

Relocation and revaluation in university collections, or, *Rubbish Theory* revisited

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Abstract

Objects move from place to place, discipline to discipline, into and out of collections within the university (even at times into and out of the university). In the course of these relocations, these objects also continually change in function and in value. By looking at university collections in a holistic and trans-disciplinary manner, a model of multiple, simultaneous and highly dynamic value systems better explains how such transformations are possible. Within the contexts of the university and of the theme of this conference, "Putting University Collections to Work in Research and Teaching", understanding these processes – migration, disciplinary shifts, alterations in the utility and worth assigned – is essential to making smart policy decisions concerning the stewardship of all university collections. In this paper, I look toward and beyond models of object circulation and revaluation such as Michael Thompson's Rubbish Theory to explain how these metamorphoses take place.

Introduction

The theme of the 2009 University Museums and Collections conference, *Putting University Collections to Work in Research and Teaching*, was chosen in order to place a spotlight on the crucial relationship of material collections to the core missions of the university. Given the financial issues today facing higher education globally, it is vital that museum and collections personnel, academic staff and university administrators be made aware of the absolutely central role that material collections of all types play in the successful work of the university. Collections require staff, funding and, above all, space, perhaps the scarcest of university resources. Many university museums and collections increasingly find themselves in the position of having to justify their development, upkeep or even existence. The pressures that collections face, however, do not only come from university administrators looking for ways to trim budgets. Changes in disciplinary practices, such as the general movement away from taxonomy in the natural sciences, and changes in disciplinary formations, seen in the fissioning and fusioning of departments across the university, can have equally profound consequences for material collections.

Universities, generally speaking, have paid remarkably little attention to their collections as a whole. There are few universities that have attempted to identify what collections they possess and fewer still that have instituted policies concerning the stewardship of those collections. Starting in 2000, the Office of Research of the University of California Office of the President authorized a study of the material holdings of the entire ten-campus University of California System. *Microcosms: Objects of Knowledge*, or more informally *The Microcosms Project*, sought to survey and analyze the values, functions and future of UC collections. Professors Rosemary Joyce, UC Berkeley, Bruce Robertson, UC Santa Barbara, and I co-directed the Microcosms Project. What none of us imagined at the outset was the sheer scale of the UC collections. Ten years later, we are still working with approximations, which have continually been revised upwards as our research progressed. Our current estimates are that there are over 150,000,000 objects and specimens in the formal collections of the UC system, omitting an undetermined amount of 'dark matter': i.e. those artifacts which haven't (as yet) been organized into institutionally designated collections. A rough estimate of replacement costs – what it would cost today to constitute collections of equivalent size and value – falls between \$40-50,000,000,000. These are by any standards enormously valuable resources, yet not one position in the UC Office of the President includes the oversight of material collections within its job description,

nor is there any set of policies in place to guide campuses or departments in decision making concerning them.

On what basis, however, would such stewardship policies be created? Our experience has been that decisions are made about the fate of collections at a highly local level, often without consultation either vertically within the administrative hierarchy or horizontally among cognate disciplines or collections to consider the broader impact of different actions. Furthermore, such decisions about collections are also usually made from a temporally restricted perspective, by which I mean that only the very most immediate financial, social and, for purposes of this article the most relevant, disciplinary conditions are taken into account.

Migrating objects and changing values

Among the major insights that we gained from our broad survey of UC collections is the realization that neither collections nor disciplines are stable entities. Arguably, one of the only constants about disciplines is that they seem to reinvent themselves on a regular, cyclical basis. Over a given period of time, the accretion of new research questions, new methods, new technologies and even new subject matter results in enough change within a discipline as to constitute an essentially 'new' field of study. Using Tony Becher's very apt metaphor of 'urban' and 'rural' disciplines, the well-funded and more densely populated fields (i.e. those with many scholars at work simultaneously on the same questions) transform rapidly, while the poorer and more sparsely settled disciplines change much more slowly (BECHER & TROWLER 2001, 106–108). At the moment, the biological sciences appear to be metamorphosing the most rapidly (15–20 years), while comparatively stable fields like classics have the slowest cycles. My own discipline of art history perhaps qualifies in these terms as a mid-size town, with a cycle of about 30–40 years.

Much the same can be said about university collections. Not only do most collections within the university continue to expand but also new collections are constantly being formed, and old collections are dissolved, discarded or destroyed. Others change locations, owners and functions over time. Indeed, viewed from a sufficiently long historical perspective, it becomes clear that objects and collections are in constant circulation and change functions and values in the process. This last point is what I will address in this article.

