokes exsolution phenomena that have been described in some geological silicate melt systems (e.g., Charlier and Groves 2012, 37, among many others).

Notwithstanding differences in their compositions, the crawling glazes on Deichmann samples D1, D2 and D4 (henceforth SOTM1), D3 (SOTM2) are visually indistinguishable from one another. All are snow white and have a glassy luster. In contrast, the crawling glazes on the Beveridge mug and flower frog have a pale brownish cast and are speckled with or have dark brown patches. They are compositionally distinct from their Deichmann counterparts and from each other. For example, they have significantly lower alumina contents (mug: 13.3%, flower frog: 11.1% Al₂O₃) than either SOTM1 or SOTM2, and, unlike the crawling glaze on the flower frog, the glaze on the Beveridge mug contains high concentrations of lead (10.2% PbO) and zinc (13.5% ZnO). Zinc oxide can help trigger melting of glaze ingredients and, in large amounts (>25 wt.%), can promote crawling.xxi The dark brown underglaze on the mug is even more leadrich (30.6% PbO) but it contains only a trace of zinc. The tan cast of the Beveridges' crawling glazes is likely due to their iron content, which is highest (up to 7.5% Fe₂O₃) in the brown patches.

The Lorenzens' crawling glaze has an alumina content (16% Al₂O₃) intermediate between its Deichmann and Beveridge counterparts (Table 2). This was sufficient to ensure retraction of the glaze over its black underglaze. Like the crawling glaze on the Beveridge mug, the Lorenzen glaze is lead-rich (12.3% PbO), but it lacks zinc. Its underglaze also contains lead (9.9% PbO). It owes its black colour to its high manganese content (16.8% MnO). Although a decolourant used to remove the green tint imparted to glass by iron, a surfeit of manganese (in the form of pyrolusite, MnO₂) darkens glass - and therefore glazes containing it - to the point of becoming black unless strongly backlit.

The brown glaze on the Mackenzie bowl has little in common with the other crawling glazes described here. It has the lowest concentrations of silica (30.1% SiO₂), alumina, $(3.7\% \text{ Al}_2\text{O}_3)$ and potash (0.4%)of all the glazes, and the highest lead content (46.9% PbO). It is also the only glaze to contain appreciable tin oxide (10.8% SnO₂), which is used in glazes as an opacifier. The white crystals in this glaze are too small to analyse non-destructively. The lead content of this glaze precludes using MELTS software (Gualda et al. 2012, 875) to reliably reconstruct the crystallization of a melt of this composition. However, the concentrations of lime, soda, and potash in the glaze, together with the colour and shape of this mineral, indicate that it is a sodic plagioclase feldspar (e.g., oligoclase).xxii

Interpretation

Erica Deichmann sometimes referred to her SOTM glaze as a "magnesium carbonate pebble glaze" (e.g., see photo captions in Inglis, 1991, 60). Indeed, SOTM1 – and especially SOTM2 – have high concentrations of magnesia, a diagnostic component of the mineral. Both glazes contain just over 1% lime, the source of which might be calcite, a calcium carbonate mineral - CaCO₃ - that is known by ceramists as "whiting," although the use of the common calciummagnesian mineral dolomite (CaMg(CO₃)₂) cannot be excluded. However, dolomite cannot be the sole source of both components because the ratio between them, expressed in terms of their molecular proportions (MP)xxiii is too high (i.e., MgO/CaO [MP] averages 7.5 in SOTM1 versus 1.0 in ideal, stoichiometric dolomite^{xxiv}). This ratio is even higher (11.4) in the SOTM2 glaze. Although dolomite does not always have an "ideal" composition, it is calcium rather than magnesium that can be in excess in natural dolomites (dos Santos et al. 2017, 164).xxv Consequently, we infer that the source of magnesia and lime in the Deichmann's SOTM1 and SOTM2 glazes is either a mixture of magnesite and dolomite, or of magnesite and calcite. Regardless, magnesite is the main or exclusive source of magnesia.

