FROM THE GOLD RUSH TO THE CRYPTOCURRENCY CODE RUSH?: COMMUNICATION OF CURRENCIES IN NATIVE AMERICAN COMMUNITIES

by

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DISSERTATION ABSTRACT

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This study unravels histories and locates meanings of specific Native and colonially imposed currencies from the 1850s to present day. Existing literature tends to reproduce colonial stereotypes of Native American peoples as technologically primitive, and has not addressed the shifts/integrations from land-based to emerging forms of digital currency. To intervene, this dissertation focuses on two case studies in which currencies as communication technologies-are dynamic parts of much larger stories. The first case study focuses on land-based currencies—gold, coins, and beads—in the period of Oregon's Gold Rush, specifically during the Rogue River War (1853-1856) between Native peoples and invaders/settlers. Additional chapters provide supplementary histories of related currencies and detail the political, social, and cultural shifts to digital currencies. The second case study centers on a limitedly used Indigenous cryptocurrency, or digital peer-to-peer currency, with a contested history and an explicit resistance to the U.S. dollar. Grounded in three theoretical areas, currency as communication and media, currency as entwined with nations, and de/post/settler colonialism, this dissertation works to answer a number of questions, mainly: What might the meanings embedded in landbased currency from the colonial past communicate about the present, and how does Indigenous digital currency of the present address the colonial past? Building on existing

work, one finding of the first case study suggests that America's democratic identity crisis was codified on currencies that were then used to dominate and shut out the various types of Native currencies in circulation. However, forms like shell and glass beads did not "vanish" after the Colonial Era, and remain as meaningful communicative forms that signify tribal identity present day. Findings of the second case study reveal how cryptocurrencies can be encoded with visions of tribal sovereignty, and can potentially serve tribal nations. However, they have proven problematic to implement. Further, this case study explicates the roles that racist discourses, circulated by journalistic media, play in contouring the meanings of Indigenous cryptocurrency. Native peoples have always found ways to challenge capitalism and settler colonialism. One way is through choices, re-articulation, and technological innovation around currencies.

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CHAPTER I

INTRODUCTION

Currencies are communicative objects—ones that typically belong to individuals and communities and represent systems of economic and social relations. Native American peoples have used different forms of "currency"—or energetic, affective, reciprocal items—throughout a larger history including shells, beads, coppers, turquoise, coins, woodpecker scalps, baskets, paper, and digital currency. Take, for instance, a simple United States (U.S.) dollar bill that is now imposed on tribal nations. It is packed with information—George Washington, a president who sanctioned genocide on Native peoples, symbols that reflect colonial histories, tracking numbers, institutional signatures, a federal reserve seal, denomination, date, and nods to religion with the "In God We Trust" motto. These elements of U.S. identity perform atop a medium of cotton fiber paper.

This is not a benign form, as settler colonialism is still felt centuries after America was crystallized as a project of democracy. By this, I mean that colonization is an ongoing, experienced process of domination in which policies and actions are taken to steal land from people for economic, political, and ideological reasons, and it leaves a residue in language, attitudes, and economies far after colonists have supposedly "left" the place in question (Said, 1978). Settler colonialism is the specific type of colonialism that best describes the U.S. because the colonizer has never truly left; rather, people settled and refuse to leave (Wolf, 1999). Colonialism surfaces in widely used and everyday objects such as currency. However, Native peoples have been using currencies as intercultural communication technologies, in some cases since time immemorial, and

continue to develop newer digital kinds of currency. These currencies are also not neutral forms. They can be ascribed different meanings colored by colonialism, but often they reflect different terrains of meaning such as survivance, sovereignty, tradition, and futurity. This dissertation weaves together critical conversations about Native currencies during the Gold Rush and the cryptocurrency code rush where digital forms, constituted by ones and zeros, are prevailing ideas.

