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HERITAGE ALCHEMY:

A MODEL FOR SUSTAINING THE BUILT HERITAGE OF MONTANA IN THE CHANGING LANDSCAPES OF THE 21ST CENTURY VIA PERSPECTIVES FROM THE NETHERLANDS ON POLICY, EDUCATION, AND STEWARDSHIP

BY

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Dissertation

Presented in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Anthropology

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Heritage Alchemy: A Model for Sustaining the Built Heritage of Montana in the Changing Landscapes of the 21st Century via Perspectives from the Netherlands on Policy, Education, and Stewardship

Chairperson: Dr. Kelly J. Dixon

Abstract

This Ph.D. dissertation presents sets of interrelated research problems, and challenges to sustaining the built heritage of Montana, in the context of the changing modern landscapes in the western United States. The research connects issues of heritage policy, education, and stewardship as common, and connected themes in historic preservation, historical archaeology, anthropology, and cultural landscape practices. The dissertation is comprised of three articles that are under review for publication, presenting perspectives and data assembled via empirical, and place-based field research, interviews, and interaction with heritage professionals, and site investigation conducted throughout the Netherlands between August 2013 and February 2017. These articles each focus on three central themes of heritage policy and law, heritage education emphasizing place-based models, and applied methods of heritage stewardship. The assembled data is then further presented for its combined potential to create a model system of cultural heritage leadership, emphasizing sustainable approaches to built heritage and landscape best practices.

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This dissertation, and culmination of nearly a decade of research into modern methods, and a more practical means for sustaining our places of heritage, was developed with the help and support of many friends, and colleagues, and through the generous contributions, and leadership examples of heritage professionals and organizations across the globe.

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DEDICATION

For my daughter,
Iyla,
who brings me joy and inspiration each day we share,
and

For my wife, and love of my life Asha, for believing, in me, and with me on this journey.

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Image source: fastcompany.com

Chapter 1: Introduction

Summary

This Ph.D. dissertation presents sets of interrelated growth and historic built environment management challenges, and aims to confront the research problem of how to best sustain built heritage in Montana, amid the rapidly changing landscapes of the western United States. The research connects heritage, policy, education, and stewardship, emphasizing common ground shared by historic preservation, historical archaeology, anthropology, and cultural landscape practices. The dissertation is comprised of three articles that are under review for publication, presenting the results of data assembled during place-based field research, personal interviews, and discussion with heritage professionals throughout the Netherlands between August 2013 and February 2017. Each paper emphasizes the three central themes of this dissertation [heritage policy and law, heritage education emphasizing place-based models, and applied methods of heritage stewardship], and includes discussion of relevant scholarly inquiry on these themes. Selected authors are additionally identified for their specific contributions to the three topics.

Following the three articles, this dissertation presents an analysis of data collected over the course of the research project, along with discussion of the combined potential of the three-theme approach to create a model system of built heritage leadership, and sustainable pathways for built heritage and landscape stewardship in Montana, and elsewhere. The three articles are submitted as an alternative to a single-topic dissertation, and presented in accordance with University of Montana Graduate School and Anthropology Department guidelines and protocols. While each manuscript conforms to the style guide requirements for the journal it was submitted, the dissertation was prepared following the American Antiquity style guide, for overall consistency.

Framing the Research Problems

The global landscape is rapidly changing, and through the growth of modern society and industry, new and complex challenges to sustaining the heritage of humankind continue to emerge, through ever increasing demands upon our natural and built environments (Harrison 2015; Lorah and Southwick 2003; Martinez-Alier 2001; Tarlock 2002). In the United States, and particularly the western states, changes in land use due to population growth, industrial development, and ownership are presenting a variety of new considerations alongside a history of natural and human-made impacts to land and water resources, and challenges to managing, and re-thinking the unique and fragile ecological, cultural, and historic resources of the American West (Barry 2012; LaFever 2012; Lorah and Southwick 2003; Morriss 2001; Nelson 2002; Otterstrom 2003; Walker 2003).

Over the last century, and particularly in the most recent years, the greater realities of preserving, protecting, and sustaining a broad spectrum of recent and ancient heritage resources within an enormous and diverse natural landscape have only continued to grow more complex in nearly every possible physical and philosophical realm (Barthel-Bouchier 2013; Merleau-Ponty 1945, 1948). It is, in short, a losing battle where historic buildings, structures, and the historic built environment as a whole are gradually becoming phased from the greater American cultural consciousness, as more and more urban and rural historic built features fall into disuse, subsequent disrepair, and ultimately abandoned and forgotten as relics of history.

In the United States, the scale of development and impacts from growth of populations common to the eastern states has not yet occurred in the inter-mountain west, and particularly the northern Rocky Mountain region (Figures 1.1 and 1.2). However, the often small, isolated, rural communities of Montana and the western states are particularly vulnerable to loss, and all too

often ill-informed on a spectrum of built heritage resources that may constitute entire towns and communities, which are otherwise offset by large expanses of open space (Morriss 2001; Otterstrom 2003). This open space represents the last of the American native prairies and mountain regions, along with indigenous and recent settler human histories, and wilderness ecosystems, which remains under constant threat from wildfires, to non-renewable resource extraction industries (Barry 2012; Tarlock 1999, 2002). These iconic regions continue to contain some of the most fragile cultural and natural ecosystems in the world, yet over the previous century of growth and expansion, such spaces persistently experience impacts from development due in part to increases in overall population throughout the western states, and also partly due to growth centered on particular places or regions (Winkler et al 2007: 479-480).

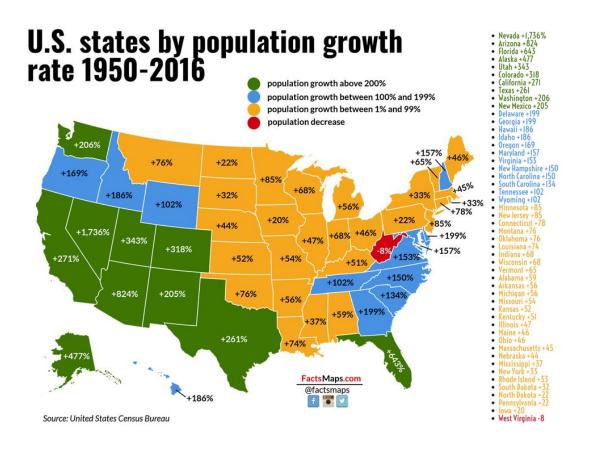


Figure 1.1. Population growth data indicating a significant rate of development in the western US over the past decade in particular. Source: US Census Bureau.

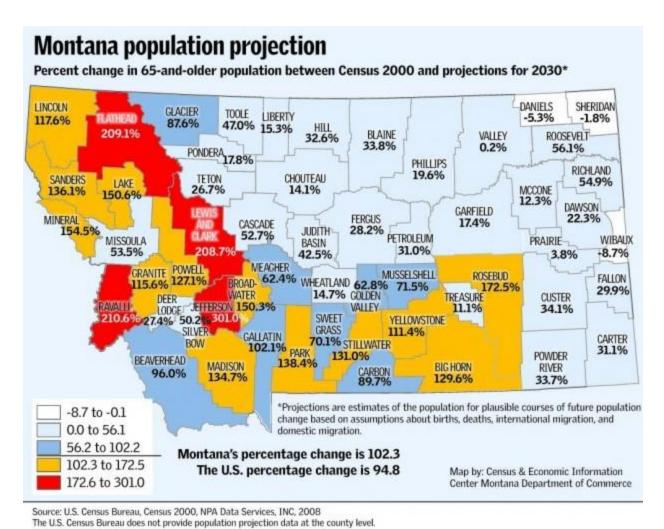


Figure 1.2. Illustration of projected 21st Century population growth in Montana by county, Image courtesy of the Montana Department of Commerce.



Figure 1.3. The 2017 Lolo Peak wildfire, Missoula, MT., Image source Boone & Crockett Club.

As result of these expanding modern challenges, equally contemporary, integrated, and international models and approaches are most needed to advance best practices in built heritage management, leadership, and overall sustainability. This also comes with an increasing need for social and cultural cohesion, combined with comprehensive heritage stewardship practices, and locally oriented approaches to heritage education and policy (Nelson 2002; Winkler et al 2007). How we best identify, adapt, and incorporate the built heritage and natural environments of previous centuries to the immediate, and future needs of the current century is among the greatest challenges confronting the once ostensibly endless frontier of the American west.

Social Challenges

The research conducted for this dissertation considered many inter-related problems to sustaining built heritage and cultural landscapes in Montana, the western US, and other nations around the world. Alongside physical and material challenges, and natural and man-made disasters like wildfires (see Figure 1.3), some of the greatest challenges to sustaining built heritage, and all heritage in context within the western states lies in the human variable, and need to cultivate a modern social and cultural awareness, and accompanying attitude toward the critical role of heritage within the built environment (Guthey et al 2014). This problem further indicates a need to more effectively connect heritage professionals, and combine systems of leadership, especially to best manage and mitigate ongoing impacts to built heritage resources from insensitive development and irreversible damage from resource extraction upon the western landscape (Wells and Stiefel 2014; Winkler et al 2007). In turn, a concerted effort toward greater cooperation is expected to provide comprehensive, and integrated methods for greater outreach, and collaboration, in the construction of models for heritage best practices in the modern world.

In Montana, along with other western states and regions around the world, comprehensive, locally-oriented, and sustainability conscious approaches are rapidly becoming of greater critical importance to managing built heritage in the environment, more notably in response to a growing general apathy toward history and heritage as a whole (Tarlock 1997, 1999, 2002; Winkler et al 2007). It remains an alarming trend that throughout the United States entire communities may lay abandoned while countless others exist in various forms of neglect and disrepair, as aging building stocks struggle to find new use and relevance in locations now void of one thriving industry, community, and life. Heritage often struggles to exist.

It is further concerning that while built heritage continues to struggle to find modern orientation within social and cultural frameworks, political agents may exploit loopholes in heritage policy and legislation, and reshape the landscape, social consciousness and ongoing political discourse and debate over heritage preservation on one side, and development and progress on another (Nelson 2002; Robbins et al 2009). Within this crossfire is a broad range of resources ranging from timeless sites sacred to Native Americans, alongside vulnerable, and increasingly fading built examples of the pioneers, and the recent transformative past of the American west (Campbell and Foor 2004; Dixon 2014; Scott 2014). As there is arguably no singular example of built heritage in Montana, or the American west as a whole, a one-size-fits-all, or otherwise polarized approach does not present as practical solution to meet the diverse challenges to heritage sustainability amid modern growth and development.

What is the Built Heritage of the American West?

Along with identifying the potential threats and ongoing impacts to built heritage in the landscape, it is important to first identify with what constitutes built heritage, along with its commonly intertwined presence within historic built environments. For the purposes of this

research, built heritage may be considered anything constructed by human civilizations over time. The built heritage of the American West contains features that describe over 10,000 years of human occupation on the North American continent, crafted with "Old World" knowledge of construction materials, techniques and comprehension of practical land use decisions, and far older cultural landscapes indicative of Indigenous Americans relationships with the land, encompassing cultural legacies of space, place, and environmental context, along with smaller scale cultural features, rock art, tipi rings, drive lines for hunting game, and wheels of stone to mark occasions, all of which are endangered considering the drastically evolving modern American West (Basso 1996; Campbell and Foor 2009; Dixon 2014; Scott 2014; Winkler et al 2007).

Addressing the Research Problems

In order to counter the growing apathy toward built heritage, and its importance to the culture and identity of the American West, increasingly comprehensive, innovative, and dynamic sets of solutions are especially needed. Connecting the heritage of the past with relevance of the present remains a consistent challenge in the heritage arts and sciences in general. Further, as threats and impacts to built heritage and cultural landscapes do not present as individual threats or problems, but rather as intricate sets of problems, counter-approaches to best mitigating and managing threats are also requiring sets of creative, interchangeable, and mutually supportive solutions. Therefore, I proposed a new approach to sustaining the built heritage of Montana, described here as *heritage alchemy*, where systems of heritage education, policy, and stewardship are illuminated for their respective qualities, along with their potential to combine and form a model of new platforms, and systems of greater heritage management, and guidance in western landscape development.

This research therefore seeks to test the following hypothesis: by addressing challenges to sustaining built heritage in the changing western landscape through the *heritage alchemy* model of combined sets of solutions, an expanded social consciousness, and positive attitude toward culture and heritage may be fostered, providing measurable actions for sustaining heritage resources that can be observed and recorded. These measurable features include the reporting and records of heritage organizations and professionals, especially visual imagery, digital and satellite photography, video, and enhanced imaging programming, to chart and record changes to historic built environments and landscapes over time (Pink 2006, 2011; Wandell 1985).

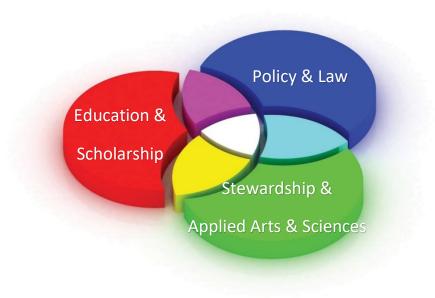


Figure 1.4. Heritage alchemy, represents a method for sustaining built heritage by combining connected subjects, as illustrated by the principles of additive color theory.

Heritage Alchemy is a conceptual model for sustaining built heritage and cultural landscapes, emphasizing the potential to blend and combine three primary elements or principals, specifically heritage policy, education, and practical stewardship, to produce new formulas for the purposes of sustaining, and adapting built heritage to environmental change. It is also

presented as an applied methodology for blending and combining approaches to theory and practice. Similar to combining the primary palettes of both additive and subtractive color methodologies to construct new color platforms, alchemic theory is based upon the identity and characteristics of three critical elements, which are in turn blended and combined to construct new compounds (Figure 1.4). Historically, these three primary base elements, or *tria prima*, consisted of Sulphur, mercury, and salt, and were believed by ancient scholars to be the building blocks of all matter on earth, with potential to be blended and combined to establish methods of transmutation, and thus create further substances, especially gold (Kauffman 1985). While this historic approach of blended and combined *tria prima* formulas may not actually produce the element of gold, this metaphor does illustrate the potential for creating new compounds through measurement and combination of various compatible subjects, to achieve similar outcomes of lasting value.

Theoretical Approaches: Applying Additive Methodologies to Built Heritage Research

Additive methods are most commonly associated with properties of light and color, and how combinations of each of the primary colors of red, blue, and green, may combine to construct additional, secondary combinations of light and color wavelengths (Wandell 1985). Furthermore, when combined in equal proportions, the three colors create white light. These color combinations form the basis of imagery produced in a modern digital display format, among other formats of visual perception (Merleau-Ponty 1945, 1948) From an alchemic perspective, this white light would be the proverbial "gold" sought by alchemists of history. However, in this case, the white light is best characterized as a neutral light, neutral palette, and clear source of illumination produced by direct combination of compatible elements, to light and establish modern pathways forward. This metaphor is intended to introduce heritage education,

policy and law, and stewardship practices, as the three critical elements to sustainable systems of heritage management in the 21st century, and beyond. Summarily, this dissertation ultimately tests the hypothesis that by expanding, investing in, blending, and combining these three critical elements, it is arguable that new, innovative, and supportive elements may also be constructed, and contribute toward increasingly holistic, and diverse systems of heritage stewardship in response to a rapidly changing Montana, western US, and modern world.

This dissertation research, and subsequent investigation of the three primary themes, are greatly influenced by, and tested using a theoretical framework grounded in phenomenological, and empirical research observations, along with extensions of additive methods, This is intended to reveal how various combinations of three primary elements may be identified, applied, and combined between systems that individually as well as collectively support the sustainability of built heritage in changing modern landscapes. For the purposes of this dissertation research, each of the primary themes of heritage policy and law, heritage education, and applied heritage stewardship practices, were assigned a color corresponding with one of the three primary colors associated with color additive theory. As illustrated in Figure 1.4, blue, red, and green are associated with Heritage Policy and Law, Heritage Education, and Applied Heritage Stewardship practices, respectfully.

As additive methodologies are most commonly associated with properties of light and color, this research integrates additive theory as a methodological framework in which to characterize, examine, and especially illuminate the three central themes as individual subjects, with the potential to blend and combine to construct other categories, or more visually, colors, or heritage systems. The use of the term systems, is intended to identify elements, and structural components of the built environment, and also to enforce the notion of heritage as best supported

and sustained through sets of combined, supportive elements. Furthermore, similar to light and color, the potential for these systems to be blended and combined to create innovative, and integrated methods to best sustain built heritage in the landscape of the changing American West is a central focus of this dissertation research.

Research Background

This dissertation was greatly influenced by personal experiences and positions in state and local government, along with university research appointments, while living and working in Montana over the past 15 years. Especially over the course of the last decade, my research has explored changes observed within the historic built environments of Montana and the western US. These observations were largely derived from observations obtained from applied heritage management and leadership positions in Montana state and local government from 2004 to 2016. As such, these observations became motivating factors for this research, and prompted a greater interest to explore effective, holistic approaches to sustaining historic built environments, and pathways toward best practices.

My research therefore presents some of the challenges to sustaining built heritage and cultural landscapes in Montana and the American West, along with investigating methods for meeting these challenges, specifically through applied systems of heritage education, policy, and stewardship practices. These themes are presented as most practical for their combined capabilities, but also as subjects relevant to the growth and sustainability of modern built heritage and landscape management systems. To this end, a larger purpose of the research was to both reconsider the modern efficacy of the traditional American top-down, government-based systems of cultural resource management and heritage leadership that often parallels grassroots

efforts in Montana and the American West, and in turn explore comparative, and international approaches to built heritage, heritage leadership, and landscape sustainability.

Early into the research process of exploring these international approaches, a cadre of scholars from western Europe, and especially those based in the Netherlands conducted forward-thinking investigations of built heritage, its presence on the landscape throughout history, and its place within modern culture. I was particularly intrigued by the work of Dutch archaeologist and professor Jan Kolen and his expressions on landscape biography, which is characterized by a modern holistic approach that considers the whole of a landscape as an assembly of narratives established over time (Kolen 2005, 2015).

Dr. Kolen's 2005 research and subsequent dissertation on landscape biography, *De biografie van het landschap. Drie essays over landschap, geschiedenis en erfgoed* (translated from Dutch as, *Landscape biography: Three essays on landscape, history, and heritage*), provided a substantial level of influence in concept, and inspiration for considering the built heritage issues of the western states in a similar three-part approach. In reviewing case studies, literature, and program models at work in the Netherlands, three primary themes emerged to both compliment and continue to frame my own dissertation research, and provide insight on methods for further combining to present new blended themes and fields of research in the heritage arts and sciences around the world. These three primary themes are effective heritage policies and laws, a ranging spectrum of heritage education initiatives, and a cadre of heritage professionals, trained in the proper care and stewardship of historic buildings, environments, and cultural resources.

Similar to Dr. Kolen's three-part approach to considering the biography of the landscape through individual, and combined perspectives on landscape, history, and heritage, this

dissertation research sought to reveal considerations of built heritage and landscape in Montana and other western states using a similarly holistic perspective, and present individual, as well as combined sets of effective policies and laws, education systems, and applied stewardship practices blending arts and sciences (Appadurai 1986; Cassar 2009; Matero 2007).

Method and Theory

To acquire field data on approaches to built heritage and landscape sustainability models for analysis, and potential to guide western case studies, three separate research visits to the Netherlands were conducted in the summer of 2013 and 2014, and the winter of 2017. These visits were conducted to specifically examine approaches to the three primary research topics of models in heritage education, policy, and stewardship practices in context, through a series of site investigations, along with structured and unstructured interviews.

The first research visit in 2013 included investigation into broader approaches to heritage education, policies, and stewardship practices. This also included scheduled interviews with educators and professionals in university and non-government positions, along with visits to several key heritage sites, to personally experience characteristics of place, physical context of literary research, and to explore phenomenological approaches to capturing data within the case study locations. Throughout the dissertation field research, methods most emphasized the value of empirical observation, and recordation of personal experiences within overall data collection, with particular influence from Tilley (1994) on phenomenology, along with notes on the powers of place as identified by Gallagher (1993), and therapeutic landscapes as explored by Gessler (1995).

It is important to offer a description of phenomenology, and the attraction of this particular methodology as structure to this dissertation. Identified by Lester (1999:1), the purpose of the phenomenological approach is to "illuminate the specific, and to identify phenomena through how they are perceived by the actors in a situation". In the sphere of research, this normally translates into immersive place, or situation-based experience, and gathering information and perceptions through inductive, qualitative methods such as interviews, discussions and participant observation, and representing it from the perspective of the research participants. Phenomenology is concerned with the study of experience from the perspective of the individual, to examine assumptions and ways of perceiving.

Epistemologically, phenomenological approaches are based in a paradigm of personal knowledge and subjectivity and emphasize the importance of personal perspective and interpretation. Consequently, phenomenological research overlaps with other essentially qualitative approaches including ethnography, hermeneutics, and symbolic interactionism. In a purer sense, phenomenological research seeks essentially to describe rather than explain, with phenomenological methods particularly effective at bringing to the fore the experiences and perceptions of individuals from their own perspectives, and therefore at challenging structural or normative assumptions. The notion of centralization and embodiment in phenomenology is characterized by Tilley (2008), who emphasizes the importance of the lived experience, noting that the phenomenologist applies sensory observations and works both simply, and humbly and most often with the simplest to tools in the undertaking of complex tasks (Tilley 2008: 273)

Adhering to the theoretical and methodological foundation of a phenomenological framework, my doctoral research included combinations of field investigations, personal interviews, and literature reviews. As demonstrated by the accompanying articles (Chapters 2-4

and 5 herein), several Dutch heritage case studies and associated examples of contemporary leadership, emphasize the evolution of the three central themes framing my dissertation, in addition to critical advancements made since the second World War to the present. Field work conducted in various locations throughout the southern portion of the Netherlands provided information about local, national, and international attitudes toward built heritage, along with inquiry into Dutch cultural identity, and why and how considerations of built heritage, landscape, and the characteristics of places, are combining to guide locally oriented and increasingly sustainable heritage stewardship models in the Netherlands.