The very low titanium (≤0.1% TiO₂) and iron (0.2% Fe₂O₃) contents of the SOTM1 glaze imply the use of rather pure (i.e., glass-grade) quartz sand and kaolin, likely the sole source of alumina. Higher iron (0.6% Fe₂O₃) in the SOTM2 glaze suggests the use of a less pure (or less well-washed) sand. The soda and potash likely originated as alkali carbonate minerals. Alkali carbonate minerals can be highly hygroscopic (i.e., can absorb water from air, turning them to "mud"), so Erica Deichmann would have stored them with a desiccant (e.g., silica

gel) in a sealed jar. Alkali carbonate minerals are readily available from pottingsupply outlets, as are other carbonate minerals (e.g., magnesite, dolomite, and calcite).

Although compositionally distinct from the SOTM glazes used by the Deichmanns, the crawling glaze on the Beveridges' flower frog and the Lorenzens' mug are nevertheless the same general type (i.e., magnesian) of glaze. Their magnesia/lime (MP) ratios, however, differ, being higher (MgO/CaO = 1.4) in the flower frog than the Lorenzens' mug (0.8). This suggests that the Beveridges used a mixture of magnesite and subordinate calcite (or of dolomite and even less calcite) in their crawling glaze, whereas the Lorenzens combined dolomite with subordinate calcite (or magnesite with even more calcite) in theirs. The crawling glaze on the Beveridges' mug, in contrast, contains very little magnesia (0.5% MgO) and so has a very low magnesia/lime (MP) ratio (MgO/CaO [MP] = 0.2). Its underglaze has a magnesia/lime (MP) ratio of 1.0, so dolomite alone was very likely the source of both components.

Carrie Mackenzie's brown crawling glaze is the odd man out. Mackenzie was clearly not attempting to copy the SOTM-type glazes - the magnesia content of her crawling glaze is negligible (0.1% MgO) and contains a high proportion of lead (largely replacing potash) as a flux, with tin oxide to opacify the glaze. The presence of iron - and titania, if fired under oxidizing conditions - accounts for its brown colour. This effect is also seen in the Beveridges' glazes. MacKenzie's glaze crawled despite its low concentration of alumina. Some of the blebby glaze "islands" are hollow, suggesting that crawling was caused by devolatilization of clay and/or small amounts of carbonate minerals during melting. Thick application of the glaze might also have contributed to the effectiveness of this process. No slip or underglaze was needed.

Discussion

It is challenging to infer an artisan's intent when investigating historical cultural artifacts, even those of relatively recent age. In the absence of documentation such as diaries, letters, or notebooks, analytical data can in some instances be used to evaluate diagnostic features that appear to have been shared or re-created by artisans working in media such as ceramics. In this instance, the compositional and aesthetic dissimilarities between the Deichmann, Beveridge, Lorenzen, and MacKenzie crawling glazes indicate that specific details of their creation were not shared by these artisans.

Despite its markedly different composition, only the crawling glaze on the Beveridges' mug remotely resembles the Deichmanns' SOTM glaze. It is not known whether the SOTM-type glaze was invented by either couple, or if it had been published and was found by only one of our protagonists. It is also not known which couple made their glaze first. The prolonged use of this glaze by the Deichmanns suggests that it originated with them. As it stands, it appears that one couple, likely the Beveridges, attempted to re-create what the other had made knowing only the most rudimentary information about the glaze's ingredients, such as the fact that it contains a magnesium-bearing carbonate mineral. The elevated MgO/CaO (MP) ratio (=1.4) of the glaze on the Beveridges' flower frog shows that they used magnesite as a source of magnesium instead of exclusively relying on dolomite. The alumina content of this glaze was insufficient to ensure effective crawling, despite being pre-treated with a slip. In this regard, the flower frog was a failed experiment, but the result was sufficiently pleasing to its creator that it was not discarded.