Problem, Gap, Contribution

The development of scholarly work concerning currency and Native peoples traces back to 19th and early 20th century anthropology, and the practice of salvage ethnography (Gruber, 1970). Salvage ethnography is a colonial method that regards researchers entering Indigenous communities and taking, generalizing, and scientifically preserving what they believed were the authentic traditions of a vanishing (dying) race (e.g. Boas, 1897; Curtis, 1907-1930). Regardless of intentions, salvage ethnography worked to help create a "pure" and "traditional" notion of Native American peoples, their/our lifeways, and technologies (Raibmon, 2005; Deloria, 1969). This is evidenced by the pervasive stereotype of the noble savage and the racist discourse that Native American peoples continue to be technologically backward (Deloria, 2004). Native currencies were often categorized as primitive and Native "banking" systems described as wasteful and barbaric. Similarly, Native epistemologies around exchange,

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¹ In *Manifest Manners: Postindian Warriors of Survivance* (1994), Vizenor popularized the term "survivance" which regards an active state of presence and confrontation of colonialism. Vizenor urges Native people to take a stance of pride and presence over being victims. This is mentioned in the literature review chapter and I am beholden to Leilani Sabzalian for understanding the importance of this term over survival.

² The cryptocurrency code rush is my play on words suggesting that cryptocurrency, described in detail in chapter six, is a popular resource that once "discovered" in 2009 attracted mass interest and cultural shifts. It also uses a practice calling "mining," which draws similarities to mining gold.

³ Binary code is based on ones and zeros and can create instructions for computers.

stewardship, and care for the Earth were considered inferior to an emerging capitalist order (Raibmon, 2005; Weaver, 1996, Younker, 2007).

To tackle the issue of problematic mistreatment and misrepresentation of Native American peoples in scholarly works, Native American studies has emerged as a field that works to call out colonialism. This and related fields consider historical, cultural, political, and contemporary experiences of Native communities and value the intellectual contribution of Native scholars and their methodological approaches (Cook-Lynn, 1997). Scholars in media studies have also elaborated on the role of media in helping create or spread stereotypes about Native American peoples. However, these studies are limited and certainly not emphasized within the field's canon. While studies on Native representational issues in film, news, and advertisement (see Merskin, 2001; Rollins, 2011; Klopotek, 2001; Miller & Ross, 2004) are categorically important, the scope of topics needs to be thickened. As a field, we need to challenge ourselves to do what other fields, including computational arts, ethnic studies, and American studies, are currently doing with more topical flare. For instance, we should be thinking about how new media can function to help build a Native futurist imaginary, as opposed to setting Native peoples in the past (see Dillon, 2012; Lempert, 2014). We should also consider how artificial intelligence and networked communication are building enclaves that support Indigenous identities and community building (see Sandvig, 2012), and how counterhegemonic narratives can best be communicated to a changing milieu (see Lameman & Lewis, 2010). This dissertation works to meet that challenge and intervene in the problems associated with previous work on Native American currency.

It does so by unraveling histories, discourses, and other meanings pertaining to some Native American currencies in two distinct episodes, or case studies. These meanings, as I will describe in the two case study chapters, are largely concerned with representational qualities, are tied to the importance of land and space, and are shaped by textual/discursive imaginings of nationhood and sovereignty. While tribal nations seem more bound to U.S. currency than ever, this study will also show the ways by which tribal nations reimagine, retain, incorporate, and rearticulate currency for cultural and political reasons. The potential integration or shift from land-based to digital currency in Native American communities is a topic that has not yet been examined.

By looking at currencies, this dissertation is a unique contribution to communication and media studies because it considers forms of mass media and currencies, which remain slightly outside the purview of legacy media, i.e. newspapers, television, and radio. While other forms of media may be pervasive, currencies are perhaps the most mass; they are used by almost everyone, everywhere, every day, often many times per day, in many ways, and enabled by multiple payment processes. In contrast, people may only pick up a newspaper or consume mass media, like a favorite television show, on occasion. A forthcoming literature review chapter will spend considerable time crystallizing why and how currency is a communicative technology, thus fitting within the scope of communication and media studies.