Along with an extensive review of relevant literature, this research presents empirical evidence and examples of Dutch perspectives on cultural heritage stewardship, education and policy, gained through phenomenological inquiry, and first-hand experiences derived from the three individual research visits to the Netherlands between August 2013 and February 2017. Research data includes personal observation, dialogue transcriptions, and interviews with individuals engaged in the heritage policy making, education and international scholarship, as well as those engaged in technical expertise and applied local stewardship. While emphasizing advancements and perspective on Built Heritage and Landscape, this dissertation research was greatly inspired by methodologies and practical approaches to heritage policy, scholarship, and practice, as investigated and observed in the Netherlands, and how these themes blend and combine to form practical and comprehensive systems of heritage management, and models of sustainability and vision for the 21st century.

The phenomenological methods applied to field research in the Netherlands largely consisted of reconnaissance pedestrian survey, and included a variety of historic urban and semi-rural communities and landscapes. The research survey area was concentrated to the southern

portion of the Netherlands, and included the provinces of North and South Holland, Utrecht, and Limburg. Along with pedestrian survey, the exceptional Dutch train system provided convenient ground travel throughout the field research and data collection process. Field data was collected via notes obtained from personal observations, in addition to an assembly of digital photography and video segments obtained on each of the research visits. Along with personally obtained visual documentation, a broad range of historic and modern visual representations, including historic paintings, photos, and satellite images provided guidance to heritage site investigations and overall research.

Personal, place-based interviews conducted in the Netherlands with Jean-Paul Corten and Jan Kolen in 2017 employed traditional question based conversational exchange, combined with unscripted dialogue, accompanied by hand-written notes. In the interview with Jean-Paul Corten, digital audio recording was also included. The combination of structured and free-form interviews, and heritage site investigations provided sets of unparalleled opportunities to gain perspective on Dutch cultural heritage systems of leadership, and professional approaches toward policy implementation, applied stewardship practices, and themes in academia. All research, and writing associated with this dissertation pursued an approach based in phenomenology, and data acquired from personal, placed-based investigation, interviews, and empirical survey.

Photographic reference and illustrations contained in this dissertation were additionally captured by the author. Furthermore, all human subject research, and personal interviews were conducted in compliance with the University of Montana Institutional Review Board, and records of Subject Information and Informed Consent associated with this dissertation research are included in Appendix A.

Along with an intensive survey of relevant literature, place-based research, and ethnographic inquiry, research questions include:

- What significant historic, as well as modern cultural variables or drivers have contributed to the advancement of built heritage considerations within Dutch policy, education and stewardship practices;
- 2. Where are platforms for local, national, and global heritage initiatives evolving in Dutch institutions; and
- 3. How do Dutch approaches to heritage policy, education and stewardship of built heritage and landscapes most effectively combine to form visionary and comprehensive systems, and sustainable models for the American West and global heritage community?

Literature and Topic Overview

The initial literature inquiry into historical archaeological heritage, the built environment, and human connections to landscape sought to refine and distill the research topic to a definitive subject and description common to heritage professionals and scholars around the world. This is best defined as the subject of built heritage, and in the context of the natural environments of the Intermountain West of North America, the concept of built heritage is the focus of this research. Built heritage is becoming more closely linked to issues in environmental resource conservation, especially water, and its ongoing role in shaping the dynamics of modern and historic built environments. In researching the types of impacts to the natural and built environment in the US West over the last century, the most significant threats have come from mining and extraction industries, which also present the greatest threat to the environment as a whole, along with critical water resources (Barry 2012; Tarlock 1999, 2002; LaFever 2012).

In seeking common ground within the heritage milieu, contemporary literature has largely identified the term *cultural heritage* as a relatively recent concept within the global community, subject to the perspective and influences of culture (Barthel-Bouchier 2013; Knauft 2006; Knibbe and Versteeg 2008). As concepts of culture and heritage may be perceived differently by different cultures as well as generations, developing systems of management and ultimately stewardship to best inform and guide the preservation and sustainability of built heritage and landscapes within modern land use assessment and planning is becoming increasingly important (Vos et al. 1999; van Assche et al. 2015).

Several European authors, among them Kolen (1995, 2005), Antrop (2004, 2006), and Willems (2010), offer insight on the modern interface of archaeological and cultural landscape issues and challenges, while presenting practical and visionary approaches to built heritage stewardship and planning for the 21st century, and further connecting heritage disciplines in a range of arts and sciences. These efforts are cultivating a network of professionals and scholars to provide informed perspectives on heritage and environmental issues, and inform policy making on local, regional, and national level.

Within a theoretical, as well as practical framework, this research supports integrated themes in heritage and sustainability, as identified by Barthel-Bouchier (2013) along with perspectives on the landscape (Walter 1988; Schama 1995) and concepts of *landscape biography*, advanced by Dutch archaeologist and professor, Dr. Jan Kolen (1995; 2005) and others (see Appadurai 1986; Samuels 1979; Rappaport 1979). Furthermore, the research more broadly supports inter-disciplinary perspectives, data, or dialogue that may occur in the discussion of inter-related built features and layers of places. The concept of landscape biography has particularly inspired the dissertation research, allowing for considerations of

multiple narratives that may be encountered at a particular location, or landscape, and ensuring that these narratives inform a better understanding of built heritage and landscapes from multiple cultural perspectives. Furthermore, the concept of multiple cultural narratives, and the biography of landscapes is a research approach that aligns well with the heritage of Montana and other western states, via the capacity to consider and apply multiple cultural perspectives on places, to protect and preserve places while integrating community needs with professional, scholarly, and local leadership. These cultural narratives should combine with art, photography, and eye witness accounts to provide a more thorough and accurate history of the built environment and changes over time, arguably best contextualized though a landscape biography-based approach.

In general, the dissertation research has explored facets of place, space, and phenomenology as outlined by Tilley (1994), alongside values of therapeutic landscapes as identified by Gessler (2005), and Gallagher (1993), and how concepts of *heritage diplomacy*, as introduced by Winter (Winter 2015), may contribute to the developing range of heritage literature and encourage further international dialogue on the critical importance of sustaining built heritage and cultural landscapes worldwide. This research further supports the notion that *heritage alchemy*, along with other blended approaches toward heritage diplomacy (Winter 2015), are centered upon dialogue and common appreciation for a past that connects peoples, places, and things. Such a system has the ability to construct a common language through shared interests and scholarly or professional collaboration and explore themes and issues within a greater perspective. It may also be a means in which to better understand and thus sustain heritage in all forms, and contribute to an expansion of consciousness toward heritage, and ideally expansion in its sustainability.

The next section presents summaries of manuscripts presented in this dissertation as research models to addressing the problem of sustaining built heritage in Montana and elsewhere in the American West. Field research and literary investigation into similar problems, and working-model solutions in the Netherlands are explored and presented in the order, and context of the of three primary themes: 1. Effective heritage policies and laws; 2. Heritage education systems; and 3. Stewardship and Applied Arts and Sciences. Following the manuscripts, which are presented in Chapters 2,3, and 4 respectively, I include analysis and discussion of the dissertation research data in Chapter 5 and expand upon and integrate data presented in the articles, to reflect on how these three core themes may combine to expand a greater consciousness, and consequently a greater culture of best practices to preserve and protect built heritage resources amid an increasing pace of development affecting built environments and landscapes in Montana, and elsewhere in the American West.

Summaries of Manuscripts Being Submitted for Publication

Manuscript 1: Built Heritage, Landscapes, and Perspectives on Policy and Law: Challenges for the American West and Approaches from the Netherlands

The first manuscript investigates the primary agents of heritage policy making, and oversight on national and local levels of government, with special attention to how these elements and efforts have evolved in the past decades and have become further refined into issues of importance for the 21st century. This is critical to sustaining historic built environments, as it is within policy where often the highest decisions are made regarding greater management, funding, and planning. Considering the broader context of the importance of effective policies and working models to develop and revise modern heritage laws and practices, this paper includes a brief summary on the evolution of Dutch approaches to cultural heritage and

progressive planning and development since World War II, along with a comparison to the US system of similar timeframe. Key policy initiatives are examined for their critical role in guiding heritage policies and practices within the scope of modern development at all levels.

For instance, the creation and implementation of visionary policies, including government subsidy programs, and legislative initiatives such as the recent Heritage Act in 2016, along with the influential Belvedere Memorandum (Belvedere 1999), are emphasized among pivotal documents and directives that continues to offer model approaches to incorporating built heritage resources amid 21st century spatial planning and development (van Assche et al 2015; van der Valk 2010; Corten 2017). Research questions further explore the history and vision for heritage policy and legislation in the Netherlands, into the 21st century and beyond. This manuscript further considers how the Dutch identify with and sustain built heritage, and build social cohesion and political will toward national heritage issues, providing model for others to follow.

Manuscript 2: Built Heritage and Place-Based Education: Lessons from the Netherlands

The second manuscript presents a sample of themes in modern heritage education and pedagogy emphasizing place-based approaches to education, particularly with regard to built heritage and cultural landscape issues. The research specifically identifies key programs, case examples, and critical advancements made in heritage-oriented education and scholarship in the Netherlands, alongside notes of personal field research into place-based and experiential learning. Inquiry was directed toward educational approaches specific to built heritage and landscape issues at the local and national levels, modern drivers, challenges, along with current focus and future vision from contemporary heritage education and scholarship. This also includes a literature review to present a sample of authors addressing place-based education and

the sustainability of built heritage, cultural landscapes, and the greater global environment as a critical component of contemporary scholarship and modern curricula (Barthel-Bouchier 2013; Corten; King 2002; Kolen 2017; Raessens 2007; Winter 2015).

Manuscript 3: Built Heritage and Landscapes of the American West: Stewardship, Sustainability, and Approaches from the Netherlands

The third manuscript presents model case studies in built heritage and landscape stewardship, emphasizing interdisciplinary, and integrated practices as key components of sustainable cultural heritage management systems. Dutch cultural perspectives, influences, and applied approaches to sustaining built heritage and landscape resources are featured as both traditional and intrinsic elements of modern society. The research additionally explores the recent history of heritage stewardship practices in the Netherlands, leading toward a modern paradigm of preservation by development (Boekman 2006; Corten 2017), with an accompanying management framework that includes a broad range of contributing experts, central and local government systems, as well as private non-profit, stichting foundation models. Case studies offer examples of best practices in organizational and applied heritage leadership, presenting organizations such as MonumentenWacht, along with Dutch approaches to heritage and landscape stewardship that present a comprehensive understanding of historic built environments, contributing toward a management systems that considers a more complete narrative and holistic biography of a particular place or landscape, (Samuels 1979; Appadurai 1986; Antrop 2004, 2006; Bloemers et al 2010; Kolen 2005, 2006, 2015; van der Valk 2010; van Assche 2015). The third essay also seeks to illustrate how applying a more comprehensive and holistic understanding of built heritage resources, alongside history and context, will best inform management systems, and technical approaches to conservation and sustainability of built

heritage resources into the future (Matero 2007; Pickerall 2009). Research further presents perspectives on the expanding impacts of modern development on historic monuments, town sites, and landscapes as a topic of global importance, along with a growing emphasis on local and regional systems of stewardship.

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Chapter 2

Built Heritage, Landscapes, and Perspectives on Policy and Law:

Challenges for the American West and Approaches from the Netherlands

Keywords: Cultural Heritage, Policy and Law, Landscape, Environment, Planning *Abstract*

As urban and rural communities continue to grow and place new demands upon the landscape, the ability to sustain historic built environments and cultural landscapes for future generations will continue to face all manner of challenges. Effective policies and laws are needed not only to safeguard historic built environments, but also to best integrate heritage resources in planning and development at the local, as well as global level. This is becoming particularly evident in the western US, where in response to new waves of development, resource extraction, environmental disasters and population increase, new and modern approaches are urgently needed to best integrate conscientious policies and laws within the practical dimensions of cultural heritage, built environments and landscape sustainability.

This paper examines some issues common to both the western United States and the Netherlands, with an emphasis on how Dutch advancements specifically linking built heritage and landscape issues to themes in environmental policies and laws, along with zoning and planning systems, may support model systems of growth and cohesion within all levels of governance and society. This research also considers how built environment, landscape heritage, and environmental issues in general, have evolved in the Netherlands and the US over the past several decades into critically combined and hardened modern platforms, foreshadowing how instruments and policies may become further refined into the 21st century. Given the trend and likelihood for development and population growth to continue to increase throughout the western

states into the next century and beyond, practical updates, such as improved visual and multimedia recordkeeping, as well as system wide improvements to cultural heritage and environmental law should be considered as themes of combined prime importance, as crafted legal policies commonly dictate greater management, funding, and planning for heritage environments.

Introduction: The Changing Western United States

The Inter-Mountain West region of the United States, and especially rural states such as Montana, have encountered rapid changes to the once wild landscape, particularly in the recent past. The increasing changes in land use, population, and development occurring in the western US throughout the 20th, and into the early 21st century, are largely due to environmental resource extraction, especially as result of mining and other non-renewable earth resource industries (Walker 2003; Wegener 2017; Winkler et al 2007). These compounding changes are driven by a range of cultural, social, political, and economic variables, with a continuing likelihood of increasing transformations brought by similarly intensifying demands over the next several decades (Bosma 2010).

This theme is most importantly observed at the regional and local level, where impacts are most acutely experienced, and require more comprehensive responses to best meet specific challenges and potential impacts (Egberts 2015; van Straalen et al 2014; Willems 2010). These causes may be as diverse as threats from wildfires and earthquakes, to water and environmental contamination, with each requiring individual and collective consideration from a variety of heritage resource, land use, and legal perspectives, among others. As result of these complexities, it is becoming increasingly important that proactive responses to built heritage and landscape best practices also consider practical legal dimensions, and working models of other regions and

nations around the world. Furthermore, working models of other regions and nations encountering similar heritage and land use challenges have established legally structured best practices in land use, which are expected to positively, and practically influence the creation of other similar systems (Janssen 2017; Parr 1999).

To gain insight on potential solutions for best meeting the growth and industry challenges in the western US, I examined alternate approaches to heritage governance, and then compiled a sample of perspectives on land use policies, guidelines, and legal elements most related to the heritage of the built environment, and environment as a whole, along with particular emphasis on policy advancements made in the Netherlands in recent years. These are included herein, and include discussions on modern legal challenges, instruments, cases, and approaches to model systems of policy and law. In addition to the literature and case study review, research methods have also included conducting personal interviews with officials representing the Dutch government (Corten 2017), Dutch scholarship and education (Kolen 2017), and Dutch phenomenological inquiry into public, as well as private foundation models, and systems of built heritage policies, laws, and by-laws.

An International Approach to Local Leadership

Several authors are able to offer insight into the increasing changes occurring within the landscape of Montana and the western US, along with the variety of real and potential threats to both environmental, as well as archaeological and cultural heritage resources (Campbell and Foor 2004; Dixon 2014; Guruswamy et al. 1999; Scott 2014). These drastic changes and comprehensive threats are gradually influencing policies and laws may that ultimately shape the protection and preservation of greater environmental resources, most importantly water (see Bryan 2013, 2015; Nelson 2002), along with guiding development of built heritage and cultural

landscapes at national, state, and local scales. Such issues are rapidly becoming more evidenced in the western United States along with other nations throughout the world, as global communities continue to respond to combined and ongoing threats to built heritage, and the environment (Bloemers 2010; Bosma 2010; Hein 2018; Weiss 1993).

It is also becoming increasingly necessary, and practical to link issues related to historic built environments to those of the environment as a whole in heritage policy and planning, as this has potential to promulgate holistic forms of heritage and environmental stewardship. While systems of stewardship may be advanced in part though effective policies and laws governing heritage and land use management strategies, a top-down oriented, one size fits all governing approach is increasingly less effective in meeting localized challenges and needs. Quite simply, one size does not fit all when considering dynamics of the landscape throughout the western US, and variables from place to place in that region and elsewhere (MacDonald 2008; Otterstrom 2003). While an examination of broader international policies and laws may provide a macrocosmic perspective on history and challenges to environmental policy making and laws, individually customized and localized approaches specifically tailored to the unique heritage and environments of specific places, and guided by active local leadership, arguably presents the most practical, and sustainable forms of stewardship by way of policy (Ploeger 2005; Weiss 1993).

A growing body of literature suggests that within the modern civic and legal system, effective heritage policy and policy making is becoming increasingly more important to safeguard the resources of complex historic built environments, particularly at the local level (see for example Eagle 2008, 2017; Frigo 2004). In seeking international perspective on this issue, Dutch authors such as Bosma (2010), van Assche (2015), van der Valk (2010), and Roymans

(2010), illustrate how challenges emerge when complex assemblies of historic buildings, pathways, and created landscapes that represent generations of knowledge of places are assimilated or destroyed in the wake of progress and modern design. As such, the management, and integration of heritage resources amid modern growth scenarios will continue to require combined insights of heritage educators and professionals, comprehensive leadership, and equally paced improvements in environmental land use and legal planning. This approach may in turn further evolve to guide and influence legal structures integrating smart-growth heritage solutions within greater policy and legislation (van Assche et al 2015; Vincent 2016).

Addressing the Research Problems

As evidenced by the records of their knowledge and expertise, practitioners and educators within the heritage arts and sciences around the world have long been able to offer critical perspective and translation of physical evidence that defines cultural landscapes and historic built environments, along with how the tangible record of human achievements may offer tremendous insight on the history, and heritage of places and their uses over time (Kolen and Renes 2015; Walter 1988; Tilley 1994; van Boxtel 2016). The invaluable knowledge derived from observation of places, spaces, and changes over time continues to inform both current science and future heritage policies and laws, providing leadership in planning for historic environments. The assembled and preserved records of history, especially the power of visual images to capture and define moments in time, may further enhance the understanding of places, and provide tangible, and measurable evidence of change and impacts to heritage resources, features, and the environment as a whole. This understanding based upon visual, audio, and other physical supportive evidence may establish pathways for improved communication between policy

makers and professionals, and advance an informed understanding of the complexities of heritage and the significance of places (Abel 1998; Gallagher 1993; Pickerall 2009).

As populations increase throughout the western United States and worldwide, urban centers continue to expand, while traditionally rural landscapes and previously smaller communities are transformed through similar expansions in residence housing and other industries (Figures 2.1 and 2.2). These small communities are often ill prepared for immediate and rapid changes to the landscape and infrastructure, and as result updated and policy and legislative models are urgently needed to best offset impacts of current and future population growth, as well as control the range of challenges to sustaining built heritage within changing land use patterns and development (Keitumetse 2014; Wegener 2017; Winkler et al 2007). This theme is noted to be especially important when considering legal dimensions and impacts to water resource systems (Bryan 2013, 2015), along with timber and other natural resources (Hein 2017), which may particularly impact the delicate heritage ecosystems of rural western states, such as Montana. Consequently, as historic communities and regions require increasingly more comprehensive and integrated approaches to sustaining built heritage amid rapid development, it is also becoming increasingly more practical to consider heritage program models, policies, and legislation of other similar regions and nations to develop similarly comprehensive and integrated approaches to heritage resources and compatible development, to best mitigate impacts to the overall environment over time (Bosma 2010; Buitelaar et al 2011).



Figure 2.1. Butte Montana, 1904, A historic bird's eye rendering illustrating the imposed impact of early 20th Century industry on the landscape, Image source: US Library of Congress.



Figure 2.2. Butte, Montana. This city located in western Montana remains a cautionary tale to the irreparable damage upon the landscape from nearly a century of invasive resource extraction. Image source: NASA.

Connecting Built Heritage and Modern Environmental Policies and Laws

Themes central to heritage policy and law may frequently be found in modern land use planning and development scenarios, as heritage resources are a consistent theme within the greater built environment. While state and local governing systems may more frequently address issues of public property and cultural resource management, approaches to addressing the archaeological and built heritage of places may also vary from location to location (MacDonald 2008; Ploeger 2005), as each jurisdiction is charged with upholding both legal and colloquial responsibility for sustaining their unique heritage and sense of place. However, as changes in land use continue to occur in connection with land ownership and development scenarios, the interface of multiple considerations of heritage, the greater environment, and local planning will continue to be most critical, in order to best guide development and sustain the fragile historic ecosystems that define the American West, and elsewhere. Such an integrated approach also appropriately considers potential impacts to interconnected environmental heritage, most importantly water resources, along with designated public lands or wilderness areas that can be designed to best fit the particular needs and conditions of particular locations (Stewart 2007).

While the literature tying heritage issues to legal aspects of environment, land use, and development planning indicates these issues may be common to many nations and regions around the world, approaches to confronting the issues do not often employ a common strategy and structure, or integrated analysis of resource considerations for a particular region, but rather tend to approach land use planning and development decisions in an ad hoc manner, and in reactive response to development agents and industry drivers (Frigo 2004; Hartmann and Spit 2014; Tarlock 1997; Todd 1974). As such, it is important to recognize the urgency of expanding patterns of land use, development, and population occurring in the western states, and to

understand how this transformation may ultimately impact the fragile and unique ecosystems that represent some of the last examples of Indigenous land management, as well as American frontier and pioneer movements of the previous centuries. Research patterns are also indicating that water resources in the western states are resources with limits; where these limits have been reached, smart-growth initiatives must be become more focused upon process, and developing real world working solutions (Tarlock 1999, 2002).

Author and University of Montana legal professor Michelle Bryan is among those connecting landscape and water issues to larger issues, and more complex environmental themes (Bryan 2013, 2015; Hein 2017; Klamer 2003; Ruml 2005). Bryan notes, "there is an emerging recognition that water law and land use law are inextricably entwined. After years of viewing these legal fields as separate, the West is now witnessing early efforts to join water and land use through assured supply laws that more strongly demand adequate water availability before development can occur" (Bryan 2013:2-3).