Alternatively, if the Deichmanns did share specific details of their recipe, then the Beveridges evidently attempted to refine it. This would account for compositional differences between the two glazes, as well as between the Beveridges' successfully and unsuccessfully crawled glazes (i.e., on their mug and flower frog, respectively). The former inference – that the Deichmanns kept details of their SOTM glaze preparation secret – is the more likely of the two, particularly since the crawling glaze on their mug is, compositionally, so diametrically different. The Beveridges did not make abundant use of their crawling glaze- the mug and flower frog described here are the only examples we have seen. Perhaps the difficulty they had in ensuring crawling of their glaze, as with their flower frog, and the development of dark brown patches and flecks in the glaze, as seen on both the mug and flower frog, discouraged them from making many more. Regardless, if the Beveridges had access to specific information about SOTM glaze recipes and their firing conditions, we see no reason that it would not have been as successfully used on their pots as it was on the Deichmanns'. Cream-firing (likely stoneware, but possibly porcelaneous) tableware with a pale grey crawling glaze was made in abundance by the Lorenzens. Although mildly magnesian (2.3% MgO) in the case of the mug described here, its liberal use of lead as a flux clearly distinguishes it from *bona fide* SOTM glazes.

The inference that the Deichmanns kept secret details of their SOTM glazes is consistent with the competitive nature of artisanal trades, even in the early days of studio potting in Canada. After all, the abundance of wares with this glaze that are still extant shows that it was a best seller. The Deichmanns earned their living solely from their pottery and produced a very wide range of forms, from very small creamers to larger and more imposing pitchers, bowls, platters, and sculptural pieces. This meant their work was available to clients from various economic backgrounds. Contemporary price labels preserved on some pieces as well as exhibition catalogues show that the Deichmanns sold their wares for a range of prices, from approximately fifty cents to tens of dollars apiece, the latter being a considerable amount in the mid-20th century. In contrast, the Beveridges only made and taught pottery to supplement their income from Foster's employment by the Canadian Navy until 1965. **The Deichmanns thus led a relatively impecunious lifestyle that at times could be stressful. For example, Elisabeth Deichmann Harvor describes "tension and money worry" in her recollections of family life at Moss Glen. xxviii She also contrasts the idyllic setting at Moss Glen and Erica mixing bare-handed a witch's brew of glaze ingredients on the dining room table (Canadian Poetry Online 1998, 4-6). Consequently, we surmise that the Deichmanns could hardly afford to share details of one of their most popular glazes with competing potters. In a market with a finite demand for studio pottery, the

financial reliance of the Deichmanns on their craft thus influenced both their relationship with other potters and the scope of the wares they produced. Thus, an element of entrepreneurship emerged early in the history of studio pottery in this country, with the Deichmanns' formula for their SOTM glaze remaining a "trade secret."

It is unclear why the Deichmanns varied the amount of magnesia in their SOTM glaze, but it is likely that the SOTM1 glaze failed to retract properly on some of their stoneware bodies. This could be why they coated stoneware sample D3 with a brown slip. This specimen certainly is not unique in this regard. Many Deichmann stoneware pieces with a SOTM glaze have a brown slip. In the case of D3, it was only by the removal of a small piece for analysis by SEM/EDS that its grey, glassy (well vitrified) stoneware body was discovered because the entire sample, including the base, had a slip coating.

Carrie Mackenzie exhibited her wares with the Deichmanns and other artisans in craft fairs in the 1950s. xxix In addition to creating "Kish"-type knobby bowls (figure 6), she might have been inspired to experiment with crawling glazes herself after seeing their wares. However, Mackenzie was certainly not trying to emulate the white, SOTM-type glaze when she made the bowl shown in Figure 10. Her glaze has a very low alumina content (3.7% Al₂O₃), so it is unclear what triggered such effective crawling during firing. No slip or underglaze is present. The moderate titania content indicates the use of rutile, which likely caused the brown colour of Mackenzie's glaze if it was fired under oxidizing conditions. The bubbly character of this glaze (figure 10) suggests that devolatilization of glaze ingredients overlapped rather than preceded melting, xxx consistent with its very high concentration (46.9% PbO) of lead – a potent flux.