This introductory chapter will first contain a brief section on the belongingness and symbolic nature of currency. Then, I will provide a limited introduction to the two case studies and begin to clarify concepts. After, I will pose the questions that guide this dissertation and provide definitions and background information germane to those

questions. To close the chapter, I provide a note on methodology, briefly summarize each of the following chapters, and make a final comment about the contribution of this work. Before the next section, I should note that individuals often have their own preferences regarding how to refer to Indigenous peoples within the boundaries of the U.S., including: Native American peoples, American Indians, Indians, NDNs, Native peoples, Indigenous peoples, and others. Scholarship on these differences trace back to scholars including Berkhofer (1979). Native American is useful because the referent implies both Native and American. However, it is problematic because it sounds as if one is Native to America, even though people are Native to land that existed far before America existed. Native and Indigenous are useful because they do not include America, but the terms can also be problematic because they limit peoples' ability to identity as both Native and American citizens. American Indian and Indian are preferred by most scholars and are what some tribal nations call themselves (e.g. Coquille Indian Tribe), but they are not the terms widely adopted by my generation and it does not come naturally to use them. In sum, there are complications with all of the terms, and it is best to refer to people with their tribal affiliation. Although there are important distinctions amongst them, I will oscillate with the use of Native, Native American, Indian, and Indigenous.

Belongingness of Objects

[Some] Indigenous peoples have always had an object-oriented ontology. Where a worldview holds that every rock, tree, kangaroo, bird, river, and mountain is alive and capable of communicating with each other [and] we are clearly in the presence of a transversal philosophy.

-Rainforth, 2016, p. 16

In adopting a media and artifact-rooted focus, I was careful not to fetishize Native currencies and to actively dismantle and reject the racist view that qualities of Native technologies (in the case of this dissertation, currencies) suggest that Native peoples are technologically primitive (Deloria, 2004). Rather, currency related artifacts are seen as micro-historical entry points that help to elucidate certain sociocultural and political circumstances. As Cipolla (2017) states, we often "look to objects to help explain *cultural* history, *social* transformation, or *human* perseverance" (p. 226). Although the terms *objects* and *artifacts* are widely used, they can be more aptly described as *belongings* (Cipolla, 2017; Schaepe et al., 2017). Currencies, as the introductory anecdote foregrounded, belonged to people and in some cases many who transacted, ritualized, stashed, or otherwise communicated with them.

Some Indigenous scholars prefer that belongings and technologies not be described by the word "culture," offering that it is actually ingenuity that Native people possess, an ability to make use of natural resources, trade items and other materials to suit needs in the contexts and limitations of colonialism (Humphrey, 1978; Younker, 2003). Seeing Native belongings as culture can sometimes work to boil down the everyday and ceremonial systems of life in communities, and becomes a mechanism in which non-Indigenous people view Native American communities as romanticized cultures, rather than contemporary nations. With these important points considered, many, but of course not all, Indigenous epistemologies are based on the belief that "man is neither height nor center of creation" (Lewis et al., para. 1, 2018), and that non-human objects are inhered with living voices as well as social and historical forces of human and non-human ancestors (Rainforth, 2016). Indigenous epistemologies are worthy of considering,

respecting, and learning from, as culture from a communication and media studies perspective can be seen as a site of struggle (Hall, 1997; Hebdige, 1979), a space for resistance (Fiske, 1993; Radway, 1986), and a platform for resurgence (Nagel, 1997).

Currency as Symbolic

Understanding culture in this way rests on a view that most aspects of life are socially constructed, meaning people create the world through their rituals and use of symbols (Barthes, 1972), and then take up residence in that world (Carey, 1989). As stated, Native epistemologies enhance this understanding by adding that non-human actors such as nature, objects, animals, and even computers or machines, are a much larger part of this world making (Lewis et al., 2008). In order for shared, or at least tacit, meaning to be achieved between these actors, messages must be transferred and negotiated between producers, senders, and receivers (decoders) (Hall, 2007). This is at its core a process of communication, moving talk, text, images, things, ideologies in form, codes, and belongings.

Currency is regularly communicated with, and has historically been socially constructed as a store of value, a unit of account, and a medium of exchange (Ingham, 1996; Simmel, 1978/1990/2004). What ultimately makes currency work is a network of people communicating, agreeing, trusting, and guaranteeing its value (Hann & Hart, 2009). Value, trust, and means of reliable memory of transaction (ledger or record) define a stable currency. If one person, for example, proposes that botanical leaves⁴ should serve as currency, as Benjamin Franklin suggested in the 1730s and 1740s (Newman, 1971), but cannot convince the colonies to accept that form, then it is useless. If a team of Native

⁴ The structure of leaves was difficult to counterfeit making them an interesting medium for money.