Leiden University's *Byzantium sive Constantineopolis (Panorama of Constantinople)* by Melchior Lorichs, 1559, exemplifies how objects can change radically in value over time. Lorichs, an artist from Schleswig-Holstein, in 1555 accompanied Ogier Ghiselin de Busbecq on a diplomatic mission to the Ottoman court.¹ Lorichs's sojourn in Istanbul lasted three and half years, during which time he produced numerous portrait drawings and sketches of architectural and artistic monuments. The most grandiose of his images from this period is the *Panorama of Constantinople*, originally in a scroll format measuring 4.5 x 11.5m. Likely based upon *plein air* sketches made on site, Lorichs created the *Panorama* after his return to Vienna. It somehow came into the possession of Nicolaas Stalpaert van der Wiele, the university *rentmeester* and the son-in-law of Janus Dousa, who was a statesman, scholar and the first librarian of Leiden University. Van der Wiele donated it to Leiden University in 1598, to be installed along the wall of the university library, as is shown in a 1610 engraving of the library by Jan Cornelis Woudanus. So prominent a display space, in one of the university's primary sites of knowledge production, strongly suggests that the university highly valued the *Panorama* from the moment of its accession. It remained on view in the library until 1653, when it was removed due to a shortage of space. From this date, its provenance is unknown until 1856 when it was discovered –

¹ Melchior Lorichs (Lorck, Lorch), 1526/27 – after 1583. The authoritative source on Lorichs is Erik Fischer's monumental *Melchior Lorck*, 5 vols., Copenhagen: Vandkunsten Publishers, 2009.

badly damaged and gnawed by mice – in an attic room of the city hall. During restoration, the original cloth scroll was divided and mounted on 21 panels. The *Panorama of Constantinople* is now located in the University Library's *Prentenkabinet*. The library web page devoted to Lorich's monumental work concludes by stating that it:

„Behoort dus tot haar oudste bezit en wordt beschouwd als een van haar kostbaarste kleinoden“.²

[It thus belongs among (the university's) oldest possessions and is regarded as one of her most precious jewels.]

Thus, over a 450-year history, the Lorichs *Panorama* changed in value and function several times. Created as a highly detailed presentation of up-to-date information concerning the architecture and fortifications of sixteenth-century Istanbul, it starts its career at Leiden as a gift of a well-connected officer and a prized knowledge artifact of the early university, then fades into obscurity as a piece of discarded, forgotten rubbish, and is reclaimed as an artistic treasure and a historical relic belonging to Leiden University's institutional memory. And, just to bring things full circle, the *Panorama of Constantinople* returns to Istanbul from June 5 – September 4, 2010, on loan from Leiden University for the exhibition *From Byzantium to Istanbul: 8000 Years of a Capital*, Sakip Sabanci Museum, Sabanci University, Istanbul.

At the beginning of the Microcosms Project we were told a story about the formation of UC Berkeley's collection of historical microscope, which reveals a more complex process of transition and transformation. We later discovered the story to be largely (but not entirely) apocryphal, but the principles it revealed nonetheless hold true. Several years ago, so the story goes, a new professor in history of science, whose specialization was in scientific instrumentation, was hired at Berkeley. In the course of his daily activities, this unnamed professor kept noticing old microscopes in various places. Some of the microscopes showed up in hallway display cabinets as curiosities or tokens of institutional memory – Professor So-and-so's microscope with which he did his ground-breaking work on x – or on top of bookcases or tucked into corners – obsolete instruments that nobody had bothered to throw away.

This narrative of multiple, shifting values and uses resembles the history of the Lorichs *Panorama*. Senior scientists with substantial research funding buy microscopes, and other scientific instruments, on a regular basis. Their slightly older microscopes are passed down to more junior researchers who do not yet have major grants of their own. From there, the instruments make their way to the desks of mere research assistants or graduate students. The next step, once outdated and devalued sufficiently, is to undergraduate teaching labs. Finally, having reached a point of obsolescence, microscopes and similar instruments are relegated to the status either of sentimental or institutional memory – the ones in the display cases – or as rubbish, albeit rubbish that is not discarded.

The sequence just described traces not just a series of functional changes to how the microscopes are used but also a disciplinary change. A microscope enters the university as a practical research instrument and it retains this use even as it is handed down the social hierarchy of the sciences. Almost certainly, it will simultaneously be used for instructional purposes along the way. The balance shifts once it enters a teaching, rather than a research, laboratory. Students still do minor research with their instruments but oriented toward pedagogical ends. The transformation of the instrument into either memorabilia or rubbish is a more substantial break, in which the microscope reaches its lowest point of value as a scientific tool. This loss of research value is paralleled by a loss of market value, of course.