As Bryan further indicates, the efforts to combine approaches to land and water resources management have become all the more critical in the face of climate change, which poses profound impacts on local water supply and land use. Ironically, land use, remains one of the primary human drivers of climate change (Bryan 2013:3), exemplifying a need for new models and a planning connection that links water-land use planning with climate action planning. While this planning need is evident, and applicable throughout the United States, it is particularly essential to address in the American West, where population pressures strain over-claimed water supplies that are further imperiled by climate change. For example, the U.S. Census Bureau forecasts that western states will experience a nearly forty-six percent population increase between 2000 and 2030, which will be the largest increase in the nation Bryan 2013:4).

To counter the intensification of development and population growth in the West, Bryan observes "if western states require local water-climate planning, there will be improved community preparedness and more robust inter-jurisdictional cooperation regarding shared water resources" (Bryan 2013:6). More broadly, this combined and blended approach to comprehensive land and water resource planning also links to the greater considerations of the historic and built environment, advocating for model legislation that fosters a level of uniformity among local responses to environmental issues, while still affording flexibility to tailor planning to the unique circumstances of each region of the American west (Bryan 2013:6).

Dutch Models and Inspiration for Western Heritage Policies

The *Belvedere Memorandum*, a key document produced in the Netherlands at the close of the 20th century, provides a pivotal model for integrating built heritage within modern development (de Boer and Mol 2005). As identified by author Koos Bosma, the interdepartmental document *Belvedere Memorandum* reacted to a widely shared dissatisfaction with the continuing loss of identity in cities and landscapes (Bosma 2010). The *Memorandum* also offered that the gap between the past and the future could be closed through the reshaping, recombining, or transforming of the ancient within the modern environment. Bosma further notes that as a recent initiative it remains to be seen whether or not the authors of the *Memorandum* have sufficiently realized the greater goal to address the dissatisfaction in Dutch society, which is further acknowledged to have far deeper roots than the physical spatial shaping of cities and landscapes. As offered in critical summation, "the spatial order and the spatial planning of the Netherlands cannot undergo a positively appreciated modernization without involving sociocultural and mental factors. Without a different way of thinking and acting, the gap cannot be bridged" (Bosma 2010: 641).

The observation made by Bosma illustrates the critical function of policy and law to provide the ability to shape and change public consciousness through an instrumentalization of laws in spatial planning, and thus change the public culture toward heritage of the built environment and the landscape of a region or nation as a whole. Given the rapid rate of development occurring in the American Inter-mountain West, it is increasingly more important to similarly expand the culture of awareness and ultimately action toward sustaining the fragile natural, cultural, and historic built environments that characterize that region. For this purpose, documents like the *Belvedere Memorandum* may serve as both influential instrument, and practical guide for integrating heritage and planning within the American western consciousness.

There are observable and notable connections between the landscape and human well-being, and cultural heritage and landscape related laws and policies at all levels are likely to become increasingly debated topics in the near future, as new and emerging impacts to land use and ownership continue to transform local and global social and physical environments (van der Valk 2010). In reference to the expanding consciousness and action toward built heritage issues, Van der Valk also called out the importance of preserving cultural history within modern development, and recognizes the "preservation through development" approach presented in the Belvedere Memorandum as practical response to the largely ambivalent view toward heritage by mid-20th century architects and planners.

Van der Valk (2010) observes that particularly in the years following World War II, attention was focused on solving the housing shortage and rebuilding the industries of the Netherlands. During this period efficiency in land use regulation was a precondition for economic recovery. Cities and agricultural areas were designed strictly according to the principles of functionalism. Form followed function. As such beautification and heritage

management were not a matter of great concern to planners and politicians. This indifference to the past ebbed away during the 1990s, and cultural history gradually began to play a role in the pursuit of spatial quality. (van der Valk 2010).

This active tactic toward land use and management is evident in the proactive approaches toward recognizing and incorporating built heritage in all manner of development, and as part of national and local policy. While the approaches, and action are decidedly modern, the attitude toward heritage on the local and national level is not a new concept to Dutch culture, which continues to broaden its unique relationship with built environments that represents the entirety of the nation. To this end, the perspective, and vision toward the past, present, and future of the national and local identity is inextricably tied to the land, and the environment that defines the cultures who inhabit this land is most exemplified in the manner in which they approach sustaining this environment and subsequent landscapes of national and regional identity (Buitelaar et al 2011).

In expanding a larger view on places and changes over long, or short periods of time, Roymans, and colleagues (2010), are among several additional authors and heritage scholars to reference the concept of landscape biography, and observe that the biography approach may deliver insight to landscape genesis and evolution based on historical narrative. As noted, this knowledge may combine different methods and can complement quantitative or qualitative approaches to landscape research to identify continuities and breaks in landscape development and the underlying reasons for breaks in particular periods of development. As such, the biography approach is able to illustrate the historical layers of a landscape and translate the historical evolution, resource interface, and overall capacity of environments (Kolen 2005, 2017; Roymans et al 2010). Furthermore, an approach toward a more holistic consideration of the

landscape as heritage is arguably ideal for western states like Montana, which is characterized by mostly small communities amid vast expanses of some of the last remaining wilderness in the western states.

Roymans, and colleagues (2010), joins a growing cadre of scholars and professionals in observing that, "appropriation and land use today take place in a sphere of multiplied influences, conflicts between different land users, high dynamics and an accelerated tempo" (Roymans et al. 2010:390). Roymans, and colleagues, further notes how modern conflicts in sustaining heritage resources alongside land use planning and development in the classic or traditional sense may become strained if not impossible; therefore, modern land use planning requires new and flexible and process-oriented steering. However, Roymans and colleagues also point out that a somewhat traditional conservative approach to heritage and stewardship may contribute to an atmosphere of defensiveness, particularly in dynamic urban and semi-urban areas, where heritage objectives may become narrowed by politics in government. As such, and as Roymans and colleagues conclude, "development, including heritage planning, in both urban and rural areas seem increasingly to take place by coincidence rather than deliberate planning" (Roymans et al. 2010:390). This approach would also indicate that heritage management and political based governance is inherently problematic, in that a top-down approach to heritage protection, or destruction may hinge upon political perspectives toward heritage, rather than an approach based on ground-up, scientific perspective, and informed systems of governance.

Contemporaneous to advancements made in the *Belvedere Memorandum* at the close of the last century, an exact observation of the critical link between heritage policy and law and the heritage arts and sciences, particularly archaeology, may be found in an article presented in the Tulsa Law Journal. Wherein, the authors specifically discuss the modern challenges to the

heritage of people, places, and things, and make note of how modern approaches to archaeology and a greater comprehension of historic built environments may contribute toward a future balance of heritage ownership and incorporation of natural and cultural environments for the new century and beyond (Guruswamy et al. 1999).

The utilitarian reason for protecting cultural resources such as monuments, buildings, landscapes, and cultures who inhabit them, include the lasting value of such resources as repositories and storehouses of human knowledge, as well as living laboratories, and archives of human experience. As such, the scientific information contained in each archaeological site is a valuable asset because of the knowledge or information it may yield. The authors additionally note the utilitarian benefits of cultural heritage as a knowledge base, or "library of life", continues to be explored within "the umbrella of archaeology, which applies controlled methods of excavation and defined principles of examination to extract information from material remains of past societies" (Guruswamy et al. 1999). As an interdisciplinary field able to traverse the sciences and humanities, archaeology has an extensive and diverse history of reconstructing past human experiences, via excavation, examination, and understanding cultural materials, and built environments. Thus, it is an essential component of the transdisciplinary policy adjustments recommended herein.

Connecting the Heritage of Built and Natural Environments

Heritage, or cultural resources are often inextricably linked to "natural" resources that comprise the context and greater environment of cultural landscapes. Water, and access to sources of clean drinking water is the most defining and connective feature of cultures, throughout the course of human history, and critical to sustaining all life. Water is a topic of heritage, and discourse as a subject all its own, and along with ownership of water rights and

resource distribution is guaranteed to be central within the modern debate over environmental stewardship in the years to come, along with essential value of water resources as the single basic element connecting the heritage and sustainability of all communities, and how policies, laws, and regulations may reflect contemporary challenges.

For example, after 140 years of negotiation, the Māori of New Zealand won recognition for Whanganui River to be treated as a living entity, which means the river has the same legal rights as a human being. The Māori view the river not as a "resource" per se, but as an ancestor. As such, they sought to "find an approximation in law so that all others can understand that from our perspective treating the river as a living entity is the correct way to approach it, as an indivisible whole, instead of the...model for the last 100 years of treating it from a perspective of ownership and management..." (Gerrard Albert, Māori Tribe, cited in Ainge Roy 2017).

Circling back to Dutch examples and perspectives, Netherlands based professor and scholar Carola Hein is among those connecting the heritage of the built environment to the natural environment, indicating a lack of literature related to the environmental and ecological heritage of water, excepting for pollution (Hein 2016). While Hein's research predated the successful and perseverant example of the Whanganui River's recognition as a human being in 2017, her work called attention to cases demonstrating water as conduit for and between people, places, and things. The waste and development impacts from fossil fuel and earth resource extraction continue to be among the greatest threats to water resources, including the heritage of water systems and built environments around the world. To illustrate the growing international concerns, Hein presents the specific market of petroleum, and the concept of "petroleumscapes" as hallmarks of 19th, 20th and 21st century land use and development, driven by corporate interests and political influence in land development linked to resource extraction and corporate

profit, over greater considerations in long-term land use and impact to natural and built heritage resources (Hein 2018). This important consideration highlights the expanding reach, and capability of the US federal government to potentially exploit loopholes in heritage and environmental policy and law, re-write or transform existing legislation, or extinguish all together.

Heritage and Legal Instruments

In both the US and Netherlands, policies and laws to protect, and encourage the sustainable development of historic built environments may also be found in the legal instruments currently available. Often, these legal protections may be linked to zoning regulations, local ordinances, and guidelines installed for the purposes of controlling growth and development within communities and regions. One such instrument is the relatively modern construct of Transferable Development Rights (TDRs), which may be employed as zoning controls to guide the development of places continuing heritage resources or other design considerations (Vincent 2016). In simple terms, TDRs are methods of zoning controls intended to encourage sustainable population growth via effective land-use planning and conservation.

Since gaining popularity in the 1980's, TDR programs have grown throughout the US, and continue to inspire similar systems of land ownership and use patterns around the world (Clinh and O'Neil 2010; Miller 1999). While intended to function as a zoning tool, TDRs, and the basic concepts of property ownership and land manipulation can each yield both positive and negative outcomes. In the modern era of legal challenges to heritage doctrines and leadership profiles in all manner of stewardship at the national and local level, legal zoning instruments like TDRs (e.g., PDRs discussed below), can represent a double-edged sword, with potential to be wielded both ways (Cruden 2016).

The concepts of TDRs and PDR's (Purchase of Development Rights), are known for their combined importance in effective policy and planning (see Kaplowitza et al. 2008; Miller 1999; Vincent 2016). Specifically, TDR and PDR programs, are based on the notion that development rights are one of many sets of rights associated with land ownership. These land-based development rights may be used, unused, transferred or sold by the owner of a parcel. In PDR programs, funding generally comes from grants or tax revenues and the development rights are not transferred but simply retired. Comparatively, in TDR programs, the development rights obtained from a sending parcel are generally transferred to a receiving parcel; encouraging development at one location, and manage density at another location (Figure 2.3). Consequently, the acquisition of the development rights in a TDR program is funded not by grants or taxes but by the developers of the receiving sites who acquire greater development potential, and therefore potential profit, by voluntarily using the TDR option (Kaplowitza et al. 2008: 379).

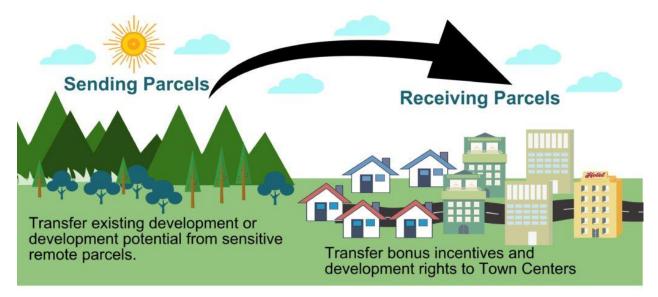


Figure 2.3. Diagram illustrating the basic concept behind Transfer of Development Rights. Image source: Tahoe Regional Planning Agency.

TDRs offer planning policy guidelines that essentially redirects development rather than simply preventing development and thus recognizes that there are areas where development must

be allowed and particularly encouraged. TDR programs are guided by local ordinances although the prices paid for the development rights are often privately negotiated between the sending area landowners and the receiving area developers. In many TDR programs, in addition to being transferred to a receiving site development, development rights severed from a sending site can also be sold to an intermediary, held by the original property owner or, in some cases, remain unused, as in a PDR program. Once a parcel's development right has been severed, regardless of whether it is subsequently used or retired, a conservation easement may then further safeguard a property and limit its future use (Vincent 2016).

Expanding upon the evolving Dutch concept of "preservation by development", an insightful perspective on the use of TDR's in the Netherlands is offered by Janssen-Jansen (2008), who observes that market-oriented approaches to managing heritage alongside development has gathered attention in recent years. Noting the paradigm shift toward development planning, and notions of preservation by development as identified in the Belvedere Memorandum and elsewhere, the concept behind TDR's as applied in the United States presents as a practical working model to meet the need for increasingly balanced approaches to built environment and open landscape considerations throughout the Netherlands. The Dutch model of development planning is shaping a modern vision toward the future of the historic built environment and landscape development through combinations of public and private partnerships, and marketplace observations and projections.

Janssen-Jansen also notes the "green for red" concept of spatial planning currently in place in the Netherlands that effectively maintains that equal quantity of green space must be preserved or retained elsewhere, to compensate for the loss of green space due to development. The "red for green concept" conversely implements spatial strategies to convert green space to

"red", or development areas, which may also include similar methods to offset development impacts. This may include the concentration of development to minimize impact, as well as conversion of lesser desirable "red" areas to green space or other natural function. As the author specifically notes, coordinated efforts in spatial planning and policy, and combinations of red and green approaches continue to remain most important, indicating when red and green areas are approached separately, the objectives may be conflicting, resulting in unpredictable outcomes (Janssen-Jansen 2008:193).

For example, and as Janssen-Jansen indicates, restriction of urban development will have more results than just higher densities. Another consequence will be higher housing prices and as a result pressure to push urbanization into an area where restrictions are less strict, undermining the initial effort to contain urbanization. Janssen-Jansen also observes that in The Netherlands TDRs are seen as very promising instruments for planning practices, particularly when linked to goals of spatial quality improvements. However, while planning and land use regulations in the US, as well as The Netherlands are mostly accomplished at the municipal level of government, the nature of the Dutch planning system and its property rights regime is quite different from the American system. Furthermore, the fundamental idea regarding land use, and personal property rights is especially different. For example, in The Netherlands property rights are not divided into separate rights as they are in the US. Janssen-Jansen presents that according to US property law, the owner of land is entitled to a certain "bundle of rights" which includes components such as the right to develop land, air rights and mineral rights. Development is often "as-of-right" implying the owner is entitled to certain benefits when his plan fits in the existing regulations. This right cannot be taken from a property owner for public use without compensation. In the US, TDR discussions revolve around the avoidance of these "takings" or limitations of land use

potential. Consequently, in a TDR model, this right to develop is separated from the other rights of ownership and transferred to another property providing compensation to the original owner (Janssen-Jansen 2008:194).

In stark contrast Janssen-Jansen points out that in The Netherlands, without suitable, permissible zoning, development is simply not allowed. Additionally, as each development requires a change in the municipal zoning code, these local municipal land use plans rarely permit development in the rural landscape. Resultingly, the value of land lies in its zoning, rather than specific personal property rights, and changes in zoning can influence the price of land significantly. In the Dutch system, many restraints on urban development exist, and in further contrast to the US system these restraints are only partially subject to compensation. This can include cases of a vested right, such as the withdrawal of a granted building permit, or a change in a previous status of a site resulting in direct, material and indisputable damage to property. Most notably, an important difference may be found in the role of public authorities. Compared to the US, the Dutch government often plays the role of "land developer," both to earn money and to guide or control development. This is referred to as "active land policy" (Janssen-Jansen 2008:194).

In order to garner lessons earned from the Dutch example, and to ensure sustainable conservation of the American West's fragile, complex ecosystems and heritage environments, instruments like TDRs, and conservation easements have emerged as effective devices for balanced, long term property use considerations that encourage comprehensive models of stewardship at the local level (Eagle 1998; Egberts 2015). This method of confronting specific present and future challenges of any region or place, also allows for place-based approaches to meeting the specific challenges of governing land and water resources alongside considerations

of heritage, environment, and development interests. Locally integrated approaches to land, water, and heritage resource may also most encourage comprehensive heritage and environmental leadership at the local level, and present ground up, grassroot alternatives to top-down systems of government regulation and oversight of property land use, heritage resource, and greater environmental considerations (American Farmland Trust 2008).

The Stichting Model

The Dutch stichting, or foundation, represents an effective and practical, non-government model that provides a specialized alternative to top-down government-based approaches to built heritage management (Jones Day 2016). While potentially viewed as an "obscure, or arcane system of organizational management" (Raice and Patrick 2015), the Dutch stichting foundation model offers a significant advantage to the future of heritage stewardship in the American West, through expertise-based administrative leadership and practical oversight to meet the unique and diverse challenges of this regions built heritage and iconic landscape.

As noted by the Netherlands Chamber of Commerce, a stichting is essentially a private foundation. A stichting has a board, but no members. It may also be a business, but its profits must be allocated to the foundation's cause or purpose. The foundation's officers may also consist of paid employees, although officers are only compensated for expenses relative to their work with the foundation (Netherlands Chamber of Commerce 2019). Establishing a stichting foundation is a relatively straightforward process, and does not require Dutch citizenship. However, certain guidelines and statutes are in place to ensure the proper establishment and regulation of foundations within greater commerce. The process of establishing a stichting requires a civil-law notary to draft a deed, stating the creation of a stichting and listing its

statutes. It is also possible to set up a foundation as an individual, or with other individuals or legal entities. It is also possible to create a foundation posthumously as a will provision.

A stichting's basic statutes will include the name of the foundation, including the word "stichting", a statement of purpose, procedures for appointing and removing officers, an identified location, decision-making protocols, and methods for payments in the event of dissolution. Stichting statutes also often include rules about the foundation's organizational structure, and require a civil-law notary to amend the deed whenever an amendment to the foundation's statutes occurs. It is also mandatory to list an established stichting in the Commercial Register (Handelsregister) maintained by the Netherlands Chamber of Commerce (Kamer van Koophandel, KVK). With regard to taxes and liabilities, a foundation operating as a business pays corporation tax (vennootschapsbelasting). In this context, a "business" is any organization that functions by way of capital and labor for the purpose of making profit through commercial activities and economic transactions, however stipulating that any profits must be allocated to the stichting's cause or purpose. A stichting is a legal entity, which means that its officers are theoretically not liable for any of its debts. There are, however, exceptions to this rule. For example, mismanagement, negligence or failure to list the stichting in the Commercial Register (Netherlands Chamber of Commerce 2019).

The effectiveness of the stichting model for the legal structuring of built heritage guiding policy is further characterized by Koele, who observes, "the essential feature of a Dutch foundation is that it is a legally autonomous entity with rights and obligations but without any owner or persons with an interest therein". Adding, "it is without members and its purpose, with the aid of funds intended for such purpose, is to realize the objects set out in its articles of association" (Koele 2014:3).

Dutch foundation law is extremely flexible and only contains a few compulsory rules. It therefore has been implemented in practice in various forms, which all have different tax qualifications, although in modern context the Dutch private foundation has recently developed into a robust but very flexible tool to manage private wealth. (Koele 2014). Examples of heritage oriented stichting models include sites like the Anne Frank House in Amsterdam, provincial oriented organizations like MonumentenWacht, along with a host of other national, regional, and local heritage-oriented programs.

As funding for heritage related undertakings is likely to remain a common international challenge into the 21st Century, flexible wealth management and sound financial sustainability for heritage initiatives are also likely to remain equal challenges. The implementation of a variety of non-profit, and foundation-based management systems present convincing and practical alternative models to systemic government-based management and funding structures. These practical alternatives can, and should include a range of public-private partnerships, to safeguard sustainable, resilient management of heritage sites and cultural landscapes.

Perspectives on Heritage, Land Use, Law, and Planning for the American West

The multi-dimensional nature and interpretation of heritage policies and laws, particularly with American values and views toward property rights and development, is aptly characterized by Steven Eagle, who presents many of these dual aspects within the context of land use and planning, social engineering, and legal frameworks. Eagle particularly observes the evolving patterns of land-use controls in the US dating to the colonial period, along with the expanding influence of corporate and financial interests in social and political decision making over time, noting American attitudes toward property law have changed from early attitudes

toward nuisance, to categories of land use zoning and comprehensive planning, to modern views of regulation as transactional (Eagle 2017).

Eagle also appropriately indicates the contributions of English scholar John Locke to the foundations of the US legal system, with particular emphasis on the fundamental aspects of personal and real property rights, and aspects of government agency action with regard to land use, and takings law. This function remains most important in the modern era as property rights and takings challenges are likely to increase as development continues to increase in *prime* interest zones, and impacting historic built environments, associated landscapes, and vast span of resources.

With specific regard to heritage and the built environment Eagle further illustrates, that there is not a universal definition of the environment. However, while the roots of "environs," meaning "vicinity," go back hundreds of years, the contemporary senses of environment and "environmentalism" are modern constructs, with social and political utility among other functions (Eagle 2013:720). As Eagle summarizes, "environmental law regulates human activity in order to limit ecological impacts that threaten public health and biodiversity" (Eagle 2013:723). This statement underscores of the direct intent of fairness, and equal protection under the law, extending to all aspects of property as stated in the US Constitution, to *local* jurisdictions over property development and land use. However, as also noted by Eagle, perspectives toward current and future land use, development, and the greater environment may vary among cultures, and particularly across generations (Eagle 2013, 2017).

