Introduction: On the Properties of Things: Collective Knowledge and the Objects of the Museum

Janine Rogers and Sophie Thomas, with Terrence Abrahams, Ainslie Campbell, Rebecca Dolgoy, Tyler Haché, Alex Main, Jesse Myers, Mirelle Naud

In a world of escalating claims on public funds – and on the public's attention – museums are increasingly under pressure to combine their original functions as sites of cultural knowledge and memory with enhanced strategies for social engagement. In response, museums are finding creative ways to challenge disciplinary divisions and to establish collaborative, teambased projects that involve multiple stakeholders; public, private, academic, and political, 'On the Properties of Things: Collective Knowledge and the Objects of the Museum' began as a two-day event, held in Toronto in October of 2018, that was designed to engage academics, museum administrators, and cultural workers who are developing new, connective ways of engaging with the museum as both an institutional structure and an idea, and who are considering the deeper roles of museums in the history of knowledge and the future of knowledge practices. Through themed conference presentations and roundtables, workshops, and creative exercises, some of which were held in collaboration with the Aga Khan Museum, the event facilitated cultural and disciplinary exchanges that fruitfully inform how we understand museums and their objects. To that end, we invited national and international researchers and museum professionals dedicated to challenging received ideas about knowledge, culture, and disciplinary boundaries. Our participants included directors and curators of national museums with cultural and scientific mandates, as well as academic researchers with a history of parapublic institutional collaboration.

The title we chose evokes the encyclopedic tradition that comprised the first texts of pan-disciplinary knowledge in the classical and medieval eras. As a collection of information about the material and immaterial world, the classical encyclopedia had an analogous structure and function to the modern museum: to provide a comprehensive circle of knowledge, wherein all human understanding might be contained, managed, and accessed. These texts formed the root of western collection practices, and as these practices shifted from medieval compiling of texts about the world to modern collecting of materials of the world, concepts of knowledge, truth, value and identity were shifted to the museums and the material objects within them. These concepts constitute the first order of the 'properties' that we wish to consider, but we mean also to raise broader questions of *property*: of ownership, transmission and territory, of duration and durability, in the face of impermanence and change (which may be material, sociopolitical, and/or historical in nature). These questions of property need to be problematized in the current era of decolonizing, opening up, and pluralizing museums.

Early encyclopedic traditions fostered connections between material culture, the natural world, and textual knowledge. Acknowledging these connections also allows us to address the 'poetics' of objects in ways that recognize their dual status as made things (artifacts, poems, museums) but also as things that make knowledge and are formative agents in the development of knowing subjects. Poetics, however, are always culturally and historically determined, and therefore their properties – in all senses of the word – are often contested. The main title of the event also recognizes that objects in and of the museum, as noted above, have various properties that derive from their materiality, their cultural history, and their knowledge-building capacity. Those properties are inseparable from relationships of power: whose property, one might justifiably ask, are they? We approached these questions through the principle of 'collective knowledge,' in the terms of our subtitle, whereby we challenge the historical, disciplinary boundaries of museum cultures (be they scholarly, curatorial, administrative, pedagogical, scientific, artistic or literary). In so doing, our aim was to forge connections between realms usually held apart: the arts and sciences, research and education, Eurocentric and Indigenous knowledges and practices, past and present, and between the academic and the public sphere.

This special issue of Museum and Society, along with a digital resource designed with the support of Ryerson University's Centre for Digital Humanities, captures and extends some of the fruitful conversations that took place among some fifty participants. Our overarching objective, which also connects the contributions gathered here, was to identify and facilitate interdisciplinary connections between museum practices and scholarly research in the sciences and humanities by involving professionals from many types of museums alongside academics from literary, historical and arts-based fields. The 'collective' of the Properties of Things event included representatives from the Oxford museums of Natural History and the History of Science, the Canadian Museum of Nature, Ingenium: Canada's Museums of Science and Innovation, the British Museum, the Turin Museum of Egyptian Antiquities, the Natural History Museum in Vienna, the Dresden State Art Collections and the Museum für Naturkunde, Berlin. Universities that were represented included Ryerson, Toronto, Ottawa, Queen's (Canada), Carleton, Mount Allison, Humboldt University (Berlin), Birmingham, Keele, Kent, and Oxford. The specific objectives of the event were to reflect on historical framings of museum knowledge-making, to examine recent experiences of museum-based research and curation, and to challenge participants to develop future collaborations that resist traditional disciplinary and institutional boundaries.