computer scientists, for example, creates a digital currency, and a Native community slowly starts to accept it, perhaps first at a tribal college or store, that would begin to create a network. Then, if more people started learning about it in news stories and by word of mouth, investors might begin to pump value into it and the network could be augmented. Once users are amassed and the currency gained traction and legitimacy, it could create the opportunity to allow for retrofitting older currency. Then the currency could be valuable. The process of creating value or encouraging a technology's uptake requires this network engaged in communication about the symbolic form (Rogers, 1962). As Mead (1934) states, "the media of these tokens of wealth are, then, in this process of exchange just such gestures or symbols..." (p. 292). Specific tokens of currency—the tangible and intangible forms like paper, gold, Rai, ⁵ gift cards, digital packets of code, leaves, baskets, shells—are forms of currency only because people symbolically and collectively ascribe meanings to them and move them through "gestures" of exchange. Currencies are resources for social action (Llewellyn, 2016) that also adapt to reflect the changing technological, social, and cultural changes of their time.

Case Study Introductions

Case study one: Land-based currency in colonial Oregon. The first case study of this dissertation is historical and provides a currency-focused view into Colonial Oregon, specifically during the time of the Rogue River War (1853-1856) between settlers or invaders and Indigenous peoples. This time period presents a distinct moment in which early capitalistic goals of the Gold Rush can be directly linked to Native and settler relations. On a more macro-level, the Gold Rush, born out of economic desire and

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⁵ Stone "money" in Yapese communities. See conclusion chapter for more on this form.

justified by American capitalism, as well as the ideology of Manifest Destiny, which will be defined at a later juncture, pushed a wave of settlers and immigrants into Oregon (Whaley, 2010). Central to this study is archeological evidence, archival texts, and consultant accounts of the concomitant use of different, even competing currencies: those considered more reciprocal, and those considered more abstract and quantitative. During archeological excavations, there were many currencies and related belongings excavated, including metals in various forms, trade beads from Europe, shells, and coins. These belongings provide context into how currency was being used and, more importantly, meanings that can be ascribed to them.

Case study two: Indigenous cryptocurrency and MazaCoin. The second case study is more contemporary and regards a potential iteration of resistance to late capitalism and colonialism that continues after initial invasion. The focus is MazaCoin, a cryptocurrency which was created with the intention of serving the Oglala Lakota nation, but after contested implementation, became pan-Indigenous and general in its use.

MazaCoin is one example, which regardless of its lack of objective success, demonstrates the ways in which Native American communities could consider alternative currencies that exist alongside dominant U.S. currencies or entirely uproot them. This can be considered for different economic and inherently political reasons. Further, this case study can also act as foundational research for Native American communities exploring the possibility of alternative currencies—particularly given that this form of currency is accessible to them and can represent a degree of freedom from the U.S. currency system. An elaboration of the history and background of cryptocurrency will be provided in the next section and in chapter six.

Specific cases were chosen because of idiosyncratic opportunity, but they were also selected because of their historical settlement within a longer period of U.S. and tribal relations (1850s-present day). This spans a time in which multiple currencies were able to exist to now where the encroachment of capitalism, as well as the dominance of the U.S. economy, has made the U.S. dollar supreme. This has left little space for alternative currencies of Native American peoples to exist viably in the system.

Unpacking Concepts

In the first case study, I call the forms of currency land-based currency because the resources from which they are made come directly from the land and are rooted to the earth—the ocean for shells, the trees for paper, and the soil for gold, turquoise, and other metals. These are markedly material. The time that we are living in now, however, is marked by a move away from material wherein information is digitized, stored, and distributed online. For example, instead of going to an establishment to rent a movie, most people use an online platform to screen digitized versions. Currency has moved in a similar direction where people do their banking and use payment platforms online.