The Maritime potters discussed here all made crawling glazes as part of their production lines. Moreover, contemporary catalogues show that they exhibited together, so they were well aware of each others' work. It is likely that the SOTM glaze originated with the Deichmanns, as it was one of their most successful creations. That said, only the Beveridges created a close facsimile it. Ironically, this glaze, which is featured on the redware mug described here, diverges furthest from the SOTM glaze compositionally. The success of the Deichmanns' SOTM line of wares might have prompted Mac-Kenzie and the Lorenzens to make their own crawling glazes. However, based on the examples described here, they certainly did not attempt to re-create the Deichmanns' achievement. Moreover, given the differences between their own wares, it appears that they didn't share their own knowledge of crawling glazes with each other or with the Beveridges.

Conclusions

Non-destructive chemical analysis of crawling glazes produced by four midcentury Maritime potters (Erica and Kjeld Deichmann, Eleanor and Foster Beveridge, Alma and Ernst Lorenzen, and Carrie Mackenzie) was undertaken to evaluate the extent to which they resembled one another. The Deichmanns are famous for their "Snow on the Mountain" glaze. The glazes on all four Deichmann samples analysed here have magnesian compositions, but one (SOTM2, on stoneware pourer D3) contains approximately twice the concentration of this component as the others (SOTM1). Perhaps not coincidentally, D3 is the sole Deichmann sample to have been coated with a slip prior to glazing, a common surface treatment strategy used by potters to promote crawling. Despite the compositional variations between SOTM1 and SOTM2 glazes, all are snow-white and have a glassy luster.

Both examples of the Beveridges' crawling glazes are compositionally dissimilar to one another and to the SOTM glazes. In this regard, the essentially non-magnesian, lead- and zinc-rich glaze used on the redware mug described here is particularly distinct. Although it has a mottled brown tint, the glaze on this mug more closely resembles the SOTM glazes in appearance than any of the other glazes described here. Crawling was ensured by the presence of a dark brown, lead-rich underglaze made from a recipe that included dolomite as the likely sole source of magnesium and calcium. The glaze on one of the Beveridges' stoneware flower frogs is mildly magnesian- and lead-poor. The glaze's relatively low alumina content, approximately half that of the SOTM glazes, precluded effective crawling despite pre-treatment with a slip. A stoneware mug made by the Lorenzens was pre-treated with a lead-fluxed black underglaze. This colour is required to provide colour contrast with a pale grey crawling glaze that itself is lead-rich. The most lead-rich glaze is on a bowl by Mac-Kenzie. This crawled, brown glaze was opacified by the addition of tin oxide. Many of its "islands" are hollow, indicating that devolatilization of glaze ingredients overlapped melting.

None of these crawling glazes are as aluminous or magnesian as the SOTM glazes and all but one is lead-fluxed. Only the Beveridges created a close facsimile to the SOTM glaze and they well may have been the only ones to try. However, its composition bears little resemblance to the SOTM glaze. If re-creating the Deichmanns' SOTM glaze was indeed the Beveridges' intent, then they did it without their help. The Deichmanns no doubt were collegial artisans, but they were also competitors.

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Appendix: Analytical Methods

Samples were analysed non-destructively under vacuum (2 mbar) using a Bruker M4 Tornado PLUS benchtop micro-X-ray Fluorescence (µXRF) spectrometer at the Mineral Imaging and Analysis Laboratory in the Department of Geology, Saint Mary's University, Halifax, NS, Canada. Both single spots and areas were measured using a 20 µm X-ray beam from a Rh source operated at an accelerating voltage of 50 kV and a beam current of 600 uA. Counting times were 180 sec for single spots and 30 ms/pixel for areas, where emitted X-rays were captured by two silicon drift detectors. The spectra

were evaluated using the M4 software and elements were identified by their characteristic X-rays peaks (e.g., K-alpha, L-alpha). The XMethod software was used to create a polynomial calibration method with several certified [USGS (United States Geological Survey; SCO-1, SDC-1, STM-1), CNRS-CRPG (Centre national de la recherche scientifique-Centre de Recherches Pétrographiques et Géochimiques; IF-G), SARM (South African Reference Materials; NIM-S Syenite, NIM-P Pyroxenite] and in-house (HFL-1, galena) standards to quantify the spectra within the compositional range of the pottery. We lack a cobalt standard, so this component, if present, was undetected.