Our model of collective action informed the joint plenary with which the conference began. Papers by Ruth Phillips (Carleton University) and Paul Smith (Oxford University Museum of Natural History) were paired to stage a dialogue between different disciplinary approaches: that of a university-based specialist in museum studies and the indigenous arts of North America, and that of a top natural history museum administrator. Phillips, whose contribution is part of this journal issue, tackled the resurgence of interest in 'curiosity' in the design and public-facing discourse of recent museums (and a selection of exhibits) while Smith argued for cross-disciplinary exchange with artistic installations in natural history museums, as a partial response to rising rates of science illiteracy. Both papers addressed important debates about the value of museums, and of the interventions – both old and new – that enable them to remain not only relevant but active creators of knowledge, that tap effectively into the depth and diversity of their collections.

Subsequent panels focussed on some of the individual elements of this broader conversation. 'Problematizing Properties,' for example, took on the thorny issues of conflicting belief systems and the weight of history that can hang on an object, or an exhibit of objects. Silke Ackermann, director of the Oxford Museum of the History of Science, questioned the usual binary of science and religion in presenting Islamic mathematical instruments in the museum, at the expense of ways that could more fully encompass culturally specific use and knowledge alongside the technical functions of an object, such as an astrolabe. Audrey Rochette (University of Toronto) demonstrated how the meaning of an object, particularly ancestral objects that are animate in Indigenous languages and cultures, resist the fundamental precept of 'object' itself: an inanimate entity to be perceived by animate (i.e. human) beings. She asked the audience to consider who speaks for ancestral objects, and how the agency of such objects is recognized and respected in contemporary museology. Robbie Richardson (University of Kent) meanwhile demonstrated how even categories such as Indigenous and European are destabilized, when a dugout canoe discovered in England could be earnestly studied as an 'Indian' object by European anthropologists. The category of 'Indian,' in his work, becomes a blank slate upon which the eighteenth century in particular constructed notions of (European) modernity. Museums around the world are taking up the challenge of de-colonization and indigenization, and the work of representing the immaterial with the material. The Canadian Museum of Nature's Canada Goose Arctic Gallery is a good example of a complete redesign of the approach to constructing an exhibition, and of the exhibition space. Ailsa Barry, the museum's Vice-President of Experience and Engagement, explored the process of redefining categories of 'nature' and 'science' and shifting from 'ego to eco,' with indigenous collaboration, artistic representation, and layered stories that sustain multiple meanings, so as to address impactful global issues such as climate change, habitat loss, food security, and cultural conflict and exchange.

Several representatives from museums were invited because their institutions had embarked on substantial programming that challenged art-science-anthropology boundaries, for

example the Kunst/Natur program lead by Anita Hermannstädter at the Museum für Naturkunde Berlin, or the Visions of Nature themed year at the Oxford Natural Museum, with a team led by John Holmes, Paul Smith and Eleanor Grillo. Such activities are, as Hermannstädter pointed out, not only outreach and engagement events for the public, but reconstitute the museum itself as a 'research field' where the artifacts and exhibits are actively reinterpreted, and where effects and impacts of such activities on the collections, institutions, and audiences can be observed and assessed. Paolo Del Vesco presented on the exhibit 'Statues Also Die' at the Turin Museum of Egyptian Antiquities, which confronted every curator's nightmare of artifact loss, through artistic interventions that spoke to the realities of the destruction of statues in the Mosul museum by ISIS. While the artistic contributions went some way toward addressing or assuaging the loss, mixing format – in this case Egyptology and contemporary art – still runs the risk of confusing audiences. While the Oxford and Berlin programs saw visitor increases, the Turin experience found the split audience occasionally fraught, as the exhibit challenged audiences that are more commonly defined by being oriented toward either contemporary art or anthropology/history, but not both together.

Other panels combined a mix of scholars and museum professionals to tease out the many stories contained in an individual object, and to address broader questions such as how museums can facilitate learning and public engagement, how collection histories inform the meaning of objects, to explore the potency of digital resources for expanding our 'collective' knowledges, and of literary interventions and intersections in museum contexts. Samuel Gessner (Dresden State Art Collections) asked us to consider what is special about learning in museums. We discussed the nature of object-based or material engagement, spatiality, visual exploration, hands-on experience, models, and replicas as learning tools. Chiara Salvador (University of Oxford) explored the many stories of one Egyptian statue, and all the secret histories of that object that were edited out of museum display. The questions and stories that the researcher and curator live with, or collect, are also part of an object's history, and those can be changed or lost in museumship. Felix Sattler demonstrated how a display space itself is similarly storied, and might be seen as a performance which shifts with each installation: in the case of Tieranatomisches Theatre on the Humboldt University campus this is literalized with a series of experimental installations from a range of disciplinary categories that, while in place, change the meaning of the historic building (formerly a veterinary anatomical school) itself.