The second case study concerns digital currencies, specifically cryptocurrency, and it is useful to have a basic overview at this stage. Cryptocurrencies are digital peer-to-peer assets or currencies, the most famous of which is called Bitcoin (Nakamoto, 2008). Seemingly invisible currencies (unlike a physical dollar bill) are created by a computer language and are exchanged by a network of peers using a system of computers. Cryptocurrencies are enabled by software, secured using cryptography (a method of encryption) and these currencies depend upon that same decentralized network for verification and distribution. This is because the system is disintermediated, meaning

cryptocurrencies also do not require governments or banks, but just the network and a standout technology (blockchain) to keep the system running. Blockchain refers to the electronic record-keeping (ledger) system that verifies and records cryptocurrency transactions. Each time a transaction is made, a block of information is added to the chain that cannot be changed. It is permanent or immutable. Cryptocurrencies are different from fiat currencies which are, by nature, often controlled by governments and tend to use privatized banks as intermediaries, raising important questions regarding whom cryptocurrency can operate on behalf of: individuals, communities, nation-states, or global economic order.

Digital currency is material in the sense that it uses infrastructures like computers made of plastic, silica, and refined energy, but what would become the digital tokens (forms like coins) are markedly virtual. Ido not mean virtual in the sense of not real, because the currency is real, just as a digitally recorded song is a real song. It just lacks the same type of materiality (as electrons or energy). It is true that the process of producing (mining) cryptocurrencies requires massive amounts of electricity and creates material environmental problems such as e-waste and climate warming (Mora et al., 2018). But you cannot hold digital currencies, like cryptocurrency, in your hand like you can a coin. You cannot put it in your pocket before stepping out to buy something from a neighborhood store, using it as a material intermediary. There are differences between something you can see and feel and something that is digitally translated into ones and zeros.

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⁶ Despite being seen in opposition to material, there are scholars that argue for an understanding of digital artifacts that integrates discourse, technological design, social use, and uptake (Parikka, 2014). For example, processors, memory, networks, and software can be conceptualized as digital material and are part of the infrastructure that makes digital currency and payment possible.

On one hand, it raises a consideration regarding how new newer forms of currency really are as McLuhan (1964), a technological determinist, famously states that waves of media often take on characteristics of the media that preceded it. Bolter and Grusin (1999) describe this as remediation or the culturally perceptible alteration process by which "new media refashion prior media forms" (p. 273). For example, coins are similar to size as shells, or credit cards include tracking numbers and iconography in the same way as paper money. These new digital currencies pay homage in various ways to the visual and technical elements of forms that preceded them, and land-based and digital currency do not exist in absolute isolation from one another. However, unpacking the ways their value is socially agreed upon, the ways that their form be it physical or digital is created, their various uses, and communicative meanings produced when one form is chosen over another, shows that they are not all the same and that there is value in looking at physical land-based and digital currency more closely.

Guiding Questions

Regardless of the materiality, in both cases, "Land Based Currency during Rogue River War" and "Indigenous Cryptocurrency and MazaCoin," currency functions as a communicative belonging affected by several external forces. Ultimately, currency offers a window into understanding cultural identity and relationships between the U.S. government and Native American nations. This helps in meeting the goals that Indigenous studies and critical bents of media studies sets as it works to globally address how the complex colonial and Indigenous relations can be first understood, often by excavating meanings from various texts and lived-experiences, and then reworked (Nakata et al., 2012). To this end, my dissertation inquiry began with one main question,

"What might the meanings embedded in currency from the colonial past communicate to us about the present, and how does Indigenous digital currency of the present address the colonial past?"

This question is then revamped into the following overarching, guiding questions for clarity and specification:

- What are the cultural meanings that are embedded within specific forms of currency?
- How are practical and technological strategies enacted around currencies to strengthen, constrain, or otherwise shape tribal sovereignty?

For the "Indigenous Cryptocurrency and MazaCoin" case study, I raise an additional question regarding media (currency) and the media (journalistic outlets):

 To what degree do racialized discourses circulated through media contour these meanings?

In looking at both case studies together, I pose the last question:

• How do shifts in forms and meanings of currencies play roles in Native American and United States governmental and social relations, as well as our understanding of nationhood within an overarching capitalist system?

These questions serve as connective tissue for the dissertation.

Defining Terms and Additional Background

Three terms embedded and implied in the above guiding questions—sovereignty, currency, and capitalism—require further definition and conceptualization in relationship to one another. This section includes a brief description of the key terms, preliminary to an expanded discussion in the literature review chapter. It also provides some necessary

background by describing the current status of Native nations within the confines of the U.S., how that status affords and limits tribal sovereignty, and why currencies are even germane to sovereignty.