² Stable URL: bc.ub.leidenuniv.nl/bc/goedgezien/objectbeschrijvingen/object045.html (accessed September 6, 2010).

The most significant change happens, however when the microscopes are gathered together into a historical collection. In this context, they return to scholarly functionality and regain research and knowledge value but now as objects *of* research in their own right, rather than instruments for performing research on something else. They have also shifted from the physical sciences to the humanities, from science to history of science. Microscopes within the collection can retain or even gain an enhanced role in institutional or sentimental memory, since the opportunities for collecting and conveying narratives about them is much greater than in a lab (though likely at a greater remove from living memory). Two other points about value are worth noting. The first is that their market value increases again, since they have attained the status of collectibles. The second is that their historical research, market and pedagogical values are enhanced by their presence in the larger collection, since they now serve as points in a series.

As mentioned above, this story is largely apocryphal. The vast majority of the instruments in U.C. Berkeley's *Golub Collection of Historical Microscopes* were not found on campus. They were instead donated by an alumnus, Dr Orville Golub, who had made a career in medical diagnostics outside the academy, and his wife Ellina Marx Golub. Nonetheless, there is a grain of truth in the original story that confirms the overall lesson: at least a few microscopes found at U.C. Berkeley have been added to the Golub collection. But even the instruments donated by the Golubs will reveal similar narrative patterns from the time of their manufacture and original use up to their accession by the university.

Models: *Rubbish Theory* and others

In his book *Rubbish Theory: The Creation and Destruction of Value*, the anthropologist Michael Thompson offers a starting point for understanding the processes by objects gain and lose value as they pass circulate over the course of their 'lives' (THOMPSON 1979). Thompson is primarily concerned with commodities – automobiles, vases, souvenirs and the like – and only considers two forms of value: market and aesthetic value. Objects enter into circulation upon manufacture, in almost all cases immediately declining in (market) value. Goods in this state of steady loss of monetary worth Thompson names 'transient'. After a sufficient period of time and use, these things fall out of use but remain in existence, becoming 'rubbish', with the potential either to be consumed entirely, i.e. destroyed, or to be reinvested with both economic and aesthetic value, at which point they become 'durables'. In Thompson's model such durables have a fixed, high value and would be removed from further circulation, which he associates with being accessioned into a museum.

Rubbish theory at first appears quite tidily to account for such university artifacts as the Lorichs *Panorama of Constantinople* or the UC Berkeley microscopes. But there are some prescriptions within the model that are problematic. For example, Thompson qualifies certain transitions as 'possible' and disqualifies others as 'impossible'. He allows goods only to move from a transient state to become rubbish, and from rubbish they can either be destroyed or become durables. Movement in the other direction, from durable to either transient or rubbish, is not allowed in this system.

Tied as they are to the missions of the university in general, and to particular disciplines in specific, objects within the university not only circulate quite freely in and out of these states but can even exist in more than one at the same time, as perceived from different disciplinary perspectives. As the life sciences moved away from the taxonomy and the study of individual organisms in the 1970s, 80s and 90s, and toward such fields as biochemistry at one end of the spectrum and systematics at the other, led to the wholesale discarding of entire, formerly prized collections. Many collections were treated quite literally as rubbish, given away to whoever was willing to recycle them or tossed into dumpsters. More recently, however, with advances in genomics and ecological toxicology, historical specimen collections have gained a new lease on life, becoming highly valuable research resources once more.

The emergence of new technologies that make use of such devalued collections does not necessarily guarantee their survival, as the case of the Woodhouse Mineral Collection at the University of California Santa Barbara demonstrates.³ The collection was formed by Professor Charles Douglas Woodhouse and others in the course of field research related to the mining industry, mine shafts offering unique opportunities to acquire otherwise inaccessible specimens. Over time, the collection grew into a substantial species collection, holding approximately 2,500 out of a total of around 4,000 known species, including a number of type specimens such as the eponymous Woodhouseite. Functioning primarily as a teaching collection for mineralogy courses, the Woodhouse collection was used actively for several decades. However, analogously to the bio-sciences, the rise of interest in earth systems and a resulting decline in interest in taxonomic mineralogy has led to the decreased use of the collection within earth science at UCSB. The collection is now housed in a basement room, which has remained available only because it periodically floods. Emeritus Professor William Wise has been the sole curator of the collection for past 14 years on a volunteer basis, since the collection has no operating budget.

Nonetheless, the collection has seen increasing use by researchers outside earth science, especially in relation to materials science, which draws upon chemistry, chemical engineering, physics and a number of other physical sciences. Neither the Materials department, nor the related science and engineering departments have the interest or the expertise to curate this collection themselves. The fate of the Woodhouse collection, once Professor Wise is no longer able to care for it, is unknown. Since neither UCSB nor the University of California system have a policy on the stewardship of collections for posterity, any decision regarding the collection will be made at a local level, within the earth science department.