As an intergenerational, and utilitarian instrument, the founding and guiding principles of common law have continuing influence and practicality in the American legal system. Noting, that throughout most of American history, the common law was the principal institution for

mediating conflicting claims about rights, grounded upon a few broad and comprehensive principles, founded on reason, natural justice, and enlightened public policy, modified and adapted to the circumstances of all the particular cases which fall within it (Eagle 2013). As further illustrated, the three great bodies of the common law are;

- 1. Property, by which the rights of individuals regarding things are established and perfected,
- 2. Contract, by which those rights are exchanged through mutual consent, and
- 3. Tort, by which harm to those rights is rectified.

In all instances, the focus of the common law was upon mutual and bilateral relationships, contract provisions between buyer and seller, and tort victim and tortfeasor. The roles of government in the legal structuring of zoning provisions, and local zoning and comprehensive planning may become influenced by the ability of development interests to outweigh those of community sustainability through land use controls. This may simply constitute appealing to local government interests through financial incentivizing of the environment and manipulation of land use functions by way of legal maneuvering or outright restructuring of local zoning regulations of a particular region (Eagle 2013).

Analysis, Conclusions, and Challenges in the Western States

Landscape transformation, and the potential to impact the interconnectedness of built heritage and natural heritage resources is among the critical themes facing the Intermountain western US, and particularly states within the northern Rocky Mountains. As Montana and the west considers how landscape and built heritage resources continue to be owned, and effectively managed in the decades to come, comprehensive heritage policies and laws will remain a critical topic in the western states, particularly in small or isolated communities. As indicated by this research, models and methods employed in the Netherlands emphasizing practical, and guided

approaches to "preservation by development", present practical alternatives on how to best manage the fragile heritage and environmental resources of Montana and the western states through effective modern policies and laws.

The research also illustrates points of common ground, and subjects that may serve to inform greater international collaboration, and active case study development, evaluation, and further comparison. For instance, the internationally common theme of Transferable

Development Rights (TDRs) emerged through this research as a common denominator in both the US and the Netherlands. While the local laws and priorities may vary from place to place, the basic tenets of the TDR concept were applied in both instances, and continues to guide and inform land development, and dialogue within and among both nations, particularly at the local level.

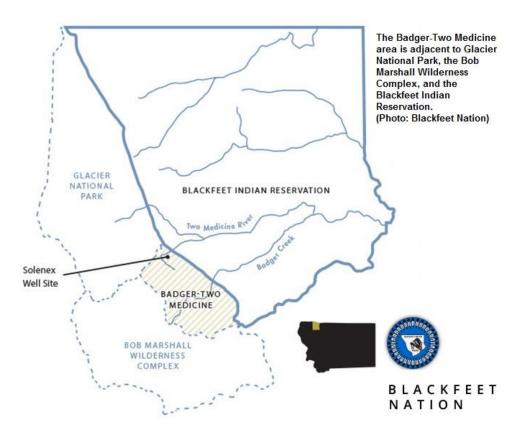


Figure 2.4. Context and proposed location of the Solonex drill site in the Badger Two Medicine region of northwest Montana. Image source: The Blackfeet Nation.

Among the more pivotal and precedent setting heritage case studies situated in the American West, the ongoing case of Solonex v. the US (Figure 2.4), and importance of the targeted Badger-Two Medicine area, is unfortunately among the many modern examples to provide stark testimonial to the power of corporate influence in US policies and politics (Cruden 2016; Wegener 2017). This cautionary, and ongoing case study of an energy corporation lawsuit against the US federal government for the right to explore and extract resources from public lands in western Montana exemplifies the tolerated extent of corporate influence on the American legal system, ability to impact public lands, and the continually enabled threat of the corporate energy and other special interest lobbies, and a prevalence of "dark money" in US politics (Tarlock 1997, 1999, 2002; Winkler et al 2007). The threat continues to be compounded by current administrative moves to de-list, de-regulate, and reduce the provisions that protect both heritage resources and environments at the federal level, and thus create opportunity for federal land use reclassifications, ownership and development transactions, transitions, and complete transformations of environments (Bryan 2014; Tarlock 2002). This unfortunate, and diminishing function of the prevailing American federal based, yet lobby driven system continues to provide staggering examples of corporate influence and the historic ability to transform, and lay to waste entire regions through the impacts of resource extraction, and poorly implemented or outright absent mitigation or management policies. However, these examples are also recorded as cautionary tales, on pathways for cultures to avoid in the future, with tarnished and toxic landscapes, and lost or ruined heritage as candid reminder, and source of constant data for present and future heritage scholars.

As alternative to a growing trend in environmental deregulation and continuing loss of heritage, this field research and associated data has provided evidence to support the theory of that Dutch policies, guidelines, and legal approaches to cultural heritage, landscapes and the built environment present practical working models for meeting many similar built heritage, landscape, and growth challenges facing Montana and the western United States. When combined with effective policies and laws, instruments such as TDRs can offer practical compromises to costly and lengthy legal battles that may derive from contentious viewpoints on heritage, landscapes, and development rights. However, effective compromise will also hinge upon the abilities of heritage advocates and stewards to advance a new, and visionary cultural consciousness of American West, and its vast resources into the 21st Century.

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CHAPTER 3

Built Heritage and Place-Based Education: Lessons from The Netherlands

Keywords – Built Heritage, Place-Based Education

Abstract

As understanding a changing global landscape grows more complex, it is important to integrate themes in heritage education that emphasize the importance of place-based pedagogies, and phenomenological approaches in the study of cultural landscapes, and historic built environments. Here scholarship relevant to place-based education and the sustainability of built heritage and landscapes is examined and considered as essential components of modern curricula, applicable to the future of greater heritage management, scholarship, and dialogue. Case studies, programs, and approaches to cultural heritage education and scholarship in the Netherlands are also explored, drawing attention to a tradition of place-based learning, as well as an ethic to expand modern capabilities of heritage sites, research centers, and professional organizations in order to shape and advance policy and stewardship practices.

Introduction

Impacts to historic built environments throughout the global landscape continue to accelerate from sources that span climate change and range of cultural and natural phenomena. As cautionary occurrences, these impacts may also function as drivers for discourse, and further influence advancements in heritage arts and sciences, such as the ways in which historic built environments may inform future generations. In the first decades of the 21st century, it is becoming increasingly important to examine the intricacies of historic built environments, changes over time, and the effects of human development upon the landscape. Consequently, *how* we learn about, and discuss the places and heritage of the built environments we inherit and

pass on, is increasingly becoming a critical consideration for dialogue relevant to global change, in addition to improving methods of experiential learning and professional best practices (Winter 2015).

Given the aim to inform and educate future generations, comprehensive, and interdisciplinary approaches to heritage education are required, at all levels, to best match the challenges to sustaining heritage in the face of constant change (Barthel-Bouchier 2013; Raessens 2007). Here I present empirical, place-based learning as an essential component of modern heritage education, and as a methodology relevant to built heritage and landscape stewardship, planning, and development research. By its nature, built heritage is an integrated part of its environment, a product of its place, and constant reminder of how the continuum of historic built environments may provide living links between past, present, and our possible future. My research therefore supports active approaches to sustaining historic built environments through advancements in place-based, and interactive education systems as both practical, and necessary to best contextualize and advance the heritage of places.

Methods

In order to investigate how cultures have approached the heritage of the built environment, particularly in the last half century, and how places have, and may continue to shape immersive teaching and learning experiences, I first conducted a literature review to explore the range of social, cultural, and professional discussions on place-based approaches to heritage education, along with international themes and program models. I also carried out field research, investigating various heritage sites, as well as conducting personal interviews with heritage professionals in government and academic appointments throughout the Netherlands. Field research and interviews occurred during August 2013 and 2014, as well as February 2017.

Photographic records and field notes further aided the phenomenological inquiry into place-base approaches to heritage education. I then synthesized the information gathered via this array of sources to explore whether and how the potential for international models, such as those in the Netherlands, might assist in shaping similar approaches to place-based learning, and reevaluation of heritage sites in Montana and the western US.

Literature Review: Advances in Heritage Education

Human cultures throughout the world produce and represent the people, places, and things that ultimately become the cornerstones of their heritage, including the tangible and intangible characteristics that are passed on to future generations. Consequently, every culture is shaped and guided by environmental factors that support and sustain their identity, and unique viewpoints originating from particular places. Perspectives on the heritage of places may therefore be best considered through a lens of cultural perception, subjective to the connection of people to places, and legacies that form cultural identity and subsequent heritage (Basso 1996; Gallagher 1993). Thus, modern systems of place-based education require increasingly comprehensive and integrated approaches to physically studying and applying knowledge on the history, and evolution of places (Corten 2017; King 1998; 2002; Kolen 2015; 2017; Tilley 1994; Walter 2008). This argument becomes particularly important as modern development continues to present ongoing challenges to understanding and sustaining the heritage of places for both current and future generations. In response, educators need more deliberate approaches to integrating place-based curricula, engaging and immersive experiences, and direct connections to heritage resources with real-world challenges (Ardoin 2008; Gruenwald 2003; Somerville et al 2011; van Boxtel 2017).

Teaching and Learning about Places

The greater conversations about place, and the heritage of places, are part of a larger discussion on the built environment, especially the challenges for adapting built heritage to the needs and inevitable advancements of the modern world. Therefore, as we consider approaches to place-based education, it is also practical to consider modern definitions and perspectives on the powers of places (Gallagher 1993), the potential to transform approaches toward leadership and stewardship, and the ways in which a variety and combination of scientific viewpoints may be applied to modern methods of teaching and learning (Gesler 2005; Sternberg 2009).

Nicole Ardoin (2006) candidly illustrated the need, and almost natural pathway toward interdisciplinary approaches to better understanding places, and especially our senses of places, and how they may come to be further illuminated through interdisciplinary collaboration. Ardoin connects the disciplines of psychology, sociology, anthropology, geography, architecture, along with political and environmental sciences by examining the literature and critical nature of each, while additionally considering how these disciplines may combine to form new and refined approaches to understanding places. In discussing dimensions of place and senses of place, Ardoin (2006) calls attention to the context of the biophysical environment, as the consistent backdrop in which to best consider the personal psychological element. the social and cultural context, and the political economic milieu (Ardoin 2006:114). This observation reinforces many of the notions put forth by Tilley (2008), and the capacity of landscapes to influence and transform human perception through the senses, and especially demonstrates the transcendent capabilities of applied combinations to shape new models for achieving a greater understanding of places, and their human dimensions.

Several other scholars have offered a variety of contemporary perspectives on heritage and links to environmental issues, emphasizing the integrated and comprehensive action required to not only meet the complex practical challenges of the present, but to also advance inter-disciplinary dialogue and approaches to sustaining heritage in built environments, both in the US and worldwide (Barthel-Bouchier 2013; Bloemers 2010; Cassar 2009; van der Valk 2010; Winter 2015). With common, yet international dialogue, problems facing the built environment often exist as problems facing the natural environment as a whole, though more specifically linked to cultural perspectives, and discussion on place, and how places are identified, interpreted, and shared with others.

Nearly 15 years ago Claudia Ruitenberg called out the need for expanded interdisciplinary research and professional advancement of place-based studies in her discussion of a "radical pedagogy of place" (Ruitenberg 2005). She presented a pedagogy where the concept, and construct of "place" is under deconstruction, and where students can be taught to see the multiplicity of places, and conflicts between interpretations of a place. Ruitenberg further explained a radical pedagogy of place with a tempered plainness, noting "a forest is a site of economic benefit to the logging and tourism industry, as well as an ecosystem, as well as land formerly inhabited by Indigenous people", additionally, "an inner-city neighborhood is a crime statistic, as well as an architectural site, as well as a social system held together by resilience and solidarity" (Ruitenberg 2005:212). As such, a radical pedagogy of place acknowledges the local contextuality of discourse and experience, but further considers the internal and external influences upon which a community identity relies. While the discourse on heritage preservation on one hand and landscape development initiatives on the other may often appear paradoxical, particularly within a place-based approach, overcoming this paradox through increasingly greater

means of communication, learning, and teaching about places remains a critical challenge of the modern era (Bloemers 2010 Raessens 2007).

While challenges to managing and sustaining the places of human history, culture, and heritage continue to grow more complex, so do the challenges of keeping up with innovative and comprehensive methods for educating and preparing future generations. David Gruenwald addressed this growing need, calling for a critical place-based pedagogy, as a guiding contemporary model. As the author notes, a critical pedagogy of place aims to contribute to the production of educational discourses and practices that explicitly examine the place-specific nexus between environment, culture, and education. It is a pedagogy linked to cultural and ecological politics, and other socio-ecological traditions that interrogate the intersection between cultures and ecosystems (Gruenwald 2003). Gruenwald also argues that convergence of critical pedagogy of place and place-based education offers a much-needed framework for educational theory, research, policy, and practice. Further, place-based pedagogies are needed so that the education of citizens might have some direct bearing on the wellbeing of the social and ecological places people actually inhabit. This drawn connection of place to human health and well-being is at the forefront of modern research illustrating the new potential for old places to cultivate awareness of the common heritage of the built environment, and its place within an ever changing local and global environment (Choenni 2015; Corten 2017; Kolen 2017; Sternberg 2009).

The discussions on the merits of place-based education presented by authors like Ardoin (2006), Ruitenberg (2005), and Gruenwald (2003), along with the powers of places as illustrated by Gallagher (1993) and characteristics of therapeutic landscapes explored by Geslar (2005), each present intriguing insight into common and related themes in contemporary heritage, and

cultural research. Moreover, these common and related themes offer the potential to guide the development of guiding philosophies, and practical approaches toward modern heritage education as a whole. For the purposes of this paper, this theoretical base is presented through a select case studies, where concepts of place-based education, the power of place, and therapeutic landscapes combine to form solid and enduring approaches to heritage education leadership. The following sections present three case studies from the Netherlands, followed by how these concepts and examples provide practical model for resolving some of the challenges to place-based education for locations in Montana, and elsewhere in the western US.

International Methods in Place-based Education

Among the many diverse challenges to passing on knowledge of places, there is an arguable need to recognize the importance of both localized and global dialogue in shaping best practices in preservation and cultural heritage stewardship, and a growing need for practical, and sustainable approaches to integrating heritage resources within modern development. While historic preservation, archaeology, and cultural heritage policies established throughout the world over the last century often recognize the importance of integrating heritage resource issues within modern land use and planning, it is becoming increasingly more difficult to advance academic heritage issues and dialogue within a global forum, which may often be hindered by policy-guiding-progress, and potentially outdated or arbitrary restrictions from a largely concentrated federal government system of oversight (Cassar 2009; Smith 2008; Walter 1988; Willems 2010). However, advancements in heritage education are able to offer new systems of modern leadership and influence within contemporary heritage policies and practices (see Roders et al 2011).

The theme of built heritage itself is a relatively modern concept in the international academic community, becoming an emerging subject of international dialogue and scholarship, which includes a growing amalgam of applied sets of arts and sciences (Barthel-Bouchier 2013; Bloemers et al 2010; Cassar 2009; Kolen 2017; Raessens 2007; Smith 2004). While traditionally a familiar concept throughout the countries of Europe, Asia, and among a variety of native peoples, place-based education is not presently or commonly linked to specific built heritage issues in the western US. While variables in heritage education and curricula in general may be found across the globe, the increasingly common need to acknowledge built heritage resources in contemporary society is arguably due in part to an increasing need for integrated approaches, and improved communication between the heritage disciplines. It is within this greater forum of improved communication where modern planning theories and practices may also benefit, and become best informed on approaches to guide the development of historic built environments. *The Dutch Approach*

The Dutch have long sustained a tradition and unique cultural system of existing in harmony with their environment, while learning from, and shaping the world around them. In recent years, the Netherlands has developed a model approach to heritage education (van Boxtel et al 2009). This modern approach is closely linked to effective management and stewardship of the built environment and landscape as a whole, and achieved as result of closely connected efforts between Dutch central, provincial, and regional governments, and heritage scholars, educators, and professionals. Collectively, these entities established more effective resource laws and standards of best practices with the government system, launching the Cultural Heritage Agency of the Netherlands, or Rijksdienst voor het Cultureel Erfgoed (RCE) in 2009 as a comprehensive cultural division of the Dutch Ministry of Culture, Education and Science.

In February 2017, I met with Jean-Paul Corten, Programme Manager Shared Cultural Heritage, at the RCE offices in Amersfoort, Utrecht province, to discuss the evolution and adaptive characteristics of the cultural heritage system in the Netherlands, among other issues of common importance, and to gain personal perspective on Dutch integrated approaches to heritage of the built environment within the national paradigm. A point consistently illustrated during the discussion, was the Dutch National Government commitment to promoting, and advancing a national social consciousness of heritage, in all its forms. This goal was being achieved through a variety of programs aimed to link social growth of regions with strategic growth models, emphasizing local, and holistic approaches and gradual change over time, as opposed to rapid development. This national model, and focus on social-strategic growth initiatives was further implemented to connect political and public awareness, along with encouraging growth based upon three pillars:

1. Political Commitment 2. Economic Feasibility 3. Sustained Public Connection.

Mr. Corten further indicated a successful outreach tradition within the Dutch system of heritage stewardship that ensures heritage resources are largely accessible to all, and promoted through a variety of public programs, literature, and educational institutions. The overall approach to education therefore seeks to link public awareness of heritage with environmental issues, inspiring collective efforts to adapt historic resources to modern needs. These expanding roles of transparency and initiative within the national government systems further include establishing partnership with university programs, and "stichting" foundations throughout the provinces. In partnership with national or provincial government agencies, these foundations provide grassroot support and otherwise special assistance (Corten 2017; Kolen 2017).

The Netherlands has additionally taken a leadership position in advancing the concept of cultural heritage in tangible and intangible forms, by establishing centers for global heritage issues and initiatives within university heritage programs throughout the country. An interview with Dr. Jan Kolen, was conducted in February, 2017, at the Center for Global Heritage and Development offices at the University of Leiden, in the province of South Holland. Dr. Kolen is an archaeologist and professor who is widely respected for his work on landscape biography as an approach for modern heritage considerations. His methodology, and previous research material was significant and inspirational to the broader research associated with this paper. During this discussion, Dr. Kolen reinforced the notions presented by Jean-Paul Corten, underscoring the need for expanded cooperation between the heritage agencies of the Netherlands, and the importance of social awareness, outreach, heritage education for all ages. This awareness was further observed to be best cultivated through connection to the places, persons, and objects that form the basis for the heritage of the built environments of the Netherlands, which lend toward a collective identity. Dr. Kolen also stressed the importance of student interaction with heritage sites and places of significance with the heritage curricula in the University of Leiden archaeology program, citing locations such as Soesterberg, along with the selected case study of this paper, the Anne Frank House, for their importance in illustrating the variables of heritage from place to place.

To acknowledge the variables of places while maintaining common heritage themes, the Center of Global Heritage and Development was established to combine the capabilities of three Dutch Universities, the University of Leiden, Delft University of Technology, and Erasmus University, Rotterdam, to meet the challenges to heritage sustainability in the Netherlands and around the world. This and other research centers and university heritage programs throughout

the Netherlands eleven provinces additionally support local and regional efforts in heritage planning and development, and perform a variety of scientific services (Kolen 2017).

As emphasized in my discussions with Mr. Corten and Dr. Kolen, through combinations of government supported cultural heritage research, education, and technical assistance programs and partners, particularly stewardship in-action non-profit, *stichting* foundations like *MonumentenWacht*, the Dutch further offer noteworthy examples of combined cultural heritage policy, education and professional practices in the 21st century. This is further evidenced by way of key pieces of legislation like the Belvedere Memorandum in 1999 (Belvedere 1999; Boekman 2006), and emphasizing the importance of how these elements may combine to shape a comprehensive and sustainable system of heritage stewardship, while providing learning pathways for other nations and future generations alike.

Bridging the Gap from the Netherlands to the US, and Other Nations

In bridging the gap between theory and practice, integrated approaches toward understanding built heritage and the potential to contribute to the design of the modern landscape is being popularized more in nations like the Netherlands and elsewhere, to better inform and maximize the growth and adaptation of a particular place or region. In particular, the concept of a landscape biography, and the applied aspects of reading and considering a place as an assembly of human innovations and changes over time, is becoming widely embraced for its compatibility and support to a range of disciplines within the heritage arts and sciences (Kolen 2015, 2017; Bloemers et al 2010).

As characterized by Bloemers:

We need an intermediate methodology to bridge the gap between theory and practice and between historical and future-oriented archaeology; a sort of middle range theory. History and environment are constituent elements of the historic landscape. The combination of knowledge of the past and preventive planning aims at preservation or, at second best, excavation...both outcomes create feedback for starting a new heritage cycle, and further contribute to a better knowledge and understanding of occupational patterns, and predictive power of potential growth models for a specific region (Bloemers et al 2010:631).

As the heritage disciplines continue to establish discourse in all variety of academic and practicing fields, it is increasingly important for scholarly discourse to include international approaches and methods for teaching and learning in the heritage arts and sciences. Furthermore, it is becoming equally important for heritage policies to ultimately reflect advancements made in the heritage education arts and sciences, and expand to reflect the growing need for practical, and scholarly guidance, and counterpoint to the politics of heritage (Smith 2004; van Assche 2015; van Boxtel and van Drie 2009; van der Valk 2010). Additionally, there is a growing need to acknowledge built heritage and landscapes as critical elements of modern land use scenarios, and for the broad and diverse information they are able to provide to better understand human interaction with places, past developments, and changes over time (Kolen 2005; 2017; Bloemers et al 2010; Raessens 2007 Vos et al 1999). As reflected in the sample of international scholarship, and professional perspectives expressed in this research assembly, practical methods and models are particularly necessary to effectively integrate theory and practice in modern place-base education, along with providing opportunity for collaboration and integration of heritage education programs to best inform future generations.



Figure 3.1. Anne Frank Stichting, Amsterdam, NL – Photo by author. August 2013.