To evaluate reproducibility of the XRF data, the glazes on two Deichmann samples (D3, D4) were also analysed using a LEO 1450VP SEM equipped with an Oxford Instrument INCA X-max 80 mm² SDD EDS detector. Sample D3 was prepared as a polished grain mount; sample D4 was small enough to fit into the chamber. Count time was 60s. Replicate analyses show that the SDD EDS detector can yield analytical results comparable to a microprobe equipped with a WDS detector (Owen 2012, 1257; Ritchie et al. 2012, 892).

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- ⁱ An alternate version of what prompted the move to Sussex suggests that the provincial government helped the Deichmanns purchase a house there so they would be closer to potential customers, given the many tourists travelling on the new Trans-Canada Highway (Maynard 2015, 74-75).
- ii See <u>Canadian Women Artists History Initiative</u>: <u>Artist Database</u>: <u>Artists</u>: <u>DEICHMANN</u>, <u>Erica</u> (concordia.ca)
- iii The patches, however, can have a glossy sheen not seen on the unglazed base of these pots, suggesting that some glaze components still coat these areas.
- iv Slip is a homogeneous slurry of clay and water. It may contain colourants as well.
- v Early in her potting career, Sandy Beveridge instructed Halifax native Charles Bezanson in potting and glazing techniques. Bezanson later became a Benedictine monk, working as artist in residence first in Vermont and then in Pennsylvania. He was celebrated as being one of the world's leading experts in ceramic glazes.
- vi The history of this company, now known as The Shaw Group Limited since 1993, dates back to 1861, and is described on their website.
- vii The body (paste) and glaze of true porcelain (i.e., Chinese-type) are generally fired together during a single high temperature firing (e.g., 1370°C in the case of a sample excavated in Philadelphia (Owen et al. 2018, 617). This particular sample, however, was coated with a lead-rich (low temperature) glaze after the initial firing, and then fired at a lower temperature (~1000°C) creating a partly crystallized, integrated bodyglaze layer.
- viii Not all historical Shino glazes crawled, but all represent an attempt by Japanese potters to make a white glaze, the first to be created in that country.
- ix Among ceramists, the devolatilization process whereby carbon dioxide is liberated from carbonate minerals is usually referred to as

- calcining. The same term is used to describe the loss of water (dehydroxylation) from clays and bone ash during kiln firing.
- x For example, calcite is generally completely dissociated once the kiln reaches about 800°C (e.g., Fabbri et al. 2014, 1900). However, the temperature ranges at which different carbonate minerals liberate carbon dioxide during kiln firing varies with the partial pressure of CO₂ of the kiln atmosphere, but they can be sufficiently high before calcining is complete that the dissociation process overlaps partial melting of the glaze mixture. Evidence for this includes bubbling in the quenched glaze, as is seen on the Mackenzie bowl. It also could be argued that this bubbling was caused by dehydration of clay minerals in the glaze or ceramic substrate.
- xi Where preserved in glazes, these bubbles should properly be referred to as vesicles.
- xii Notably, very fine-grained magnesite can be a culprit in this regard (see <u>Glaze Crawling (digital-fire.com)</u>
- xiii See Glaze Crawling Problems (lakesidepottery.com)
- xiv We distinguish creamers from pourers by the absence of a handle on the latter.
- xv Not all crawling glazes need to have distinct "islands" form to be considered a *bona fide* crawling glaze. For example, a stoneware tea caddy made by Bernard Leach c. 1960 has a greyish-white glaze with dripped edges that has retracted around a few triple points, exposing small parts of its substrate (a "dark iron glaze" on a stoneware body). It nonetheless was described as a "crawling glaze" by the London auction house that sold it on 17 May 2018. See Bernard Leach (British, 1887-1979) Tea Caddy, circa 1960 Stoneware, creamy grey crawling glaze (the-sale-room.com).
- xvi The term "clayey" is used instead of "clay" because (1) the body of many ceramic objects consist of a mixture of clay and other materials (see text), and (2) the presence of iron-rich beads