An analogous, if still more dire, case study is that of the collections of Greifswald University's Geologische Landessammlung Vorpommerns, in the university's Paläontologisches Institut.⁴ The collection, which dates back to the Mineralien Kabinett of 1777, has over 3,000,000 specimens of minerals, fossils and other geological/paleontological materials estimated to be in its possession, though the exact number is unknown, since no comprehensive survey has ever been possible. During comprehensive, government-enacted reforms in higher education in 1968, the collection suddenly lost most of its storage and display space. The majority of its holdings are now housed in an unfinished basement of the building, in old wooden crates precariously stacked one upon another. Pervasive moisture has created ideal conditions for pyrite oxidation, resulting in severe problems with deterioration. Only a very small percentage of the ca. 2,500 type specimens in the collection can be located. Staffing is also a major problem, since nearly the entire paleontology staff was relocated to Rostock University (although the collection remained at Greifswald) in the name of disciplinary consolidation. The most urgent need is for simple utility shelving; next most important will be a systematic survey of the collection by a team of specialists to identify the most important holdings, especially the type specimens.

Conclusions: Policies on the stewardship of university collections

On April 15, 2009, in a document entitled *Konzept für den Aufbau eines Generalinventars zu den Sammlungen der Ernst-Moritz-Arndt-Universität zur Unterstützung der vergleichenden und interdisziplinären wissenschaftlichen Erforschung des Sammlungsbestandes*, Greifswald University agreed upon instituting policy reforms concerning its material collection, beginning with the centralization of

³ This account of the Woodhouse Mineral Collection is based upon interviews conducted by the author and Rachel Johnson with William Wise, Emeritus Professor of mineralogy and curator of the collection, in April, 2007.

⁴ This account is based primarily upon an interview with Prof. Dr. Ingeborg Hinz-Schallreuter, paleontology and historical geology, July 2, 2009. My research at Greifswald University was made possible by a generous research residency at the Alfred P. Krupp Wissenschaftskolleg in Greifswald.

information. Given the direness of the situation in the geological collections and the worldwide financial limitations of higher education in the early 21st century, it remains unlikely that the situation can be fully remedied in a timely fashion. In the meantime, despite continued international interest in working with materials from the geological collections, they are effectively unavailable to researchers. With less research being conducted, justifying a large infusion of funding becomes increasingly challenging.

Our experiences within the University of California Microcosms Project, and my research at Leiden University and Greifswald University, consistently point to the need for universities to develop clear policy guidelines for the stewardship of university collections. Such policies ought to be developed not only in reference to the short-term, localized priorities of a given department or discipline, though these should certainly be taken into account, but also in reference to the university's long-term, comprehensive interests. Individual artifacts, specimens or instruments, as well as entire collections, may be of interest and use to researchers and teachers well beyond the narrow precincts of a particular discipline. Some means of assessing the broader utility of collections should form part of such a policy. Similarly, decisions about the fate of collections should be made with a sufficiently long-term overview of the cyclical processes by which disciplines redefine themselves, and by which new disciplines are formed.

In more specific terms, the recommendations of Professors Robertson, Joyce and myself on university policy concerning the stewardship of collections include the following:

1. Identify and survey collections, with specific attention to prior, current and projected future usage.
2. Include incipient and working collections, as well as formal museums.
3. Centralize information and planning. Making information about the nature and contents of collections available to scholars and students across the disciplinary spectrum will contribute to more efficient usage.
4. Approach university collections holistically. Individual collections may easily be dismissed; the totality of a given university's collections cannot be.
5. Base decisions on historical and long-term trajectories.
6. Base decisions on university-wide overviews.
7. Incorporate an assessment of the dynamic, simultaneous functions and value systems relevant to how individual collections are used.
8. Institute a central review process for determining the desirability of discontinuing or discarding collections.

As the papers delivered at the 2009 UMAC conference and the articles published here demonstrate, university collections remain vital, vibrant and essential resources for the very core work of the university. Given the tremendous resources already expended in developing collections (the estimated replacement costs of the material collections of the University of California dwarfs those of the UC library system, for example); the significance of these collections for academic, natural, cultural and national heritage; and their contributions to local, state and national economies, a central stewardship policy should be seen as a prudent institutional strategy.

Literature cited

- BECHER, T. & P. TROWLER 2001. *Academic tribes and territories*. Buckingham and Philadelphia: Open University Press.
- THOMPSON, M. 1979. *Rubbish Theory: The creation and destruction of value*. Oxford: Oxford University Press.

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