The Anne Frank House: A Case Study in Place-Based Learning

Although there are numerous historic buildings and sites around the world that provide a narrative to human histories within the context of their respective time and place, very few may offer the depth, complexity, and power of the Anne Frank House, in Amsterdam. I had the good fortune to visit this heritage site in the summer of 2013, and experience first-hand the unquestionable energy of the location, and exceptional, and personalized quality of the overall visitor experience (Figure 3.1). It is this immersion, and sense of personal inclusion that I traveled to Holland to experience, intending to visit with the staff, and explore the potential for an in-depth inquiry into Dutch approaches to built heritage and education. It is also most important to emphasize the visit to this specific heritage site represented a point of reference, and cornerstone for the ontological and phenomenological inquiry that predicated my research visit to this premiere heritage site. The visit also motivated me to focus on place-based learning as an

integral part of the accompanying dissertation research. This visit, on this day, quite literally impacted the manner in which I investigate, and experience the places that contextualize the heritage of the human condition.

While the museum receives over a million visitors each year, from people of all ages and from around the world, the site is far beyond an ordinary visitor experience that may be found in the countless interpreted spaces, or so-called "house museums" across the world (Hartmann 2013). Further, it is not the intention of this essay to attempt to undercut, or specifically discuss the drivers and expressions of heritage tourism, but rather to offer insight and perspective on the unique character, place, and endearing power of the Anne Frank House, and its ability to inspire other systems through its example of stewardship, and place-based leadership.

Originally conceived in 1960 as a small, private heritage site by Holocaust survivor Otto Frank, commemorating the story of his daughter, and ultimate loss of his entire family at the hands of the Third Reich, the Anne Frank House continues to thrive in the 21st century as a private, stichting, or non-profit foundation (Anne Frank Stichting 2010). This private foundation driven system of is arguably among the more practical working models of modern heritage stewardship, presenting unique combinations of educational outreach, technical curation, and socio-cultural philosophies within internal policies and management.

The combined powers of place and personal histories, in concert with the appropriate systems of management that transcend time and connect with people across generations and cultures, are among the many reasons for the lasting success of the Anne Frank House. Visitors patiently line up each day by the thousands to wait their turn to experience the human conditions and stories of families from a not so distant past. It is the consistent ability to connect with this past, through the self-guided museum experience, that allows visitors to become part of a

collective journey of those who experienced the Holocaust first-hand, and of those who did and did not survive. It is of course those who survived, like Otto Frank, who have gone on to tell the stories that continue to inspire others to engage, and learn from the experience of others, while literally experiencing the lives of others, via the setting they knew as home, sanctuary, and prison, for a brief moment in time. In the case of Anne Frank, such moments have gone on to change so many other moments, for many other peoples in the years since its humble beginnings (McEvoy-Levy 2012).

Research at the Anne Frank House: A Phenomenological Approach

Touring the Anne Frank House as a self-guided visitor allows one to take their time meandering through the sequence of rooms, up narrow staircases, and through hidden passageways, accompanied by others simply engaging a similar moment in time at one of the world's premiere heritage sites. However, to tour the Anne Frank House as a heritage researcher with neutral expectation became a field investigation unlike any I have ever had. Over the course of five years, I have been able to reflect upon the mid-August afternoon in 2013 where I was able to independently investigate the architectural and physical context, exceptional human history, modern social dimensions, and exemplary approach to education and interpretation of the space and story. This immersive event, and investigation into phenomenological approaches to built heritage research became a personal snapshot of what cultural heritage stewardship meeting the built environment is all about, and what it should be most about going forward. While photography is not permitted, I spent several hours going from room to room, space to space, and often back again, taking hand written field notes, observing the movements, posture, and flow of the other visitors, and gathering impressions on the essence of the place that had once held the

lives and dreams of families hoping to survive the very real holocaust that occupied the world outside.

For a brief time, this *achterhuis*, or "house behind", and the hidden set of rooms that held the Frank family and several others in hiding existed as a fragile fortress against the outside world, where their only hope was to remain hidden, and wait out the storm (figure 3.2). The sequence of rooms meanders up small and narrow stairwells, through hidden passageways behind hinged bookcases, reveals the power of human ingenuity combined with shear will to survive. The spaces occupied by the Frank family and the others in hiding with them remain very much as they once appeared for a short time during one of the worst periods of human conflict the world has ever seen. The images, and ephemera on the walls, and in static display present a portrait of common human expressions; dreams, desires, and hope.

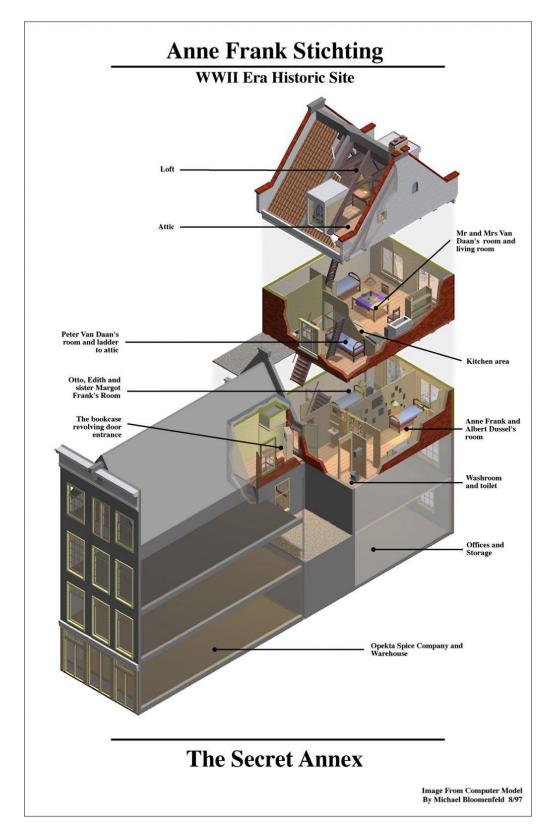


Figure 3.2. Computer generated model of the Anne Frank Stichting, and secret annex. Image source: Michael Bloomenfeld 1997, Pinterest.

The space is also meticulously maintained and presented by the Anne Frank House staff, and contains exceptionally innovative and sensitive approaches to both site conservation and management of the visitor experience. Examples of conservation by design within the space include sections of perforated screening, utilized as ultra violet light protection over the windows in the upper story outward facing rooms, alongside the Prinsengracht. Along with protecting interior finishes and materials, this screening has been further printed in monochromatic image of the world outside as it would have appeared during the period of the Frank family occupation. This creative assembly combines with a human energy that continues to shape an often somber yet serene visitor experience. It is a heritage site that captures, and explains the power of human dignity, love of life and family, and the power within us all to ensure that heritage lives on.

As history notes, Otto Frank was the only member of the Frank family to survive the war. Upon discovering Anne's diary, he went on to make the story public, and in 1960 attended the opening of a museum at the site that once housed his family, and place of business. A video continuously playing on a small screen near the end of the visitor experience, contains a narrative by Otto Frank later in his life. The segment is presented in Dutch with English subtitles and provides a candid excerpt of his personal story leading up to the publishing of Anne's diary, and its resonance with him, and others around the world. He notes that he "never knew that Anne possessed such deep thoughts within her", in an interview colored with an underlying, and most understandable grief, and human dimension brought further to life and consciousness through audio and visual media. This notion was most compounded to me personally in an image at the end of the visitor experience, and in publication (Anne Frank Huis 2010, Lee 1998), that captures Otto Frank just before the opening of the museum in 1960. It is a black and white photo of the man in right profile, leaning against a narrow support column of one of the upper annex rooms,

looking off into a distance, with a depth most unknown (Figure 3.3). It was this image that brought the visitor, researcher, and human experience home to me, as the life experiences told by the only one who was able to tell the story of what happened to his family, and the similar life and death experiences of another six million Jews lost in the Holocaust. It was in the simplest explanation, an image of a man who has known complete and utter devastation. It was also an image that would undoubtably resonate with anyone, of any culture, age, or nationality, as a capstone to experiencing a snapshot of other's lives, offered in the quality and context of the place of significance, and timelessness of human compassion.

This experience provided a serendipitous aspect to the field investigation, and from that time forward, changed my life as a heritage professional, and fellow father to a daughter. It provided an unexpectedly personal plot twist in what was otherwise expected to be a site investigation and analysis of modern approaches to studying stewardship of historic built environments. However, this unexpected occurrence also became a personal lesson in historic empathy that will likely resound forever, and has illuminated my views toward the human condition, and its power to shape the historic built environment. For others, I hope it may do the same.

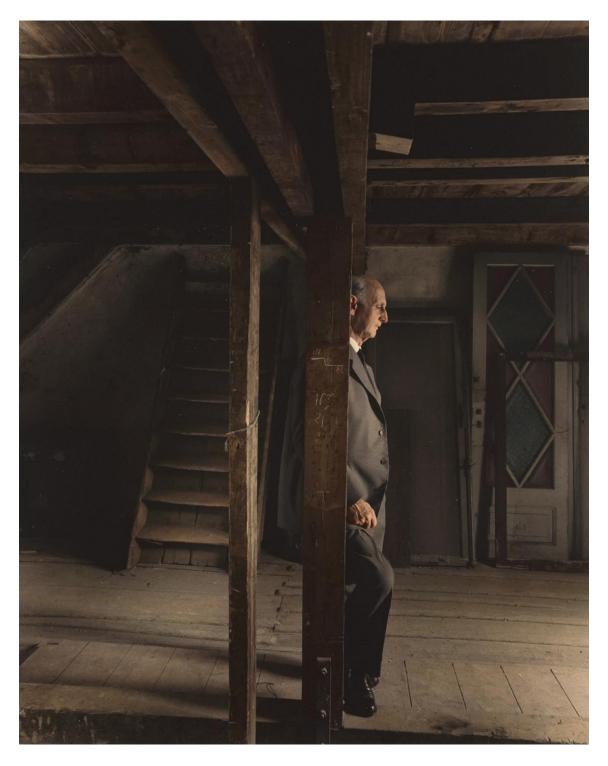


Image 3.3. An image of Otto Frank in the secret annex captured prior to the opening of the museum in 1960. Image source: The Casual Observer.

Analysis and Discussion

This research has revealed that the ability to connect people to places can be specifically, and significantly linked to discussions relevant to the concept and action of historical empathy, as well as to emotional characteristics that may unite people and places with senses of belonging, or other deeper forms of emotional connection, and expression (Throop 2005; Yilmaz, 2007). Cultivating, and promulgating historic empathy and response to the human dimensions and lasting connections between people, places, and things is among the effective outcomes of the immersive experience that sites like the Anne Frank House are able to provide (Gallagher 1993; Gesler 2005; Sternberg 2009). This connection is essential to sustaining an active capacity for human interaction with built heritage environments, which in turn maintains function and relevance in the modern world.

Along with identifying working models, and new approaches toward meeting challenges to contemporary built heritage education and scholarship, it is equally important to consider how to best improve outreach efforts and a greater social awareness of built heritage and its critical place within the greater modern, cultural landscape (Ardoin 2006; Basso 1996; Cassar 2009). In order to create a lasting and sustainable system of management and stewardship of a heritage site or landscape, there must also be a lasting and sustainable human connection to the place or landscape in order for it to endure, and change with the times. This may arguably be achieved in part by a system of place-based education at all levels of the learning spectrum, and through effective programming and outreach in order to cultivate a sense of personal awareness, and connection to heritage based upon human emotional response (Throop 2005; Yilmaz 2007).

Conclusions: Seeking Sustainable Solutions to Built Heritage Education

This research identifies traditional and modern themes and approaches for learning and teaching about places, and encourages a contemporary need to expand upon themes of placebased education, to more deeply consider the heritage of places, changes over time, and how improved understanding of places may also inform more comprehensive systems of scholarship, and leadership (Gallagher 1993; Somerville et al 2011; van Boxtel and van Drie 2009). It is noted that the heritage of places may ultimately be employed to generate and direct human responsiveness, and captivate a full spectrum of human emotional response to transform social consciousness, and enhanced awareness on the importance of places of human heritage. This can notably range from senses obtained from places of peace, nature, and security, to those bearing the marks of conflict, and the darkest places of human atrocity.

The modern concept of heritage education is one which combines approaches to studying and learning about the past, to form a more complete understanding of places as assemblies of human conditions, influences, and changes over time. By combining approaches to place-based investigations, along with notions of historical empathy in heritage studies, it is possible to form new and sustainable pathways of heritage education.

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CHAPTER 4

Built Heritage and Landscapes of the American West:

Stewardship, Sustainability, and Approaches from the Netherlands

Keywords: Applied Stewardship, American West, Sustainability, Built Heritage, Landscape, Netherlands

Abstract

Modern cultural heritage management systems can benefit by considering and adapting international models, interdisciplinary practices, and options for non-government leadership. This paper investigates issues and case studies in built heritage stewardship, exploring contemporary approaches to heritage stewardship practices in the Netherlands, and drawing insight from a paradigm of preservation by development, and a combined stewardshipmanagement network that includes a broad range of contributing experts, central and local government systems, as well as non-profit, "stichting" foundations. Dutch cultural perspectives, influences, and applied approaches to sustaining built heritage and landscape resources, as both traditional and intrinsic elements of modern society are also examined, including examples of current practices in organizational and applied heritage leadership, as well as comparative approaches to sustaining built heritage within the historically engineered landscape. The sample literature review and summary of field investigations highlight exemplary (i.e. model) heritage sites, organizations, and Dutch approaches to heritage stewardship reflecting a comprehensive cultural network and understanding of historic built environments that have the potential to contribute to a more informed, holistic narrative, and dialogue on the biography of places. Such an intimate understanding should, in turn, foster sustainable stewardship practices for the longterm, and provide models for others.

Introduction

As we face the middle decades of the 21st century, it is becoming increasingly more important to observe, record, and consider the complexities of historic built environments amid a changing global landscape, and apply an informed understanding of the ways in which these places are being transformed by human societies, and cultures over time (Antrop 2004a, 2004b, 2006; Appadurai 1986; Roders et al 2011). As populations increase and landscape development intensifies, particularly in the western US, how built heritage is sustainably managed, and ultimately passed on becomes the responsibility of agencies, organizations, and individuals. These entities in turn exercise the roles of heritage managers, keepers, and experts, who ideally provide the best and most practical care as stewards of cultural and historic resources, within their respective place and time. This care may include a variety of applied arts and sciences, along with a network of heritage professionals and partners to best sustain the qualities and essential characteristics that define the heritage of peoples, places, and things for future generations (Matero 2007; Wells and Stiefel 2014).

Here I present alternative examples to traditional forms of governance-based approaches to heritage resources, highlighting the need for modern approaches to heritage stewardship as a whole, and expanding roles of non-government (NGO) organizations in specialized management and oversight, particularly of local heritage. By identifying locally oriented, and sustainable approaches to heritage stewardship, I also consider how international approaches to heritage preservation by way of development might help to address challenges to sustaining built heritage at the grassroots and localized level in the American West. I argue that non-profit organizations with the ability to flexibly interface with heritage policies, practices, and educational platforms may present practical alternatives to the traditional roles of government-based heritage

management, by offering adaptable, sustainable, and localized heritage stewardship systems (Choenni 2015; Corten 2017; Egberts 2015).

Methods

For the purpose of this paper, the scope of built heritage research is most associated with the critical interface between natural and built environments, supported by modern perspectives on the roles of applied stewardship and initiatives in preservation technology, as well as the need for sustainable management systems for objects, monuments, and places of human significance. This research investigates the utility of exemplary case studies to guide heritage stewardship solutions for historic built environments, and acknowledges the importance of including a wide range of scholarly disciplines and professional expertise representing contemporary systems of built heritage management, planning and technical arts and sciences. Consequently, I sought out case studies via literature review of Dutch built heritage methods, systems, and researched scholars who could provide direction and statements on the functions and capacities of heritage sites and organizations within a greater heritage stewardship matrix (van der Valk 2010; van Assche, et al 2015). Recognizing that sustained physical care of heritage resources, most critically depends upon both technical expertise, a sustained human connection to these resources, and the inclusion of future generations to maintain the relevance of heritage in the built environment in changing modern communities, research methods have also included evidence gathered from [and observations made] during visits to several heritage sites, along with interactions and ethnographic interviews with heritage professionals, and discussion of model programs and examples discussed in this paper.

After synthesizing the results of these information-gathering endeavors, I observed four sets of common challenges to the advancement of modern, practical and integrated systems of

stewardship for built heritage and cultural landscapes in the American West. These are presented below as Research Problems, followed by suggestions for sustainable, long term, and multi-disciplinary approaches to the management and technical oversight of heritage resources in the western states.

Research Problems

Problem 1: Modern Heritage Management Challenges

In the US, individual states, their regions and local communities are largely tied to the top-down federal system of cultural resource management, archaeology, and historic preservation, which extends funding and regulation through the US Department of Interior to the various state and Tribal Historic Preservation Offices (THPO's), through the Certified Local Government (CLG) programs into the local communities. The states in turn manage and preserve cultural monuments and sites of significance to a region, state, or larger history, which may include the further support of federal, state, and local private and non-profit agencies. A combination of public, and private non-profit stewardship programs and partnerships additionally provides opportunities for collaboration on a wide variety of heritage related issues.

The interface between natural and historic built environments additionally appears as a modern hot zone issue, with the sustainability of natural and heritage resources increasingly weighed against those of land-use and development, and potential impacts to a range of cultural and natural resources. While it is reasonable to conclude an effective form of equalized governance should provide for essential oversight of resources associated with a common natural, or otherwise established heritage of places, the form and method of this oversight and ultimate stewardship should remain open to debate, and ideally tailored to suit the heritage resources of particular places (King 2002; Verberg 2004b).

Similar to the smaller countries of western Europe, US states are most connected to the culture, and built heritage of their respective regions and communities, and are arguably in the best position to offer knowledge and informed perspectives on local built heritage, and associated changes over time. However, the current broad-based federal model does not often provide the comprehensive framework of communication, services, and resources required to effectively incorporate the diversity or sensitivities of local heritage resources within preservation planning, or greater land use considerations, as the inevitable pathway of development continues into the 21st century. Acknowledging that changes to historic environments exacerbate stresses on the practical functions of existing models, new models are increasingly identified as necessary to best sustain the built heritage of places at the local level (Barthel-Bouchier 2013; Verberg 2004a). The model uses cultural and archaeological records in tandem with local knowledge to best define and sustain the significant characteristics of a place or landscape, supporting the development of practical, and sustainable long-term solutions for incorporating heritage resources within living landscapes.

As the wild, vast, and scenic landscapes of the American West continue to be transformed by a rapid rate of development and population growth, people with the skills, abilities, knowledge, and wherewithal to effectively weave built heritage resource preservation and adaptive reuse into modern planning and development will be of critical importance. In the rural western states in particular, it is becoming increasingly more important to consider the heritage of places at their respective local levels, and beyond systems of top-down models of built heritage management and stewardship. This approach is arguably best achieved through expertise driven, ground-up leadership, incorporating both applied professional knowledge and localized perspectives (van Assche et al 2015). Notably, it is at this immediate level of

stewardship where the most candid details on the unique qualities and characteristics of places may be examined, understood, and considered for their contribution to larger and broader patterns of built heritage management and incorporation in modern land use planning (Egberts 2015). As effective built heritage stewardship models are more often tied to sustainability of the environment as a whole (Barthel-Bouchier 2013; Corten 2017; van der Valk 2010), new and ever-expanding realms of local leadership, local voices, and place-based creative responses are needed to adapt historic built environments to specific modern needs and courses of development.

Problem 2: Consolidated Power: Dated Governance Models and Modern Alternatives

There can, and should be practical, modern alternatives to a traditional governmentoriented paradigm in heritage and landscape stewardship, and particularly in cases of managing
localized resources, where similarly localized and oriented grassroot and non-profit agencies
may provide the most sensible and effective forms of local long-term and applied stewardship. In
the examination of practical stewardship models for built heritage and landscape systems, it is
becoming increasingly more practical to consider the advantages and disadvantages of public, or
governance-oriented systems, along with private, or non-profit systems for site-specific heritage
management and future use scenarios (Cassar 2009; Choenni 2015).

Some argue that government-based heritage management systems are inherently problematic, in that expertise is often shifted toward a different control function of leadership, typically through bureaucratic and legal processes (Eagle 2017). By shifting to a paradigm of heritage knowledge and expertise-based leadership systems, initiatives may be much more quickly mobilized, and goals realized, through the simple abandonment of unrequired bureaucracy. In the two decades since King produced the seminal guide to Cultural Resource

Laws & Practice (see King 1998), a greater reflection upon the evolution of cultural resources as a whole, and the emergence of modern approaches to concepts of heritage, is both healthy and necessary within the greater discussion on built heritage and landscape stewardship approaches in the 21st century.

Problem 3: Land Use and the Western Landscape: Challenges to Built Heritage Sustainability

Stewardship of built heritage resources is becoming more defined, and critically dependent upon systems of ownership and prescribed land use patterns, to ensure protection and adaptation to changes in context over time. However, these systems of ownership are especially under increasing political pressure and threat of changes in land use from one pattern to another, and transfer from public to private interest in the western US where the majority of public lands are located. Particularly in the western states, the debate over the potential transfer of public lands to state ownership, and subsequent further pathway to private ownership, may also be linked to ongoing debates over environmental management issues, particularly water rights and responsibility for public safety (Bryan 2013, 2015; Janssen 2009). While models exist at the federal, state, and local level for the practical care and stewardship of natural, and built resources within their respective divisions of management, regulation may often encumber intra-agency communication, action, and discourage integrated approaches to built heritage, as well as environmental stewardship (Barthel-Bouchier 2013; King 1998; 2002).

In the western US of the 21st century, the keys to sustaining built heritage, and its continuing place in the evolution of the rapidly transforming and transitioning landscape will arguably depend upon a critical interface between land use and ownership, heritage scholars and professionals, and the legal system, to ensure new and integrated systems of heritage stewardship can help chart a vital, sustainable path forward (MacDonald 2019). Another critical aspect

depends upon the active, and sustained interest and involvement from local citizenry and those that call the western states home. As example, the western US is among the few remaining places in the nation, and the world to maintain traditional lifeways as ranching and agriculture. It is also among the few remaining places to retain traces of the pioneer era and the settling of the west, which may be found in historic ranch and homestead sites and historic communities. The western US also contains the largest portion of federal and tribal lands and resources, which include historic built environments, alongside ancient and recent archaeological remains (Campbell and Foor 2004; Dixon 2014).