between the glaze "islands" and the sheen of the area between the "islands" suggest that the ceramic substrate itself is not exposed, but rather is thinly coated by a residue from surface preparation prior to firing, or from the retracted glaze.

- xvii In the caption to this illustration, Crawford (2005, 40) refers to this glaze as a "white crater glaze with feldspar".
- xviii The Beveridges were active 1957-1985, although Eleanor started taking potting classes Oct. 1955. Based on an exhibition pamphlet (Holtz 1999), they produced stoneware for about the first six years of their potting career.
- xix It appears, however, that their kiln-firing problems were related to controlling kiln temperatures rather than deficiencies in local clay, because pots made from Moss Glen clay were successfully fired by studio potter Janet Doble at temperatures commonly used for redware (i.e., Orton cones 04 and 06). See Owen and Boudreau (2008, 9).
- xx Engobes are similar to slips but they contain less clay and therefore have lower alumina contents.
- xxi See Microsoft Word Ceramic materials.docx (lindaarbuckle.com)
- xxii With this caveat in mind, and calculated exclusive of lead and volatiles at 1 bar pressure, MELTS predicts that this glaze would have a liquidus temperature of 1082°C. Rutile would form first, followed by oligoclase (An₂₂) at 1062°C.
- xxiii Molecular proportions of cation oxides are determined by dividing the concentrations of components of interest (in this instance, MgO and CaO) by their respective molecular weights [MgO: 40.32 g/mole; CaO: 56.08 g/mole]), and then determining their ratio.
- xxiv In this instance "stoichiometry" refers to the proportions of elements or compounds in a

- mineral formula. In the case of dolomite, Mg and Ca are present in a 1:1 ratio.
- xxv Ca can be in excess in non-stoichiometric dolomite by up to 0.25 atoms per formula unit (pfu) thereby approaching the composition of non-stoichiometric calcite, which can contain up to 0.287 Mg atoms pfu in magnesian calcite.
- xxvi According to Anneke Deichmann Gichuru (pers. comm. Autumn 2022), her mother (Erica Deichmann) gave her notebooks to someone in Fredericton in the 1970s. We have been unable to track them down.
- xxvii After which he no doubt received a pension.
- xxviii See Canadian Poetry Online: Elisabeth Harvor: Interviews. "Not the Beth of Little Women: Maria Kubacki speaks with Elisabeth Harvor. Books in Canada v. 27(4) May 1998, p. 4-6". (Canadian Poetry Online | University of Toronto Libraries | Elisabeth Harvor (utoronto.ca).
- xxix For example, both the Deichmanns and Carrie MacKenzie participated in the Canadian Handicrafts Guild and Canadian Guild of Potters joint exhibition held in Toronto (Royal Ontario Museum) and Montreal (Montreal Museum of Fine Art) in 1955 and 1957 (and probably other years as well). The Beveridges, Deichmanns and Lorenzens participated in the same exhibition in 1959. After abandoning stoneware in or before 1967, the Beveridges produced porcelain bowls with a stylized flower motif very similar to that on a Deichmann bowl shown in the 1959 catalogue.
- xxx Depending on the composition of the glaze and purity of the carbonate minerals, decarbonation and partial melting could overlap at very approximately 900°C \pm 100°C. The formation of metakaolin at the expense of kaolin occurs at much lower temperatures (i.e., optimally, at \sim 600°C; e.g., Khaled et al. 2023, 1).