In an attempt to be more creative about how a conference about museums might be conducted, 'On the Properties of Things' incorporated a number of small, hands-on workshops alongside panel and roundtable discussions. In 'Object Interrogations: Stories of Velvet Telescopes, Sow Bladders, and Paper Sectors,' for example, Michael Korey (Dresden State Art Collections) led a 'group think' about how we deal with objects that have tangled or messy histories, objects that are sometimes mysterious or – quite literally – hard to get one's hands around, such as an old, room-sized HP computer. Another workshop – 'Hanging Dinosaurs: Mesozoic Life as Museum Art' – run by Will Tattersdill (University of Birmingham), invited participants to 'create' their own dinosaurs as the starting point for a probing conversation about the relationship between science and art history. How *do* we approach the representation of (in this case) an extinct animal? As central attractions in natural history museums, dinosaurs make an excellent case study for the role of creative practice in museum displays.

We were also fortunate to have the Aga Khan Museum as a collaborator, and held a series of workshops and events on the second day that explored the shifting meanings and identities of Islamic art objects in a museum context. Under the friendly direction of Ulrike Al-Khamis (Director / Collections and Public Programs) and Jovanna Scorsone (Education and Public Engagement Manager), four on-site workshops addressed such problems as the tension between tradition and transformation (or innovation) in how objects are passed on, presented and understood; how objects inscribe – and are inscribed by – questions of identity and ideology; how we recover the intangible dimensions of an object; and how, in the shift from private collection to museum display, the meaning of an object can shift. As Ulrike Al-Khamis's more detailed account of the workshops included in this issue reveals, these discussions spoke to our overall investment in trying to find a balance between respecting and representing the autonomy of objects – their voice, or subjecthood – while accounting for the complex historical, cultural, and interpersonal contexts in which all objects live, and through which they continue to challenge us.

Over the course of the two-day event, certain shared metaphors and terms emerged – such as layers, stories, perspectives, and voices. Again and again, we revisited the complex nature of objects, histories, exhibits, and communities as well as the polyvocal or polychronic nature of building, interpreting, and visiting objects, exhibits and museums, and in this issue of Museum and Society, several of the conference participants extend these themes further. Here too, our aim is to combine literary and text-based research with scientific approaches to material culture. The common methodology is to consider individual objects in museums as the loci where various forms of meaning intersect and potentially 'collect.' Indeed 'objects' is a term we have loosely deployed to include museums themselves as architectural entities. alongside individual displays and installations, and specific specimens and display objects. This openness has informed how we have structured this special issue, with its cluster of 'object biographies' constituting the first part, which also includes a brief piece on our workshops at the Aga Khan Museum, followed by a group of six extended scholarly essays, some of which have been co-written. The issue also includes a group of photographs taken by Joséphine Michel in natural history museums across Europe. Selected from a photobook - The Heat Equation published in the autumn of 2019, the photographs capture and juxtapose properties of things that are at once precisely defined and suggestively blurred, perceptible and imperceptible, simultaneously seen, heard, and felt.

In his recent book The Return of Curiosity: What Museums Are Good For in the 21st Century. Nicholas Thomas invites us to consider the vibrancy of museums in the present moment as very much a function of their capacity to 'make things new,' to enable creative (re-) engagements with objects (9). In his view, museums are 'forms of activity,' rather than simply buildings or institutions, their objects and collections constituted by qualities and relations – more or less latent - that may at any moment be 'discovered and activated' by their visitors (100, 81). Ruth Phillip's essay, which builds on the talk that opened the conference, examines the 'return' to curiosity that has impelled a selection of newly built museums, as well as recent exhibitions in more established ones, to find more heterogenous and inclusive (as opposed to orderly and purified) ways to represent the complexity of human history and knowledge - approaches more in line with holistic Indigenous thought systems that emphasize our interlinked and reciprocal relationships with the world around us. New, multi-disciplinary museums such as MAS in Antwerp, or the Musée des Confluences in Lyon, explicitly seek out ways to re-combine and fundamentally enliven discipline specific knowledge through the juxtaposition and interaction of diverse collections. Older museums such as the Smithsonian's National Museum of Natural History are also invoking curiosity in their appeals to visitors, in order to unsettle the 'categorizing and objective practices' inherited from Enlightenment rationalism, along with its broader political and social consequences. The Smithsonian's 'Objects of Wonder' - like similar exhibitions, at a wide range of institutions, that emphasized the vibrant and topical research they foster - offered visitors a multi-disciplinary 'mash up' by bringing together, in a manner suggestively reminiscent of the early modern Wunderkammer, a broad array of its most treasured objects. The key question Phillips poses, is can such structural interventions, which rehabilitate responses to objects (such as curiosity and wonder) that have been historically discredited, adequately respond to the needs of increasingly pluralist societies.