Such resources may include a diverse assembly of natural and cultural features, which are also commonly connected to the states, tribes and innumerable local communities of the West. Some examples include traditional human use patterns that have created layers of historic and modern systems of land use linked to systems of the built environment, along with natural environments that may include connective infrastructure and water management systems. Historically, as well as presently, these scenarios typically rely on models of state and local government in the management and stewardship of any associated natural, historic, and cultural resources.

Within the intricacies of this particular modern challenge, it is also important to note that the West is polarized over federal lands management, and yet, "beneath it all lie truly important questions about current land management practices and the complementary roles federal agencies and local communities could play in managing shared lands" (Bryan 2015). Changes in ownership from public to private, along with changes in land use and the increasing demands upon the western landscape are also among the challenges to practically all facets of heritage stewardship. As functions within the greater landscape, built heritage resources are also often

closely connected to environmental issues and natural heritage resources, especially water. Historically, places of human heritage and features of the built environment are practically always connected to water as a critical resource of basic survival. This connection in turn further connects the heritage of places with modern needs, along with practical, and essential roles of stewardship. As such, effective water conservation and management strategies are rapidly becoming partner considerations within the dynamics of greater heritage stewardship, particularly in the western US (Bryan 2013; 2015).

Over the course of time, it may be further noted that changes in land use may be particularly influenced by industry and increases in population. Both of these factors may often threaten the culture and heritage of places or regions through disconnect, and may further challenge traditional notions of stewardship and sustainability of places and their accompanying local knowledge. These very real threats to the future of built heritage include great public ambivalence, and ultimate removal of built heritage resources from the greater landscape, entirely through permissible and legal processes. Further compounded by changes in ownership, and development of private lands as well as public lands, rapid and often irreparable changes in land use are equally transforming the landscape of the American west, and continuing to threaten the fragile and incredibly unique historical, archaeological, and cultural resources and delicate ecosystems of states like Montana (Campbell and Foor 2004; Dixon 2014; LaFever 2012), and heritage sites throughout the region.

Problem 4: Social Challenges: Historical Apathy and Historical Empathy

In the early 21st century, there has been a stagnant, if not decreasing trend of greater public interest in the historic built environment, often relegated to re-active rather than pro-active processes to local planning, or development undertakings. This trend overall reflects an alarming

problem: a growing public sentiment of historic apathy, and ambivalence toward recognizing history, historic places, and historic built environments as a whole, along with waning public interest in sustaining the various forms of local built heritage that characterizes the environments of western states.

As human sensibilities, and emotions are also constantly challenged by the increasing unpredictability of a modern world, there is a common need to examine the places of our human heritage, and reconsider the role of built heritage in sustaining a sense of place, along with shaping human quality of life and well-being (Geslar 2005; Sternberg 2009). Consequently, to best confront the complex physical, as well as social and socio-political challenges to sustaining built heritage, multi-disciplinary approaches from anthropology and the heritage arts and sciences are most needed to present and best interpret contemporary data on built heritage for the scientific community, while engaging and inspiring the and public at large, land use planners, and agencies representing local, regional, and national scales to further insure the seek paths guided by ingenuity, adaptive re-use and ethical and sustainable decision-making as relevant to the heritage of places.

The notion of historic apathy toward historic built environments may be best countered with action, advocacy and education that collectively can foster an opposing sense of historic *empathy*, promoting a genuine, informed, and enduring connection to the people, places, and things of human history, and cultivated through a range of human emotions, and personal experiences (Brooks and Endacott 2013). This phenomenological approach additionally provides opportunities to consider the human scale, and contributions to historic built environments over time, which allows for a more holistic evaluation and application of built heritage resources in contemporary and future use scenarios.

The primary purpose of historical empathy is to "enable an ability to transcend the boundaries of presentism by developing rich understandings of the past from multiple viewpoints, particularly those of the historical agents" (Colby 2008). Within a social connection approach emphasizing individual experience and resonance, a sense of identity, a personal connection, and sense of belonging may be also be arguably achieved, and contribute toward a greater culture of heritage awareness and as personal experience will variably dictate, awakened personal connectedness.

Potential Solutions: Addressing Challenges to Built Heritage Stewardship through International Approaches

Whether part of large, or small-scale considerations, heritage stewardship is invariably linked to achieving a sustained human connection to the people, places, and things of our past. The modern approach to built heritage stewardship, and effectively sustaining built heritage forms in the context of the landscape requires increasingly greater interdisciplinary collaboration and support to meet the ever-changing dynamics of globalization, and general apathy toward the heritage of places. While approaches and guiding philosophies toward built heritage stewardship may vary across the globe, the academic disciplines most often involved in the study, care, and sustainability of built heritage resources typically include archaeology, anthropology, historic preservation, with an increasing host of specialized applied arts and sciences and innovative technological disciplines such as museum specialists, art historians, hydrologists, environmental historians, and cultural geographers (Colby 2008; Roders et al 2011; Verburg 2004a; 2004b).

A sensible collaboration of professionals working in academic and applied settings can be seen via the collaborations and partnerships that integrate historical archaeology, historic preservation, ethnography, geography, and planning, among many allied disciplines. While these

respective disciplines may join and collectively focus on aspects of the historic built environment and landscape, they may also approach the study, care, and stewardship of built heritage and landscape resources of the western states differently, particularly when guided by policy (Tarlock 1999, 2002).

However, the scope and scale of modern development is equally approaching the development of the modern landscape in a multi-faceted manner, and it is becoming more and more important to align and integrate the heritage disciplines to approach the study, and comprehensive care of heritage resources accordingly. This may be best addressed through an expanded system of best practices, across the heritage spectrum, though here with special emphasis upon the need to better connect the needs and potential of built heritage via improved communication, and the potential for dialogue and communication with the international heritage community to best inform issues and problems to sustaining built heritage at the local level. While living and working in direct interface with the built heritage, and unique landscape of western Montana over the past 15 years, a need for improved dialogue, and subsequent understanding and development of state and local systems of best practices has consistently increased. Given the dynamic, and climatically challenging variable of the norther Rockies and Inter-Mountain West as a whole, the historic built environment requires frequent monitoring, and where necessary, practical conservation treatments that follow related protocol to best preserve and sustain invaluable heritage sites and resources. This state-oriented, and further localized system of heritage management and applied stewardship can only improve through improved communication, informed understanding, expanded documentation, monitoring, follow-through, and dedication to an evolved system of best practices. Some of these potential improvements to western state and local systems are discussed and presented below.

The Dutch Approach: Monument Watch

The Netherlands is among the global leaders in heritage and landscape stewardship, offering varieties of expertise, including traditions of effective integration of water resource management systems within greater landscape, and built heritage stewardship. Through centuries of comprehensive, and regionalized (i.e. localized) approaches the Dutch purposefully engage the archaeological-historical values of the landscape, and further present a holistic manner in which to view and respond to modern development challenges. The Netherlands also offers a core group of heritage scholars and professionals, who proficiently present the importance of integrated approaches to built heritage and landscape stewardship, by illustrating the value of aligning the fields of heritage education, policy and law, and applied arts and sciences, as part of a comprehensive, and contemporary model of sustainability and best practices (Bosma 2010; Choenni 2015; Kolen et al 2015; van der Valk 2010; Verburg 2004a; 2004b).

In Europe, and the Netherlands in particular, built heritage stewardship considers resources at the national, provincial, and local scale. Barthel-Bouchier candidly links heritage stewardship to sustainability, acknowledging the innovative approaches toward cultural heritage and stewardship in the Netherlands, and including advancements in recent years. Barthel-Bouchier also illustrates the nation's lengthy history and relationship with water, and its traditional role in shaping the built environment, specifically noting the contributions of key non-profit *stichting* foundations and organizations such as MonumentWatch in shaping the modern system of greater heritage management in the Netherlands (Barthel-Bouchier 2013:82). As discussed elsewhere (see Jones Day 2016; Koes 2014; Netherlands Chamber of Commerce 2010), the stichting, or non-profit foundation, presents a practical independent management system for applying a comprehensive spectrum of technical expertise that can aid built heritage

and landscape stewardship, particularly at the local level. A stichting foundation may also frequently work in combination with other stichting organizations, as we all as private, public, and government partners.

The MonumentenWacht (Monument Watch) organization as a whole, presents a highly practical working model for sustaining built heritage resources, in western Europe as well as the western US. Originally conceived in Belgium in the early 1970s, MonumentenWacht Nederland has been in operation since 1973, and continues to provide a system of membership-based services to a host of public and private stewards of the nation's historic built environment and accompanying heritage sites (Luijendijk 2002).

As characterized by Luijendijk, "MonumentenWacht offers the owners of monuments a very special and independent service" (2002:9). Further identifying, the services of the organization include routine inspections of monuments, or as in the case of American resources, historic places and sites. If damage, material failure, or defects are noted during the inspection, such as a roofing slate that has been blown off, or broken, a leaky gutter, minor or temporary repairs will be made. A report is also provided to the owner, which forms the basis for planned preventive maintenance. Every report includes advice about the maintenance needed and a list of priorities. Luijendijk additionally notes that a "MonumentenWachter" can but will not carry out the maintenance personally. It is a task of the owner to select and call the needed craftsman, whether it be a plumber, carpenter, slater, or other member of the traditional building arts and trades. There is further admission that in MonumentenWacht's early history, craftsmen and contractors thought that the organization would take most of their work away. This has proven to the contrary, as MonumentenWacht delivers them not only more work, but also continuous work

that they can plan in advance as largely preventative maintenance, and not repairs requiring immediate attention (Luijendijk 2002)

MonumentenWacht began in 1973 with one part time team; now, 25 years on, 45 teams are working throughout the Netherlands full time. The growth of the organization is largely attributed to long term collaboration with the owners of monuments, and the financial support by the national and provincial governments. There are presently eleven provincial Foundations MonumentenWacht, focusing on the localized needs of monuments within each of the Netherland's eleven provinces. The provincial offices vary in size from two teams up to seven teams. Therefore, the budget of the provincial foundation varies greatly. The average annual costs incurred by one team, including salaries, transportation, fuel, office materials, and overheads total about 112,000 euro. A provincial government subsidy covers 75 to 90% of the salaries and labor costs of the MonumentenWacht provincial branches. This scheme continues to prove most effective, as the owner of the monument is discounted half of the real cost of inspection and follow through, and receives the quality assurance of the provincial government. National, provincial and local governments, along with monument owners, and stewards have become more aware of the advantages of monument-maintenance as result of the efforts of MonumentenWacht Nederland over the past four decades. The organization also continues to actively demonstrate that regular, systematic, preventive maintenance will always means a large saving in restoration costs, and thus saving on governmental subsidies. Lastly indicated, is the observation that the owners of historic buildings have become more aware of the financial and cultural-historical advantages of regular maintenance. As result of this awareness, the owners have become more committed, and increasingly follow the maintenance advice provided, leading to an improvement in the condition of the historic buildings, which is the general aim (Luijendijk 2002).

I had the good fortune to visit with staff of MonumentenWacht Limburg in the summer of 2014, and gain insight into the range of services and assistance of the non-government organization, and applied expertise within a broad range of heritage services (Figure 4.3). The Monument Watch model as a whole emphasizes routine inspections of monuments, or heritage sites, along with encouraging preventative maintenance of historic building materials. This approach is offered in a set of membership-based services, where owners, or other stewards of heritage monuments and sites receive expert guidance, referrals, and recommendations on how to best maintain and preserve the historic function and capabilities of the heritage example. As I was able to discover first hand, these examples may range from technical assistance on the continuing maintenance of historic windmills (Figure 4.2), to guidance of historic interior conservation of historic estates like Kasteel Arcen (Figure 4.1), to professional assistance with heritage sites like the Anne Frank House.



Figure 4.1. Kasteel Arcen, Limburg Province, Netherlands. Photo by author 2014.



Figure 4.2. MonumentenWacht provides assistance to owners and stewards of built heritage. Roermond, Limburg Province, Netherlands. August 2014. Photo by author.



Figure 4.3. The sustained built heritage of Thoorn, and MonumentenWacht provincial office, Limburg Province, Netherlands. August 2014. Photo by author.

The Dutch Approach as Model

As a nation contending with 21st Century challenges as rising populations and increasing demands upon a small land area, the Netherlands modernized notion of preservation by development continues to resonate within the greater Dutch built heritage stewardship system. The central government initiative most notably continues to advance beyond initial state and local government projects, and expand in cooperation with non-government partners and heritage stakeholders (Corten 2017; Luijendijk 2002). Even so, challenges and potential solutions to heritage stewardship abound in the modern age, with connections between natural resource needs like water management becoming increasingly relevant to built heritage and spatial planning.

Discourse on the new National Spatial Strategy in the Netherlands collectively applies to the protection of natural values and regional development, while further identifying that coalitions are to be decentralized, since planning will involve provincial and local government as well as nature and landscape organizations. Through this approach, there is more emphasis on guiding change in a qualitative direction rather than focusing on a pure conservation of nature and landscape (Janssen 2009). However, while financial and heritage management issues face the American west, complex challenges to heritage stewardship may also be found in the Netherlands. As a result of the adopted decentralized governance approach, the current policy for Dutch National Landscapes has to achieve its management goals mainly by voluntary measures, further noting that central to these measures are techniques for encouraging good stewardship of the landscape.

In summarizing modern stewardship approaches in the Netherlands, voluntary methods are increasingly important, "not only because regulations are believed to be crude tools for addressing the management of the land, but also because they save the costs of compensation often due from regulatory measures" (Janssen 2009:38). Further, "in due course, provinces and municipalities within the National Landscapes have to encourage desirable action on the part of private landholders. This, however, is increasingly complex, since each of the major stakeholder groups – farmers, conservationists and tourists – holds different interpretations of landscape conservation" (Janssen 2009:39). Combining the multiple rationalities and interdependencies of the stakeholders involved is therefore a complex process of social and institutional interaction

Janssen is among a growing cadre of Dutch and international scholars observing that in theory, a promoted governance approach and administrative arrangements could support sustainable development; however, in practice drawbacks and challenges will occur (Cassar

2009; van Assche et al 2015). Within the European dimension, compounding reasons for this outcome include an absence of cohesive jurisdiction over agriculture, greater authority, and lack of clear criteria for socio-economic development (Janssen 2009), and most importantly, addressing policy conflicts between the national government's deregulatory approach and effective protection of landscape heritage.

Analysis and Concluding Comments: A Case for Improved Built Heritage Stewardship Systems in the US

By examining integrated systems of stewardship applied in the Netherlands, I have argued that modern methods, and models in best practices in the 21st Century should include applied expertise and leadership of heritage professionals, inspired by models such as MonumentenWacht, in the practical management and routine maintenance of heritage resources. Within a foundation, or stichting management system, technical, social, economic, and neutral political platforms may combine to form the most effective forms of stewardship, through practical expertise and effective leadership. Consequently, a sustained social connection built upon personal connect and empathy for the history and heritage of our lives will remain a critically important, and necessary component to combine with applied heritage arts and sciences, and tailored governance systems, to form a model for modern heritage stewardship.

In contrast to the Dutch system of built heritage stewardship, which has consistently evolved through the course of decisive action over the last half century, the American system has neither maintained a similar course of evolution, nor has this system demonstrated any focused intent to expand the capabilities, and critical balance of its by-design top down method of greater heritage management and stewardship.

The American heritage system recently celebrated the 50th anniversary of the passing of one of the most important and guiding pieces of heritage legislation of the 20th century, the National Historic Preservation Act of 1966. While this guiding legal framework continues to provide the basic structure of heritage, and cultural resource management within the federal asset management system, it is by nature of design, dated legislation, dated methodologies, and dated perspectives on how to best manage and advance the practical decision making regarding the future of built heritage resources within the American landscape (King 2002; LaFever 2102; Tarlock 1997, 1999, 2002; Tilley 2004; Wegener 2017).

Since heritage neither exists in a vacuum, nor is it practical to require institutionalized governance over all issues related to heritage and land uses, a balance between effective management and practical development must be achieved. To this end, effective modern heritage leadership must arguably include locally oriented, multi-disciplinary and integrated approaches, and recognize human connection to places over time. Following this investigation of working heritage site models, and approaches to built heritage stewardship in the Netherlands, examples revealed within the investigation indicate strong potential for the development of similarly integrated approaches to meeting challenges to heritage stewardship and sustainability in Montana and the American west. Particularly in the face of current impacts and future challenges to built heritage and the constantly changing landscape, this article seeks to highlight the increasing need for effective, and forward-thinking models to best integrate historic built environments in modern land use and planning.

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Chapter 5

Article Summaries: Connections, Discussion, and Conclusions

Research Summary

This dissertation represents the cumulative results of a five-year investigation of built heritage preservation policies, education, and applied stewardship practices in the Netherlands, along with exploring the efficacy of applying Dutch methods and working models to cultural heritage needs in Montana, and the western US. The preceding articles present sets of research investigations into the three research themes of heritage policy, education, and stewardship, along with samples of related literature, applied methods, and discussion derived from personal interviews. While each of the three identified research themes were discussed in length in each of the three articles included as part of this dissertation, here I revisit the three themes and outline some to synthesize research connections across those themes and to present additional closing thoughts, further observations, and added references to more case studies from my professional history working with local, tribal, federal, and state governments, as well as private and public organizations.

Summary 1: Heritage Policy and Law

As presented and discussed throughout the previous chapters the Dutch stichting, or foundation model offers an appealing alternative to the structure of top-down government agency-oriented approaches to heritage management and stewardship. The stichting model, as tended by an oversight board, may support a wide range of actions and services that may further partner with other like-minded stichting organizations in comprehensive, specialized, and streamlined approaches to heritage resource issues. Premiere examples of stichting organizations managing heritage sites, such as the Anne Frank House, may best coordinate support services

and technical expertise through other stichting organizations like MonumentenWacht. As the research has further indicated, combinations of public-private partnerships, and especially locally guided heritage and land stewardship and sustainability models present practical, forward-thinking alternatives to traditional top-down systems of leadership.

Sustaining built heritage and landscapes of cultural significance is also about tactical politics as much as it is about technical preservation (Tweed and Sutherland 2007; Walker 2003). The policies protecting built heritage, cultural landscapes, and combinations of built and natural features, are most often linked to larger environmental factors, and situations that may dictate levels of various political interest and involvement (Winkler et al 2007). This may be acutely observed by the effective ability of industry agents or lobbyists to influence those in positions of political power, and thus impact the outcome of decisions that go on to become laws, developed guidelines, and established policies. Tactical control, and ownership, therefore take on new meaning and utility when viewing the often-superfluous considerations of heritage. Additionally, natural resources, particularly when held in weight against the potential for personal short-term profit or gain that may come from realigning public land use governance and policy, and potential long-term impacts and future outcomes for the western states, and US a whole.

Wells and Stiefel (2014) provide a candid, yet succinct summation of guiding heritage philosophy, as well as the evolution of cultural resource and historic preservation laws and practices, and their links to educational systems at the post-secondary level, including advancements and benchmarks from the late 20th century to the present. Particularly noting pedagogical advancements made in the 1980s and onward, Wells and Stiefel (2014) observe, that despite concentrations of various preservation and heritage initiatives, one area that had broad implications for the public, yet relied on a specific disciplinary background, was law. The

regulatory environment figures prominently in the identification and protection of historic resources and has broad impact on property owners and, as such, preservation law has been central to academic heritage and cultural resource programs since their inception.

Along with the three themes explored in this dissertation, several additional themes have emerged as part of a modern discussion on regulatory considerations, land governance and stewardship of the "New West" (Robbins et al 2009). As described by Robbins, New West studies, and applied methodologies, represent an approach to environmental governance focused upon community and based upon locally oriented, collaborative, natural resource management, and grassroots ecosystem stewardship. While there is acknowledgement that grassroots ecosystem management can sometimes result in special-interest government, accelerated environmental degradation, and subversion of national environmental law, locally oriented governance and leadership, especially regarding land and resource use decisions, has proven to achieve democratic accountability given the right combination of traditional, or informal institutions and formal governance, resulting in outcomes that are more socially and ecologically sustainable than "top-down" approaches.

In a more global view, research into the drivers and dynamics shaping the outcomes of land transformation into a "New West" as indicated by Robbins (2009) has detected a broader ambivalence toward localism, in the context of trends toward decentralization in environmental governance, and challenges whether local management achieves environmental consensus among diverse groups, or instead seeks compliance, or cooperation with environmental subjects, or actors (Veteto and Lockyer 2008). As research indicates a more general trend of localized, and liberal governance to reveal its linkage to an often-narrow set of economic interests, further questions raised by this research undermine assertions of any consistent relationships between

good governance and local scale. Rather it underscores the coherence of a region, and environmental context, especially in evaluating the character of political geographies of community and resource governance. The argument of local versus nonlocal, new and old, West and East, may be misleading starting points from which to launch an analysis:

"more profitably, we might think about the processes that make governance local and the assumptions that fix the scale of debate and governance. The question may not simply be "what are the relative merits of local versus nonlocal control?" but also "at what scales do power and decision making converge, and what determines or constructs the 'appropriate' scale for decision making under divisive political conditions?" (Robbins et al 2009:372).

It is increasingly apparent that contemporary natural resource development, environmental, historical, and cultural preservation laws conflict. While current lease cancellation lawsuits and pending administrative actions may vary, the leaseholders all encounter similar uncertainty in anticipating decisions regarding lease actions on public lands subject to review under the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA). Drawing from research presented within the article discussing policy and law within this dissertation, when property is taken in order to comply with NEPA or the NHPA, legal proceedings arguing a takings claim may follow. Noting that each case presents particular and unique sets of circumstances, under the Supreme Court's regulatory takings jurisprudence, whether the claim is successful depends greatly on the circumstances of each case. With the regulatory environment of upstream development in great flux, Solenex is the case to watch (Wegener 2017).