Categorizing any Native community as a tribe, nation, society, or culture can be problematic because certain definitions may not adequately capture how Native people see themselves (Champagne, 2007). Further, these terms were often created, defined, and prescribed by colonial forces (Champagne, 2007). Anderson (1983) states that nations are figments of human imagination with origins dating back only a few centuries, around the time when countries including the U.S. were beginning to form a national consciousness. However, Anderson's work focuses heavily on the concept of nation-states (with shared national identity, rather than multination-states like the U.S. and conceptions of Indigenous nationhood. Communities of Native people have deep roots, have been on Earth for tens of thousands of years, and are also bound because of different types of kinship, spirit, and blood that are defined differently within each nation. While the term nation and nation-state, for example, can suggest worldviews of secularized people groups (Anderson, 1983), the term nation is still a preferred term by many Native communities because it highlights the sovereign-to-sovereign government relationship and self-determining power. As Anderson (1983) suggests, the words nation, nationality, nationalism all have been proven notoriously difficult to define, but while sovereignty is

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⁷ Taiaiake Alfred (1999) critiques the word "sovereignty." He argues that the ideation of the word, and the sentiments, belong to the West. When Indigenous people choose to use the term, he adds that they are complicit in retaining the nation-state model. Alfred's rejection of "sovereignty" is compelling because it actively rejects the framework prescribed by the West (typically a sovereignty that is politically inclined, hierarchical, and intertwined with capitalistic goals). However, most other words spoken in English in matters considering Indigeneity, such as "tribe," "Native American," and "Indian," can be critiqued for being Western as well. While it would be appropriate for tribes to use their own terminology to describe concepts like sovereignty, the reality is that for most Native American peoples is that this is not possible due to language death and cultural genocide. My point is that what is really important is how individual tribes self-define, rearticulate, and individualize their own definition of sovereignty. This process can be as powerful as eradicating the word sovereignty altogether.

also difficult to define, the word demands both profound emotional and political legitimacy (Klopotek, 2011; Teves, Smith, & Raheja, 2015). There are several types of sovereignty and three types are most relevant to the dissertation's guiding questions. They include political sovereignty, inherent sovereignty, and monetary sovereignty.

Political sovereignty refers to the U.S. Federal Government granting itself the power to deem tribal nations in a political state of their choosing. This is rooted in the Supreme Court case titled *Cherokee Nation v. Georgia*, 30 U.S. (5 Pet.) 1 (1831) where Justice Marshall favored the idea of Indians as domestic dependent nations. This can be characterized as a paternalistic nature, reliant upon the idea that Native American peoples are dependent on the government, and that the relationship is like that of "ward to his guardian" (p. 30). The overall legal terrain has been both a useful place for Native American peoples to assert sovereignty based on their "granted" inherent rights as domestic dependent sovereign nations, as well as a place that sovereignty for tribal nations has been regularly limited (Deloria & Lytle, 1983); for instance, where Indian nations are not federally recognized. While the U.S. government largely sought to reduce Native land bases with treaties and laws, they also inadvertently supported a newer type of national consciousness building among tribes by describing tribal nations in terms of European sovereign states (Grossman, 2017).

Currently, there are 573, and growing, federally recognized Indian nations in the U.S. and a large number of Indian nations that are not recognized and sometimes referred to as "tribes, nations, bands, pueblos, communities and native villages" ("About Tribes", n.d., para. 2). Some of the inherent rights of these 573 nations are expressed through tribes creating their own forms of government and "determining citizenship; establishing

civil and criminal laws for their nations; taxing, licensing, regulating, and maintaining and exercising the power to exclude wrongdoers from tribal lands" ("About Tribes", n.d., para. 6). There are several rights that are afforded to states and nations that tribes do not have, and one regards currency.