The way museums 'build in' their values, and thereby encourage us to read them more or less consciously as expressions of what they contain, is a question of long-standing historical interest. The essays included here by John Holmes and Stefanie Jovanovic-Kruspel both consider the architectural histories of museums themselves as 'objects' of inquiry. Holmes explores the interpretive problems that can arise when scientific ideas are ostensibly encoded in the fabric of a building – in its architectural style as well as in decorative schemas. His specific focus is natural history museums built between the mid-nineteenth and early twentieth centuries, and his numerous examples are drawn from Oxford, London, Toronto, Ottawa, Montreal, Dublin and Vienna. Paradoxically perhaps, the meanings – or intended interpretations, in so far as we can reconstruct them – are as changeable as the scientific paradigms they are designed to reflect: similar architectural features may read very differently in other locations, and purpose-built structures may find themselves 'repurposed' over time, effectively in-completing the stories they might otherwise tell. At the centre of these narratives are the human agents – artists, architects, and scientists – and their competing visions, which may not have been adequately captured in historical records.

Perhaps nobody has had the opportunity to meditate as extensively on the intersection between the arts and the sciences as Jovanovic-Kruspel, an art historian who works in one of the most famous natural history museums in the world: The Natural History Museum in Vienna. She explores the complex and multi-functional visual representations of science in the museum, and ways in which they both reflect history and became an agent of history, in their role in popularizing and communicating science. The tension between the idea that art has an 'eternal' aesthetic function while science is, by definition, 'progressive,' means that representations of science as truth in art are doomed to fail: to become outmoded in the ways described by Tattersdill, Kistler and Holmes, which then become interpretive problems for science. Jovanovic-Kruspel, by contrast, demonstrates how anachronisms were deliberately deployed as a creative force and mode of understanding. Indeed, there is perhaps no more powerful a metaphor for many of the Properties of Things discussions than Stefanie Jovanovic-Kruspel's idea of 'border-crossers' in the history of science visualisation in museums. The phrase itself is deeply significant, perhaps especially in our current political context of human migration crises, the idea of the 'illegal' immigrant, and the realities of climate change that redefine borders and boundaries of the globe. The border-crosser metaphor does not deny that there are borders between science and art, object and artifact, collection and display, museum and community, but recognizes that, like actual borders, such disciplinary and sectoral borders are arbitrary and historically contingent. It asserts that those borders are crossable – and those who cross are both heroes and trespassers.

Marla Dobson and Emma Peacock also consider shifting historical contexts around scientific objects – in this case medical waxworks used originally for teaching demonstration models – and the ways in which borders are transgressed. This include the psychological boundaries of viewers who experience the uncanny as the objects shift from medical to artistic contexts. How medical waxworks – specifically obstetrical and gynecological models – are displayed has a fraught history that reaches back to the eighteenth century. As Dobson and Peacock explore, modern models housed in Kingston, Ontario share a complex reception history with the famous 'Anatomical Venuses' of eighteenth-century Florence, including an intriguing history of female creators, that impacts their function as 'objects.' Once scientific models, now art, their display contexts and mode of reception are deeply resonant, even disturbing.

The often-tenuous relationship between the object and its 'artful' representation is very much at the heart of Jordan Kistler and Will Tattersdill's treatment of the role of fiction in museum displays – and in particular of dinosaurs. As the related workshop demonstrated, the reconstruction of dinosaurs is especially open to creative interpretation – and their essay situates this phenomenon in relation to Stephen Greenblatt's distinction between resonance and wonder, which, like nineteenth-century distinctions between indexical and iconic displays, invites us to interrogate historical assumptions about the extent to which objects can speak for themselves. Responses to paleoart today are informed by the 'fantasy of knowledge' espoused by nineteenth-century naturalists such as Cuvier and Owen, which held that universal truths, embodied by objects, could be grasped visually – without context or paratext – literally, at a glance. Through examples that also include 'fake' objects such as Rider Haggard's sherd of Egyptian pottery, the authors show how inscrutable and resistant to interpretation, yet how multiply meaningful, things can be.