Summary 2: Heritage Education

Given the dire need for historical empathy, there is a fundamental need to cultivate a modern sensitivity, and sensibility toward the non-renewable heritage of our collective past, with the ability to reach all ages and cultures through inherent common bonds. These bonds may be culturally, and universally tied to grounding principals, among them, advancements in education on the people, places, and things of heritage, along with new methods and means for educating, protecting, and sustaining a lasting human connection to historic built environments for generations to come (Matero 2007; Semken and Freeman 2008; Stewart et al 2003). Wells (2014) observes that while larger and better-known fields, such as education and other applied sciences have an abundance of literature on pedagogical techniques and curriculum design, similar resources for heritage conservation simply do not exist, further noting that there appears to be little or no evidence of an active discussion on outcomes-based learning in this field, much less pedagogical techniques and curriculum design. This problem may in part be due to the "fragmented, multidisciplinary nature of topics that address the historic environment from disciplines as broad as architecture, landscape architecture, history, construction management, materials science, environmental psychology, and anthropology that make a focused approach difficult", additionally summarizing the overall inconsistency by noting, "even agreeing on a common term to describe the activities that we, as professionals and academics, do in the historic environment has been difficult" (Wells and Stiefel 2014:3).

Historically, anthropologists have often tried to understand these ways of being through notions of holism and relativity. Another longtime guiding principle of anthropology is that we know best about something when we can see it in comparative perspective, and by bringing the cultural basis of specific beliefs or actions into sharp relief, we can locate ourselves relative to other groups and ultimately identify potential prospects for change.

Anthropological investigations of educational policy connect the local to the global, and the individual to the group, revealing particular ways in which inequalities and inequities are perpetuated within systems of schooling can be identified, and providing opportunities for change and the promotion of social justice as called for by multicultural educators. Educational outcomes in the United States are increasingly scrutinized and modernized by systems of state, tribal, and federal government, while continuing to be absorbed as a local concern. Studies that seek to investigate the ways in which community values impact decision-making on educational issues often highlight discordant rhetoric (Demerath and Mattheis 2012:3). An anthropological approach can deconstruct the competing influences of competition and comparison on one hand, and calls for equal opportunity and diversity in schools on the other collectively demonstrate the impact of such policies on the lives of students and teachers (Demerath and Mattheis 2012:6).

As additionally noted by Demerath and Mattheis (2012), a literature review on topics related to historic environment education indicates a chronic lack of focus on pedagogy and curriculum development, most specifically noting a lack of scholarship on assessing outcomes in the context of historic environment programs, and defining how well-prepared a student is in relation to the job market or continued academic studies, along with understanding expectations in regard to educating students to advance the discipline. and to encourage others to contribute original research and case studies to advance tertiary-level historic environment education. Summarizing that curricula, therefore, should be designed to achieve specific learning objectives while the effectiveness of pedagogical techniques should in turn be assessed against how well these objectives have been met.

As an example of bridging theory and practice, Well and Stiefel (2014) present and discuss Robert W. Ogle's article "Thinking and Doing: A Twenty-First Century Pedagogy for Preserving the Historic Architectural Artifact," which explores the historical American educational models that were designed to revive traditional building arts, and reviews the recent revival in heritage preservation, as well as how colleges and universities are addressing student and market demand. Wells and Stiefel also discusses the merits of a "preservation integrated learning model" (PILM) that considers "relational concepts of thinking-doing, head-hand, theory and practice within a framework that recognizes recent advances in preservation technology, and variety of contemporary higher education institutional structures in the United States. According to Ogle, PILM serves as a roadmap for administrators, faculty, researchers, practitioners, and stewards of heritage property to see a clearer pathway to reuniting "thinking and doing" in preservation education, especially at the undergraduate level (Wells and Stiefel 2014:22).

In general, the physical and socio-cultural challenges to sustaining built heritage resources within modern landscapes are not going un-noticed, and the heritage professions continue to change and respond to new economic and industry challenges around the world (Barthel-Bouchier 2013; Corten 2017; King 1998, 2002; Smith 2004). As such, the heritage professions are also becoming more defined by scholars and professionals with diverse and multifaceted backgrounds in archaeology, anthropology, historic preservation, geography, and a variety of humanities, arts, and earth sciences. As evidenced by observations and connections to social, political, and economic drivers shaping development and population growth, the challenges to sustaining built heritage in the landscape are additionally expanding. In turn, the response is requiring increased collaboration and interface among the heritage disciplines, as historic preservation, historical archaeology, and anthropology are applying combined, inter-

disciplinary approaches to real world challenges, along with better understanding, and actively sustaining built heritage in the modern landscape. Such approaches reflect a spirit of the PILM model, indicating foundational elements already in place and a clear-cut opportunity to build a foundation for improved best practices in heritage education. When combined with a spirit of public inclusion, and roles of "citizen stewardship" inspired by Dutch models, especially at the local scale, a true sense of personal association, inclusion, and empathy is further gleaned, and contributes strongly to local, and overall heritage sustainability.

Summary 3: Heritage Stewardship

Building upon the need to better combine methods of "thinking and doing" as identified by Ogle and discussed by Wells and Steifel (2014), much can be learned from international dialogue. However, attitudes may considerably differ internationally as to the imperative for historic built environment stewardship, sustainability, and the extent to which built heritage and associated management should be publicly regulated and funded. Lazarus (2007) is among several scholars who recognize that while all European countries have a statutory system for the identification and protection of buildings and structures considered to be of cultural significance, the degree of support from the different states shows significant variation. Though the success of working models such as MonumentenWacht, which started in the Netherlands in 1973 on a very small scale, has evolved into larger operation supplemented by central government subsidies for each province, similar working models are established elsewhere in Continental Europe. However, as Lazarus notes, within the UK, as with the US, while there are national heritage organizations, the organizational structure and associated financial support is very different. Further observing, "there is a need for collaborative research into appropriate methods and materials for sustaining built heritage, and for widespread dissemination of the findings, in order

to avoid a repetition of damage to historic fabric acknowledged to have been caused in the past" (Lazarus 2007:321).

Kutasi and Vidovszky (2010) additionally observe that an active schedule of routine maintenance of monuments and historic buildings is most important to preserve the original fabric of built heritage, and is a concept supported by many international cultural heritage organizations. The idea of continuous maintenance has also been evident in the literature for some time, though despite the number of heritage organizations monitoring and maintaining historic buildings throughout Europe, there is a significant lack of published data on the economic advantages of preventative maintenance practice. To this end, Kutasi and Vidovszky (2010) interviewed heritage professionals, to analyze the key factors as to why owners do not take the necessary precautions for their buildings. As a result of the investigation, three common, and key factors indicated that; a. heritage property owners should be well informed on the technical details and the advantages of a continuous maintenance system; b. special support from the authorities and available national grants for continuous maintenance is needed; and c. well qualified professionals are required.

Moreover, as the earliest organization of its kind, the Dutch MonumentenWacht provided an example for many similar organizational proposals in Europe and elsewhere, with cost effectiveness as an essential factor in convincing property owners and community leaders on the benefits of the preventative maintenance system. As a member-based organization, MonumentenWacht is able to extend a 50% reduction on the total sum of the restoration costs to historic property owners. Preservation and restoration work may only be performed by contractors accredited by the organization, with an inspection report and follow-up provided upon completion of recommended treatments. Bolstered by confidence in the government

supported approach to maintaining sites and monuments of national and local heritage and significance in the Netherlands, the MonumentenWacht organizational model continues to thrive, positively reinforcing attitudes of property owners, as well as provincial and local authorities have adopted the policy of continuous maintenance (Kutasi and Vidovszky 2010).

Within my own professional experiences, recent years in particular have included several built heritage projects that did not fit the typical description, or specific professional designation of archaeology, historic preservation, or materials science. These projects included properties such as historic buildings with intricate foundation systems, root cellars, privies, and historic gravesites, with above and below grade components. As built heritage resources encountered throughout the American West may often present, historic preservation, archaeology, and landscape challenges at the same heritage site or location, multiple professional heritage disciplines will be needed to perform comprehensive analyses and treatments relative to the applications of the allied professions. Furthermore, personal experiences with the oftenunpredictable facets of fieldwork, combined with variables in reporting to state and federal agencies, has revealed a general disconnect between the heritage professions, educational programs, and integrated approaches to heritage site preservation, management, and interpretation. As evidenced by successful organizational models such as MonumentenWacht, combinations of applied preventative maintenance, professional and scholarly assistance, along with effective governing policies and guidelines, present a comprehensive, practical, and adoptable model for contemporary built heritage leadership in states such as Montana, and throughout the American West. Toward this goal, this dissertation and associated research support a greater call for new methods in applied technologies and a blended approach to sustaining built heritage within its greater associated environment.

One Montana-oriented example of applied technologies, combined with place-based educational outreach materialized via the Virginia City Institute, which provided hands-on training and exposure to a variety of building preservation technologies, and applied techniques. In development and operation between 2005 and 2009, this education and training element of the Montana Heritage Commission Historic Preservation Team, based in Virginia City, would typically host workshops dedicated to historic log building stabilization and preservation, historic masonry, historic finish materials, among other topics, and would receive attendees from all over the world who would travel to Virginia City for one and two-week workshops. Along with completing much needed stabilization and preservation repair work to multiple historic buildings and structures throughout the landmark community, the Virginia City Institute programs brought together students and heritage professionals from across the globe to learn and work together, spark genuine dialogue across continents, and also generated revenue through the nominal registration fees.

The Virginia City Institute represents yet another model from my own experiences that integrated preservation expertise, local knowledge, and a place-based approach to the preservation of the historic built environment of the landmark community. However, as a basic extension of the Montana Heritage Commission Preservation Team, the Institute program did not possess any range of autonomy, or ability to function as an independent partner, or control finances, investment, or revenue earned as part of program tuition. Rather, funds were absorbed into the Montana Heritage Commission, or parent agency Montana Department of Commerce. Although transitions in funding, and leadership have resulted in significant changes to the overall approach to preservation archaeology and greater stewardship of the state-owned properties in Virginia City, project documentation and reporting, particularly between 2004 to 2009 (Montana

Heritage Commission 2004-2009), provides examples of heritage projects, approaches, and greater value of cooperative combined approaches to better understanding and caring for cultural landscapes and built environments. Through the combined approach to contextualizing the cultural heritage of the Virginia City National Historic Landmark as parts of a whole, a more consistent approach has the potential to advance cooperation and multi-disciplinary collaboration among the disciplines of archaeology, and historic preservation, among many others.

While state government-oriented programs like the Virginia City Institute, may join other field schools and place based programs and initiatives provided through the Montana university system, and other programs visiting the state or region, these programs are often sporadic or inconsistent, and lack a site-specific field school location, or campus for the continuing development of skills and working knowledge in a real-world atmosphere. Public-private partnerships, and organizations subsidized with regional or national funding, such as MonumentenWacht, offer effective and sustainable ways of preserving historic built environments, by way of routine maintenance, and integrated, holistic approaches.

Furthermore, as noted by Scott (2012), information on the historic and cultural resources of Montana and the western US is often captured in the grey literature, typically associated with annual reporting, or otherwise project-oriented report structure associated with Cultural Resource Management systems of federal, and state governments. However, this information is not always readily available for public access and knowledge; thus, the results of such research need to be disseminated to audiences of various backgrounds to encourage historical empathy by education and involvement.

Heritage Alchemy and Sustaining Built Heritage

While this dissertation is not directed toward a study of color, what is presented here as "heritage alchemy", draws from the use of color characterization as a vehicle to visualize, categorize and analyze themes in built heritage policy, education, and stewardship. Similarly, as with color, these subjects may also be blended and combined with other subjects to produce new, and additional colors, and in the case of applied heritage alchemy, new vehicles, platforms, and formats for the advancement of all variety of heritage and cultural subjects (Merleau-Ponty 1945). The ability to see in color, and experience the colors of life, is one of the more unique characteristics of the human condition. However, color, much like culture and heritage is not experienced in the same manner and proportions by all people (Hård and Sivik 2001; Heesen 2015; Izmailov and Sokolov 1991; Mollon 2003; Rosero-Montalvo1 et al 2017). Social, physical, and contextual variables continuously influence and alter the perception of colors of life, culture, and heritage. Consequently, much like physical interpretations of color, and individual abilities to read color, perceptions of heritage, and its value, may vary from person to person and culture to culture. In short, what is important to one may not be important to another.

As noted by Lakowski, "if we are to understand 'colour vision' we must be constantly aware that it depends on the nature of the stimulus, the state of adaptation of the sensory organ, and also on the type of observer (Lakowski 1969:25). As result, a multitude of concepts physical, psychophysical, neurophysiological, and psychological must necessarily be understood and utilized. Perhaps the best way to regard color vision is as an emergent and subjective experience, dependent at intermediate stages on variables which can be studied and usually verified by objective means. Comparatively, sensitivities to color, as with sensitivities to built heritage and the environment, is subjective to the viewer-participant. This spectrum may be further

conceptualized by thinking of people's perception of heritage in terms of color vision capabilities, with achromatism representing little to no sensitivity, compared to those whose color perception is excellent. However, the most fundamental variable in vision is the level of illumination that determines the level of visual adaptation, and thus the appropriate visual process (Izmailov and Sokolov 1991). The inclusion of a three-color primary system of categorization may also be conceptualized within trichromatic theory of color use and function. As Lakowski further observes, "in essence, the trichromatic theory is a concept of three simple sets of peripheral sensory mechanisms, whose quantitative characteristics provide a basis for the different type of color vision discrimination. These are based on observations of certain phenomena that arise from color mixing simple response mechanisms involving red, green, and blue and are described as the fundamentals which characterize the sensory mechanism as such" (Lakowski 1969:25).

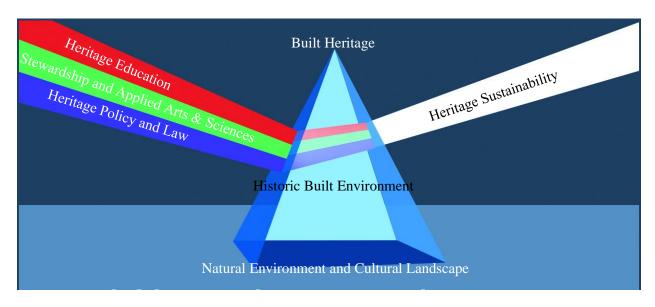


Figure 5.1. Model for applied methods of Heritage Alchemy prepared by author.

Additive approaches allow for the visual representation of subject or object as color, and thus matter and energy. Additive theory and methods are also defined by the process of combining colors within the spectrum to produce other colors, and when combined in equal

proportion, white light. This process of measurement and combination may be further visualized as a form of alchemy, where colors, or other variables may be blended and combined to produce a new product or, outcome (Figure 5.1). Consequently, the selection of three primary elements, as trinity, or *tria prima*, represents an age-old approach of blending and combining subjects, objects, or concepts to achieve new and desired outcomes.

Consistent with alchemic methods grounded by three primary elements, or tria prima, and additive processes where three primary elements may combine to form new compounds and spectrums (e.g., Figure 5.2), the individual primary built heritage research themes identified in this dissertation may illuminate complex themes, and also combine to form more complex systems, and effective, highly visual, measurable, and integrated approaches to resolving complex issues of land, water, and heritage resource management and sustainability. While advances in culture and heritage sustainability on the whole have traditionally remained largely reactive in the western United States, such as that shown in the example of Figure 2.2 presented in the chapter 2 herein. Yet, the visible and measurable changes that have, and continue to take place within historic preservation, archaeology, and landscape research, such as the aforementioned Virginia City Institute programs, may arguably be viewed as indicators of potential future outcomes, success stories, and drivers contributing to the reshaping the traditional roles of the heritage professions. Particularly, programs such as the Virginia City Institute will continue to provide both supplement and alternative to government oriented, topdown response to built heritage stewardship, while also offering place-based opportunities, and educational forum for multidisciplinary and intergenerational field work.

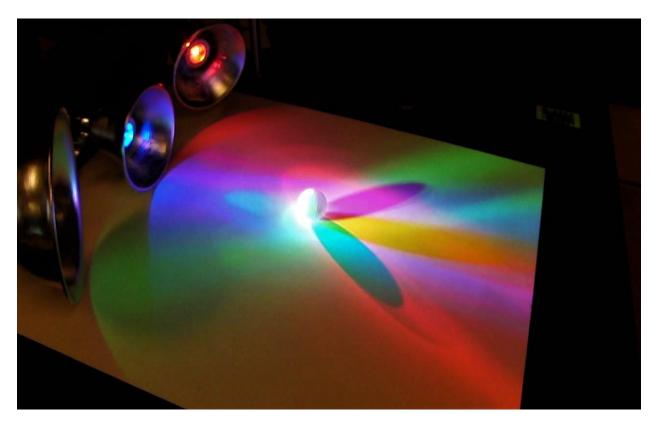


Figure 5.2. Light and color experiment to illuminate the principals of additive methods upon a three-dimensional surface. Here an illuminated object is situated on a horizontal plane, representative of features upon a landscape, as well as the landscape itself, establishing context. Image source: YouTube.

The Power of Visual Imagery in Heritage Research

This dissertation investigated the phenomenological Dutch model of heritage leadership, integrating personal experience and multiple lines of evidence. This evidence includes field data, ethnographic data, scholarly literature, visual documentation representing the passage of time and evidence of changes to built heritage and the greater landscape. Therefore, considering the discussion on color and alchemy, it is appropriate to include a brief section on perception, and the human condition's relationship to the processing of visual imagery.

To record, and compare changes to built environments and the landscape over time, visual images, and particularly photography and aerial imagery of the mid to late 20th century, capture stark and cautionary examples of the ability of mining, and other earth resource

industries to lay waster to entire regions. The simple, yet wonderfully effective means of capturing and recording heritage subjects and subsequent changes over time, is an old methodology with ability to provide modern insights through modern technologies, and advancements in satellite and enhanced visual imagery. Since the earliest images of the American west appeared through the work of Catlin, and Bodmer (Figure 5.3), and eventually photography (Figure 5.4), and into the digital age, sources of visual data and documentation methodologies continue to provide a measurable record of the human condition, the environment, and changes over time. Furthermore, an image based, or otherwise visual system of recordation particularly allows for the candid observation of the human condition and related context to be captured as moments of time and place, while also providing a datum point in which to measure changes over time, and contributions to future generations.

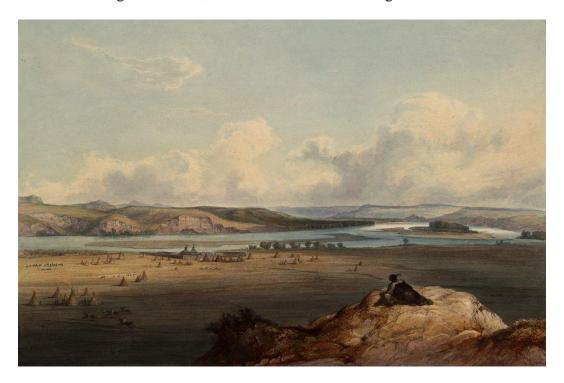


Figure 5.3. Early visual depictions of the historic built environment and western landscape provide invaluable record for anthropologists, and candid insight into places, and human conditions, as depicted in *Fort Pierre on the Missouri River*, by Karl Bodmer, 1833 (Image courtesy of Pinterest).



Figure 5.4. Early photos captured the landscape and human conditions of the American Civil War, as in, *Confederate Prisoners Awaiting Transportation*, ca. 1863. Mathew Brady. US National Archives.

With the advent of aerial photography, and eventually satellite imagery, visual depictions of the global landscape have remained within constant reach, and continue to provide insight into global trends and patterns in landscape development. Photography, and particularly aerial photographs and modern satellite images have allowed for the most precise charting and visual interpretation of changes to the landscape and built environments over time. Combined with a range of digital enhancement technologies, recording, interpreting, and analyzing the global landscape continues to challenge the boundaries of modern sciences, while capturing evidence for the heritage professions (Demerath and Mattheis 2012; Rosero-Montalvo1 et al 2107).



Figure 5.5. East Helena Smelter, East Helena, Montana. By David T. Hanson. 1986. Image source: fastcompany.com

One set of evidence appears in the photographic work of Montana native David T.

Hanson (Figure 5.5). With a career spanning several decades, Hanson's work captures the range and effects of mining and resource extraction upon the landscape in both color and black and white imagery that captures the transformation of the western American landscape from wilderness to wasteland (Hanson 1997, 2015). Images range from aerial surveys conducted in the 1980s up to the present, and reveal an alarming history of callous human behavior and pattern of outright abuse of western land and water resources. These images also present a measurable timeline of landscape appearances, and their changes over time. These changes include outright

destruction of entire landscapes, and loss of heritage resources of both tangible and intangible quality. In the photo essay publication *WasteLand: Meditations on a Ravaged Landscape* (1997), Hanson photographed and recorded the affects upon the American landscape, recording 67 toxic sites across the country in land and aerial images over the course of one year, and providing sets of images in which to guide future evaluations of the American landscape from that time forward.

While the artistic and photographic work of Bodmer, Catlin, Hanson, and others, may represent art, and imagery reflective of particular moments in time and space, this art is also a useful tool to Anthropologists and others who measure the extensions and capabilities of the human condition, in its many various forms. Imagery of all variety, including video and modern animation forms, present enormous potential for informing investigation of land use and change, along with providing a legal point of reference in which to gauge cause and effect upon the landscape, and changes within the historic built environment.

By presenting the visual image as data source and system of measure, it was also appropriate to consider the human variables in creating visual imagery, along with various abilities to process and comprehend visual data. Examining built heritage and its human dimensions through the lens of additive methods has allowed for the expression of the greater metaphor of heritage as an amalgam of various applied arts and sciences. These applied arts are further often grounded in the physical realities of time and place, along with perspective and perception based upon location and individual inflection. We all perceive colors, and life differently. As such, we all identify with the perception of culture, or cultures, and heritage of the life that means most to us (Merleau-Ponty 1945, 1948). Since heritage, both tangible and intangible, is subjective to cultural value and importance for its preservation and ultimate

survival, it becomes fragile and dependent upon a living connection between past, present, and future for its preservation and ultimate survival.