Monetary sovereignty is the power associated with having legal say over the currency of the state (Kaden, 1979), and tribal nations are limited in this regard. Tribal nations can levy a tax, and often are required to make monetary pacts with states that they are located in. However, there is constitutional wording that could be used to claim that Native currencies, including potential cryptocurrencies, are legally slippery. Often tribal nations are seen as having rights similar to that of states within the U.S. In U.S. Const. art. I, § 10 there is a list of state limitations, for example, states cannot "make anything but gold and silver coin, a tender in payment of debts" (para. 1). If taken as read, that means states cannot accept anything for payment of debt besides gold or silver, or that states cannot pay in anything but gold or silver, though it was later clarified that Congress could determine what constitutes legal tender. More relevant, is that tribal nations are limited from doing certain things in which policy-makers perceive as being a threat to the U.S. For example, tribal nations cannot raise an army or specifically mint money. This is meaningful because federally recognized tribes are among a list of nations without their own globally recognized fiat currency, 8 and this is significant regardless of the fact that a tribal nation having their own currency may likely not be economically advantageous within the current economy. Other nations quite often use and accept the currency of high-power countries, but having bills and coins with culturally specific icons and

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⁸ Currency that does not have intrinsic value and is often controlled by governments.

symbols is often a perceived sign or ingredient of contemporary nationhood (Anderson, 1983). More simply put, currency is connected to sovereignty because having currency is a national right and all choices that surround it—including how it is created, how it is used, how it is taxed, and who it benefits—are all sovereign rights. The limited reported—on cases of tribal nations recently considering their own newer currency include "scouts" for the Crow Tribe made of copper, silver, and gold (Kemmick, 2013), and MazaCoin for the Oglala Lakota Nation, which, as chapter five explains, is more of an individual than a national enterprise.

Capitalism, favoring private ownership over means and processes of production, elevating individualism over communalism (Adorno, 1951/2005), has marginalized everyone but most certainly Native American communities and their economies (Miller, 2002). When I talk about capitalism, I am referring more to the spirit of capitalism that exploits labor, structures production, and demands innovation and accumulation, than advanced theory (Weber, 1958). In many ways, capitalism undergirds colonialism in the U.S. and was enacted to invade and steal land from others for economic, political, and ideological reasons (Stephanson, 1996). The Western concept of private ownership for labor and capital gain requires money and is rooted in a worldview that suggests that land is, firstly, able to be owned (Locke, 1690), and that wilderness/land was empty despite Native people living there (Coloma, 2013). Shaw (2008) argues that discourses around sovereignty by American thinkers that share these sentiments, for example, Locke and Tocqueville, limit the degree to which Native Americans can apply their own ideologies to defining sovereignty, specifically those that suggest that people should be stewards rather than owners of land (Anderson, 2005; Weaver, 1996). Slavery, as well as

dispossession of Indigenous land, is central to the American nation-building story in what Tuck and Yang (2012) discuss as "an entangled triad structure of settler-native-slave" (p.1). This triad worked by freeing up land to White men (and often giving them even more acreage if they had wives) and enslaving others to create infrastructure and profitable markets. For settlers to be able to claim land required them to look at that land and think "this is mine," and moreover, that seizing it was "part of normative behavior, rules of interaction, and social engagement" (Moreton-Robinson, 2010, p. 50). Settler freedom and sovereignty were based on eradicating freedom and sovereignty of Indigenous peoples. Ultimately, White supremacist ideology is at the core of understanding racism and colonialism, which root ideas of entitlement to various forms of privilege, power, private property and capital (Klopotek, 2011).

Indigenous philosophies regarding capitalism often oppose certain Western economic philosophies. For example, some Native American scholars, including Alfred (1999), argue that capitalism specifically encourages commodification of land and resources and contradicts Indigenous philosophies that value the spirit and sovereignty of those resources. Other Native scholars like Miller (2012) argue that a newer type of reservation "capitalism" is actually exactly what tribes need to consider to boost economies and increase their ability to care for their people. Tribal nations minting their own money is a threat to the U.S. capitalist economy, and currency practices (such as potlatch described at length in chapter two) threaten the capitalist order. Practices like this can be categorized by the U.S. as "dangerous" or "unsafe" in their perceived threat to democracy (Lomawaima & McCarty, 2006).