Many of the collections and displays examined by the essays here embody an element of humour and playfulness. As Jovanovic-Kruspel shows us, humour has been deployed in public museums from their earliest days, even built into their architectural fabric, as in the case of the 'cheeky' Darwin frieze at the Natural History Museum in Vienna. As in this case, humour can be used to soften tough messages or mediate difficult cultural transitions – in this case, the shift to evolutionary paradigms that connect humanity to the rest of the biological world. Moreover, the child-mind is an interesting perspective from which to re-imagine the interdisciplinary potential of museumship. Phillips' essay, for example, begins by entertaining (pun intended) instances of artistic intervention, and publications ostensibly for children, such as *Grover and the Everything in the Whole Wide World Museum*, that make fun of the often highminded, formal restraints of conventional museum practices, and appeal to child-like curiosity and wonder. Central to Tattersdill and Kistler's essay is in fact a children's book that explores a number of deceptively serious issues: an inaccurate carving of an Iguanodon – one of the

Crystal Palace stone dinosaurs – comes to life to parse out the nuances of his relationship to the *real* Iguanodon (and their series of fossil reconstructions and other visualisations), in the process interrogating the history of science, the problem of scientific truth or accuracy, and the place of the museum in its construction.

The role of the child at the museum is also the central subject of Naomi Hamer's analysis of the 'hybrid' exhibits of story museums, which have abundant potential for a subversive dialogue with children's literature as well as with what defines a museum. She explores how the category of children's museum, with its expectations of playful participatory engagement and knowledge-building around subjects like science that engage materiality, are contorted in museums of children's literature and stories. The ways in which children's books and reading are presented in museums frequently means making the textual material, and reading a physical enactment of the text.

As these essays show, a key element of museumship and scholarship of museums is storytelling, and capturing the ways in which stories weave, layer, and entangle themselves through histories, objects, collections, intuitions and people. The stories themselves became objects – things to be collected, shared, pondered over. In the trio of short 'object biographies' that open the issue, we follow Samuel Alberti's ideas about objects being stories and storied, and extend that to imagine the stories of their makers, users, owners and collectors. Ingrid Mida imagines the body in the dress. Erich Weidenhammer connects a tool of psychological research to the 20th century World Wars. David Pantalony links an innocuous coloured tile without even the status of 'artifact' back to the World Fair and Japanese factory workers. Story goes beyond narrative and plot: story is colour, form, dimension, suspense, wonder, comedy and tragedy, presented in language that carried the presence of an object beyond itself – to readerships around the globe. The stories captured here, in objects, images and text, are only the beginning – we hope – of further exchanges between 'border crossers,' among a community committed to interdisciplinary, multicultural, and trans-sectional collaboration as a way to re-think the materiality of museum practice and the lives of objects in museums.

Notes

This event was made possible by a Connections Grant from the Social Sciences and Humanities Research Council of Canada, and generously supported by Ryerson and Mount Allison Universities, to whom we extend our thanks.

References

Alberti, S.J.M.M. (2005) 'Objects and the Museum', Isis, 96 (4) 559-71.

Thomas, N. (2016) *The Return of Curiosity: What Museums are Good for in the 21st Century*, London: Reaktion Books.

Authors

Prof Janine RogersMount Allison University
Canada

irogers@mta.ca

Bio Statement

Janine Rogers is Head of Department, Reverend William Purvis Chair of English Literature, and Professor of Medieval and Sixteenth-Century Literature in the Department of English Literatures at Mount Allison University in Sackville, New Brunswick, Canada.

She specializes in interdisciplinary approaches to literature and her current primary research area is in the field of literature and science. She is the author of two monographs: Eagle (Reaktion Press, 2015) and Unified Fields: Science and Literary Form (McGill-Queen's University Press, 2014).

Prof Sophie Thomas

Ryerson University Canada

sophie.thomas@ryerson.ca

Bio Statement

Sophie Thomas is Professor of English at Ryerson University in Toronto, where she teaches eighteenth and nineteenth-century literature. She is the author of *Romanticism and Visuality: Fragments, History, Spectacle* (Routledge, 2008), and of articles and chapters that address the crosscurrents between literature, material culture, and visual culture in the Romantic period. She is currently completing a book on objects, collections, and museums at the turn of the nineteenth century - *The Romantic Museum, 1770-1830: Matter, Memory, and the Poetics of Things* - and beginning a new project on Romanticism, museums, and the poetics of sculpture.