Discussion: Scholarly Contributions, and Societal Implications

My dissertation research has concluded that the heritage professions are evolving as an amalgam of integrated disciplines of supportive arts and sciences, which is due in part a modern response to sets of increasingly complex modern challenges (Abel 1998; Barthel-Bouchier 2013; Otterstrom 2003; Tarlock 1999, 2002). These challenges may include population increases, demographic shifts, conflicting political viewpoints, and issues of short-term exploitation of resources over long-term stewardship, which are joined by modern transitions in land use, and ownership, all presenting further sets of considerations to sustaining built heritage resources amid increasing change (Stewart et al 2003; Todd 1974). As an active response to the challenges facing the sustainability of built heritage and historic built environments in Montana and the western US, my dissertation research has sought to advance new and combined approaches to advancing leadership in built heritage and environmental issues, by way of blended and combined methodologies, especially in anthropological research (Abel 1998; Knibbe and Versteeg 2008; Pink 2006; 2011).

By consistently applying phenomenological methodologies throughout this dissertation, this research offers sample indication to the validity and importance of empirical, place-based research, and encourages further lines of phenomenological inquiry in anthropology, built heritage, and environmental research (Knibbe and Versteeg 2008; Merleau-Ponty 1945; Smith and Osborn 2015). As a research tool, a phenomenological approach was able to best explore the three key themes as individual, yet contributing subjects within a larger approach of examining built heritage and environmental issues (Dahlberg 2006). A phenomenological approach also

provided occasion to examine the combined research as a whole, and holistic set of interconnected experiences, that may illuminate, and enrich the other (Lester 1999).

The usefulness, and importance of a phenomenological approach to supporting anthropological research is perhaps best characterized by Merleau-Ponty, who states, "phenomenology, as a disclosure of the world, rests on itself, or rather provides its own foundation. All cognitions are sustained by a 'ground' of postulates and finally by our communication with the world as primary embodiment of rationality" (Merleau-Ponty 1945:24). However, as a dialogue or infinite meditation, the unfinished nature of phenomenology and the inchoative atmosphere which has surrounded it are not to be taken as a sign of failure; rather, they were inevitable because phenomenology's task was to reveal the mystery of the world and of reason. If phenomenology was a movement before becoming a doctrine or a philosophical system, this was attributable neither to accident, nor to fraudulent intent. It is as painstaking as the works of Balzac, Proust, Valéry or Cézanne—by reason of the same kind of attentiveness and wonder, the same demand for awareness, the same will to seize the meaning of the world or of history as that meaning comes into being. In this way phenomenology merges into the general effort of modern thought (Merleau-Ponty 1945; 1948). This dissertation has contributed to this merge and evolution through phenomenological research as the basis for practical theoretical framework. This methodology demonstrated the ways in which anthropological investigations can provide solid foundations for understanding the immeasurable nuances of place, as well as how these studies can inform, support, or challenge policy and action.

This dissertation also intends to provide information useful to environmental anthropology (see Knauft 2006; Lorah and Southwick 2003; Throop 2005). As characterized by Kottak (1999), the new environmental anthropology aims to both understand and construct

culturally informed and appropriate solutions to such problems and issues as environmental degradation, environmental racism, and the role of the media, NGOs, and various kinds of hazards in triggering ecological awareness, action, and sustainability. Environmental anthropologists also provide focus on new units of analysis, including national and international, as well as local and regional models, connections, and variables such as time and space.

Applying the multi-disciplinary approach researched and recommended herein, anthropological perspectives on natural resources and the environment, connect local and global scales of human understanding of environmental justice and ecosystems management, which natural resource specialists have been studying independently for decades (Kottak 1999:24).

Kottak further observes that anthropologists have for some time applied methods and perspectives developed in other nations and cultures to shed light on environmental issues in the United States and Canada. In noting that North America itself becomes an increasingly common field of study in anthropology, new methods, ranging from surveys to satellite imagery, are both used and needed to place ecological issues in a context far larger, deeper, and broader in space and time than the bounded-system approach of the 1960s. Therefore, research continues to illustrate that methodologies within a new ecological anthropology must be appropriate to the complex linkages and levels that structure the modern world.

(Kottak 1999:29)

Concluding Thoughts: A Dutch Model, Heritage, and Landscape Sustainability in Montana and the American West

One of the central understandings of this dissertation is the notion that there is not an allencompassing, singular modern approach to sustaining heritage in any form. However, as research of heritage management systems has revealed, there are models presenting practical approaches, and applications of combined and blended solutions, and especially those incorporating built heritage and landscape preservation by, and through development. Research conducted in support of this dissertation has indicated that some of the best models for applied, modernized concepts of preservation by development are linked to advancements made in the Netherlands, particularly since World War II. Applications of these models emerge as both practical, flexible, and sustainable solutions to modern heritage stewardship challenges in Montana, the American West, and elsewhere.

In the Netherlands, the landscape has been worked and reworked over centuries, creating a unique national model of a cultural heritage continuum by way of the built environment. Supplied by personal experiences of field research, and inflection found within the literature (Willems 2010), and personal interviews (Corten 2017; Kolen 2017), I have found the Netherlands to present some of the more comprehensive and integrated working models for combining heritage education, policy, and approaches to stewardship. This belief is further supported by an observed overall cultural attitude toward heritage in the Netherlands, or "houding", that effectively blends a greater cultural consciousness and connectivity to places and environments that continue to define the Dutch identity. I suggest within this research that this difference in attitude, or Dutch "verschil in houding", is a critical variable between Dutch and American approaches to heritage as a whole, and most reflective of cultural variables within Dutch culture, and an overarching lack thereof in modern American culture. This research into Dutch cultural approaches, and overall attitude toward built heritage within the landscape, along with measurable actions taken to address the topics of heritage policy, education, and stewardship, is intended to guide further research, discussion, and debate on built heritage sustainability, and systems of best practices.

As previously noted, the western US has not yet experienced the rate of rapid expansion of growth and development common to the eastern states, which is largely responsible for the loss of the historic resources from the previous centuries of expansion on the American continent. However, the heritage of the American West in all its forms continues to change over time, facing greater threats from growth and development, along with a growing ambivalence on the role, and use of built heritage, and the resources of our past in modern society. The landscape is changing through industry and development, and the heritage professions, and the education systems that provide the future generations of heritage professionals and leaders must change as result.

While it is widely acknowledged that heritage sustainability is best realized at the local level, federal systems of oversight may provide both compliance information to applicable policies and laws, as well as practical guidance to cultural heritage and landscape issues at all levels. The US as well as the Netherlands are no exception, however each system of government has its own fundamental differences in organization, funding, and leadership, in addition to varying histories and modern priorities. Succinct and recent summations of both US and Dutch federal policies and the resonance to state and local levels may be found in two key publications. In the US, a summary of legislative history and modern perspectives is found in *Federal Historic Preservation Laws, The Official Compilation of U.S. Cultural Heritage Statutes 5th Edition* (2018). Comparatively, the Dutch Ministry of Education, Culture, and Science has also recently published a public guide to heritage history and policy administered at the national level. *Culture at a First Glance* (2016) provides a candid insight in to the directives and socio-economic benefits of culture, and heritage investment for all of Dutch society. While both national models offer valuable direction for heritage sustainability at the state, or provincial level, regional and

local heritage models providing complimentary grassroots leadership are arguably the most critical, customizable, and effective, and necessary within heritage scholarship and practice. Consequently, a new model, approach, and attitude is thus presented in this dissertation, as a method to sustain the built heritage of Montana, and its unparalleled environment.

Over the past 15 years my positions within Montana state and local government, and principal investigator appointment at the University of Montana have provided opportunity to materially participate in the shaping, and application of systems related to heritage policy, education, and stewardship practices throughout the state, and nationwide. Furthermore, these opportunities have also presented occasion to contribute to technical literature, and investigative reporting associated with cultural resource management, and typical heritage project best practices. Among these technical reporting records are the results of fieldwork and applied methods that provide additional reference on background and drivers influencing this dissertation research. Report reference recommendations include the Montana Heritage Commission Historic Preservation Team Annual Report, particularly 2004 to 2009, Town of Virginia City Historic Preservation Office annual reports from 2012 to 2016, as well as select publications noted in the references section. As previously noted by Scott (2014) and others, this inclusion highlights the importance of "grey literature" and often overlooked research contributions of federal, state, and local compliance reporting, along with student theses, dissertations, and other scholarly essays.

The synthesis of three selected subjects, and accompanying articles, are presented in this dissertation as a combined model for sustaining built heritage, further recognizing the changing landscapes of Montana, and the American West. The concept of heritage alchemy is hereby offered as a new approach to sustaining built heritage by considering established methods in policy and law, place-based education and research, and applied arts and sciences, to establish

new methodologies for sustaining built heritage. This may be achieved through blending and combining the three primary themes of heritage policy, education, and stewardship practices to produce measurable results, and new models in built heritage leadership.

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2015 Theoretical Frameworks, Methods, and Procedures for Conducting Phenomenological Studies in Educational Settings. *Turkish Online Journal of Qualitative Inquiry*, Vol. 6(1).

Appendix A: Interview Notes and Summaries

1. Corten, Jean-Paul

Personal communication via interview with author. Rijksdienst voor het Cultureel Erfgoed. Amersfoort, Netherlands. 14 February 2017.

Summary

On the morning of 14 February, 2017, I conducted a free-form, one on one interview with Jean-Paul Corten, Director of International Programs for the Rijksdienst voor het Cultureel Erfgoed, or Cultural Heritage Agency of the Netherlands. The purpose of this interview was to discuss, and learn about the structure and functions of Dutch government approach to cultural heritage, with a particular emphasis on built heritage, current status and vision for the future. The discussion spanned national policy history since World War II, the introduction and subsequent influence of the Belvedere Memorandum at the cusp of the 2st Century, and contemporary emphasis on localized heritage initiatives, and built heritage considerations within modern spatial planning. A range of instruments was also discussed, including national policies and strategies for infrastructure, as well as a recently developed national Heritage Act in 2016, developed with the intent and purpose to consolidate national positions on heritage into a singular legislative model. Interview discussion also included a scholarly comparison between the Netherlands, Montana, the US as a whole on issues in built heritage in the context of changing cultural landscapes, and the need for advanced models in heritage education and local leadership.

2. Kolen, Jan

Personal communication via interview with author. Center for Global Heritage and Development offices, University of Leiden, Netherlands. 16 February, 2017.

Summary

On the afternoon of 16 February, 2017, I conducted a free-form, short interview with Dr. Jan Kolen at the Center for Global Heritage and Development offices at the University of Leiden in the Netherlands. A central focus of this interview was to discuss modern approaches to the concept of landscape biography with Dr. Kolen, as principal proponent and expert on the subject, in addition to sharing the needs for more considerations of this kind in heritage in Montana, the Western US, and elsewhere around the world. The interview centered on applied aspects of landscape biography, benefits of multidisciplinary approaches to landscape investigation and interpretation, as well as the need for greater collaboration among organizations and research institutions. A strong connection between government agencies, universities, and heritage professionals in the Netherlands was also noted, along with a maintained focus on integrated policies and educational initiatives in national and local heritage planning and sustainability

Appendix B: UM IRB Subject Information and Informed Consent Forms (PDF)



INSTITUTIONAL REVIEW BOARD

for the Protection of Human Subjects in Research FWA 00000078

> Research & Creative Scholarship University Hall 116 University of Montana Missoula, MT 59812 Phone 406-243-6672 | Fax 406-243-6330

Date:

July 17, 2014

To:

Jeffrey MacDonald, Anthropology

Kelly Dixon, Anthropology

From:

Paula A. Baker, IRB Chair and Manager

RE:

IRB #145-14: "Cultural Heritage Research - Netherlands 2014"

Your IRB proposal cited above has been **APPROVED** under **expedited review** by the Institutional Review Board in accordance with the Code of Federal Regulations, Part 46, section 110. Expedited approval refers to research activities that (1) present no more than minimal risk to human subjects, and (2) fit within the following category for expedited review as authorized by 45 CFR 46.110 and 21 CFR 56.110:

7. Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

Each consent form used for this project must bear the dated and signed IRB stamp. Use the PDF sent with this approval notice as a "master" from which to make copies for the subjects.

<u>Amendments:</u> Any changes to the originally-approved protocol must be reviewed and approved by the IRB **before** being made (unless extremely minor). Requests must be submitted using <u>Form RA-110</u>.

<u>Unanticipated or Adverse Events:</u> You are required to timely notify the IRB if any unanticipated or adverse events occur during the study, if you experience an increased risk to the participants, or if you have participants withdraw from the study or register complaints about the study. Use <u>Form RA-111</u>.

<u>Continuation:</u> Federal and University of Montana IRB policy requires you to file an annual Continuation Report (<u>Form RA-109</u>) for expedited studies. You must file the report within 30 days <u>prior</u> to the expiration date, which is **July 16, 2015**. *Tip: Put a reminder on your calendar now.* A study that has expired is no longer in compliance with federal or University IRB policy, and all project work must cease immediately.

<u>Study Completion or Closure:</u> Finally, you are also required to file a Closure Report (<u>Form RA-109</u>) when the study is completed or if the study is abandoned. See the directions on the form.

Please contact the IRB office with any questions at (406) 243-6672 or email irb@umontana.edu.

Form RA-108 (Rev. 11/12)



THE UNIVERSITY OF MONTANA-MISSOULA

Institutional Review Board (IRB) for the Protection of Human Subjects in Research CHECKLIST / APPLICATION

IRB Protocol No.: 145-14

At The University of Montana (UM), the Institutional Review Board (IRB) is the institutional review body responsible for oversight of all research activities involving human subjects outlined in the U.S. Department of Health and Human Services' Office of Human Research Protection and the National Institutes of Health, Inclusion of Children Policy Implementation.

and IRB Stud	ructions: A separate appl must be continued annuall <u>@umontana.edu</u> . or submi fent applications must be a t be completed. If an item	y (unless Exempt). It a hardcopy to the Cocompanied by emains	Faculty and Office of the il authoriza	I students me Vice Presintion by the	nay emai ident for supervis	I the complete Research & I	ed form as a Development	Word document to , University Hall 116.	
1.	Administrative Inform	nation							
	Project Title: Cultural He		Vetherland	s 2014	***************************************				7
	Principal Investigator: Jeffre	y MacDonald			T	UM Position: P	hD Student		1
	Department: Anthropolog					Office location:			
	Work Phone: 406.244.591	11				Cell Phone: 40	6.241.1096		1
2.	Human Subjects Prot study course on protection of to supply the "Certificate(s)	f human research subje	ects within ti request. If yo	he last three	years (ht	tp://www.umt.e	du/research/co contact the II Research	omplianceinfo/IRB/) and	a self- i be able
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	Name: Jeffrey MacDona Email: thenightskye@ya							8/6/2013	/
	Name: Kelly Dix	on @umonta	ra.edu					3/24/13	
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3.	Project Funding (Iff Is grant application curre agency? Yes (If yes, Agency	ently under review at	a grant fur	nding ⊠No	Has gra	int proposal re	oonsor on ICF	oval and funding? "if applicable) No I on grant	
- \frac{1}{\infty}	Condit	s Research rom Review, Exemplited Review, Categotion e *Note to PI) Approval (see memorions Met (see *Note posal (see memo) (see memo)	ory # <u>7</u>) - IRB Cha	_ (see memo	to PI) Date:	attached IRB-a when preparing date, a continu IRB if any sign When the study submitted. Fail	approved form g copies. If contains report maificant change y is completed three to follow th UM policy	oved for one year only. s (signed/dated) as "mas ontinuing beyond the expust be submitted. Notifies or unanticipated even I, a closure report must be these directions constituted and will have consequent. Expires: 4/6	sters" piration y the ts occur. oe ttes non-
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SUBJECT INFORMATION AND INFORMED CONSENT

Study Title: Cultural Heritage Research – Netherlands 2014

Investigator(s):

Jeffrey MacDonald Faculty Advisor: Dr. Kelly Dixon
University of Montana UM Dept. of Anthropology
E: thenightskye@yahoo.com E: kelly.dixon@mso.umt.edu

P: 406.244.5911

Purpose:

You are being asked to take part in a research study examining issues and methods for advancing Cultural Heritage stewardship and international dialogue and collaboration. You have been invited to participate because of professional association and range of expertise related to culture, heritage and potential for international development. The purpose of this research study is to learn how Cultural Heritage themes and issues are approached in the Netherlands along with methods and means of international engagement.

Procedures:

If you agree to take part in this research survey, you may be asked to provide professional opinions and/or information relative to cultural heritage practices and resources of the Netherlands.

All gathered information will be assembled in English, and retained in written form for application to further scholarly research of international cultural heritage themes and issues.

Risks/Discomforts:

There is no anticipated discomfort for those contributing to this study, so risk to participants is minimal.

Benefits:

Although you may not directly benefit from taking part in this study, your answers may help advance understanding in this area of knowledge.

Confidentiality:

Term	·y·	
•	Your records will be kep	pt confidential and will not be released without your
	consent except as requir	red by law.
•	Your initials	indicate your permission to be identified by name in any
	publications or presenta	tions.
•	If you do not want to be	acknowledged by name in any publications or
	presentations, please ini	tial here

The University of Montana IRB
Expiration Date 7-16-2015
Date Approved <u>7-17-2014</u>
Chair/Admin Aula Alishay

Voluntary Participation/Withdrawal:

Your decision to take part in this research study is entirely voluntary.

You may choose not to answer any question with which you're not comfortable.

You may refuse to take part in or you may withdraw from the study at any time without penalty.

Questions:

If you have any questions about the research now or after the study, you may contact the investigators listed at the top of this form.

If you have any questions regarding your rights as a research subject, you may contact the University of Montana Institutional Review Board (IRB) at (406) 243-6672 or irb@umontana.edu.

Statement of Your Consent:

I have read the above description of this research study, and all my questions have been answered to my satisfaction. Furthermore, I have been assured that any future questions I may have will also be answered by a member of the research team. I voluntarily agree to take part in this study. I understand I will receive a copy of this consent form.

Printed Name of Subject	
Subject's Signature	Date
Statement of Consent to be Photographed [and/or A	Audiotaped, Videotaped, etc., if applicable]:
I understand that photographs and audio/video I consent to having my photograph taken, and/I consent to use of my photograph, audio/video study. I understand that if photographs and/or audio/of any kind, names or other personal identifying them without permission. Please initial to indicidentifying information in presentations related	or being audio/video recorded or recording in presentations related to this video recordings are used for presentations againformation will not be associated with cate permission to include any names and
Subject's Signature	Date

The University of Montana IRB
Expiration Date 7-16-2015
Date Approved 7-17-2014
Chair/Admin Jalah Bofor

SUBJECT INFORMATION AND INFORMED CONSENT

Study Title: Cultural Heritage Research - Netherlands 2016

Investigator(s):

Jeffrey MacDonald
University of Montana
E: jm.heritagepreservation.com
Faculty Advisor: Dr. Kelly Dixon
UM Dept. of Anthropology
E: kelly.dixon@mso.umt.edu

P: 406.244.5911

Purpose:

You are being asked to take part in a research study examining issues and methods for advancing Cultural Heritage stewardship and international dialogue and collaboration. You have been invited to participate because of professional association and range of expertise related to culture, heritage and potential for international development. The purpose of this research study is to learn how Cultural Heritage policy, education, and stewardship themes are approached in the Netherlands, along with methods and means of national and international engagement.

Procedures:

If you agree to take part in this research survey, you may be asked to provide professional opinions and/or information relative to cultural heritage practices and resources of the Netherlands.

All gathered information will be assembled in English, and retained in written form for application to further scholarly research of international cultural heritage themes and issues.

Risks/Discomforts:

There is no anticipated discomfort for those contributing to this study, so risk to participants is minimal.

Benefits:

Although you may not benefit from taking part in this study, your answers may help deepen our understanding in this area of knowledge.

Confidentiality:

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0	Your records will be kept confidential and will not be released without your			
	consent except as required by law.			
0	Your initials indicate your permission to be identified by name in any			
	publications or presentations.			
0	If you do not want to be acknowledged by name in any publications or			
	presentations, please initial here			

The University of Montana IRB
Expiration Date 7 - 16 - 2017.
Date Approved 7 = 21 - 2016
Chair/Admin Hull & Balas

Voluntary Participation/Withdrawal:

Your decision to take part in this research study is entirely voluntary.

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Statement of Your Consent:

Prot dr. J.C.A. Wolen

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	17-2-2017
Subject's Signature	Date
Statement of Consent to be Photographed [a	and/or Audiotaped, Videotaped, etc., if applicable]:
I understand that photographs, audio, as study.	nd video recordings may be taken during the
	en, and being recorded by audio and video
	io, and video recording in presentations related to
I understand that if photographs and/or presentations of any kind, names or oth	audio and video recordings are used for er personal identifying information will not be in. Please initial to indicate permission to include in presentations related to this study.
Subject's Signature	Date

The University of Montana IRB

Expiration Date_____
Date Approved ____

SUBJECT INFORMATION AND INFORMED CONSENT

Study Title: Cultural Heritage Research - Netherlands 2016

Investigator(s):

Jeffrey MacDonald University of Montana

E: jm.heritagepreservation.com

P: 406.244.5911

Faculty Advisor: Dr. Kelly Dixon UM Dept. of Anthropology

E: kellv.dixon@mso.umt.edu

Purpose:

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• If you do not want to be acknowledged by name in any publications or presentations, please initial here

The University of Montana IRB
Expiration Date 7-16-2014.
Date Approved 7 - 21 - 2016
Chair/Admin : Jule & Bales

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Printed Name of Subject

Subject's Signature

14/02/2017 Date

Statement of Consent to be Photographed [and/or Audiotaped, Videotaped, etc., if applicable]:

I understand that photographs, audio, and video recordings may be taken during the study.

I consent to having my photograph taken, and being recorded by audio and video equipment.

I consent to use of my photograph, audio, and video recording in presentations related to this study.

I understand that if photographs and/or audio and video recordings are used for presentations of any kind, names or other personal identifying information will not be associated with them without permission. Please initial to indicate permission to include any names and identifying information in presentations related to this study.

Subject's Signature

14/04/200 Date

The University of Montana IRB
Expiration Date 7 - 20 / 4
Date Approved 7 - 20/6
Chair/Admin