Beyond political and monetary sovereignty, other conceptions of sovereignty are less tangible. The essence and actuality of power, national self-rule, and ability to ideate a collective of people based on ontologies, spirituality, culture, place and civil impulses is what I define and use as sovereignty throughout this dissertation. Similarly, Wilkins and Lomawaima (2001) describe sovereignty as the ability of an Indigenous nation to selfdefine, self-govern, claim jurisdiction over their own legal affairs, exercise political jurisdictions, and delineate the rights of citizens on their lands. It is a state-of-being in line with the total values of a specific nations. Further, there are different conceptions of sovereignty. For example, Kickingbird, Kickingbird, Chibitty, and Berkey's (1999) work argues that sovereignty is not granted, but that it comes specifically from people, often spiritually or religiously bestowed. Rather than viewing Indigenous sovereignty as conditional or different than that of other nations, sovereignty can be viewed as inherent or always existing (Champagne, 2007). A more pragmatic or relational conception is that sovereignty is an agreement that is brokered between two sovereigns of their respective independence. This is demonstrated in a historical event dating back to 1613 when Haudenosaunee peoples noticed White people in their territory and met with their representatives. In doing so, the Haudenosaunee peoples recognized the White peoples' emerging government with the hopes of forming an alliance or understanding with them (Onondaga Nation, n.d.). To the Haudenosaunee nation, this agreement means, "in one row is a ship with our White Brothers' ways; in the other a canoe with our ways. Each will travel down the river of life side by side. Neither will attempt to steer the other's vessel" (Onondaga Nation, n.d., para. 4). At its core, this is a sovereign to sovereign relationship and one based on power and shared belief in legitimacy. As Bourdieu states,

Symbolic power is a power which the person submitting to *grants* to the person who exercises it, a credit with which he credits him, *a fides*, an *auctoritas*, with which he entrusts him by placing trust in him. It is a power which exists because the person who submits to it believe that it exists. (p. 192)

It is a trust relationship regardless of whether sovereignty is inherent or otherwise brokered. Within the differing definitions, sovereignty has become a prevailing discourse of power and it often means something different for the U.S. government and Native nations (Deloria & Lytle, 1983). Sovereignty of Native nations can challenge colonial systems and practices, thus they are often policed by state and federal governments. Now that some of the key terminologies have been described, I will move to a brief note on methodology. Other terms, such as de-/post-colonialism, will be described in the following chapter because of the need for more theoretical attention and literature to support them.

Brief Description of Methodology

To address the guiding questions, I use a case study approach because of the methodological affordances to organize, describe, analyze, and draw in multiple sources of data to create and strengthen arguments in relation to an established theoretical framework (Yin, 2009; Creswell, 1998). In adopting a case study approach, I employ a number of specific methods of textual analysis, discourse analysis, archaeology, and semi-structured interviewing in an interdisciplinary fashion. These methods are amended in order to fit ethical considerations of work concerning Native communities. I chose case study methodology because when you strip the scientific words from its description it is essentially in-depth storytelling, and storytelling is compelling in that it historicizes,

humanizes, and helps people to feel, understand, and change (King, 2003). Currencies, as the case studies make clear, can elicit stories and memories, but they are also part of much larger stories of social and ecological transformation. This is all discussed at length and in detail in the methods chapter.

Structure and Chapter Overviews

In this section, I sketch out and summarize the forthcoming chapters and their central findings. Following this introductory chapter, chapter two presents a review of more literature and a discussion of theoretical grounding. This chapter engages literature on three theoretical terrains: currency from a communication and media studies perspective (including semiotics), nationhood and currency, and colonialism. The aforementioned guiding research questions emerged from noting the gaps in the existing literature.

In Chapter three, I present the methodologies employed in this dissertation. Specifically, I provide a more in-depth description of the case study approach, the body of information analyzed, and the more specific methods employed. These include textual analysis, discourse analysis, archeology, and semi-structured interviews. I also include a section where I discuss my identity as an enrolled member of the Coquille Indian Tribe and White woman, and discuss how this shapes my choices.

Chapter four provides part one of a two-part history of Native American currencies and shows how currencies of North American colonists/settlers have always had a relationship with Indigenous belongings. Specifically, I discuss dentalium, beads, and potlatch. This history ends around the mid-1800s, in order to provide background or a prelude to the first case study situated in that time.

Chapter five presents findings around specific land-based currencies and related materials (gold, coins, and beads) in the period of early Oregon colonialism. I discuss how gold was a stolen Native resource that went through a process of colonial production as it was pressed into coins, stamped with signifiers of an incipient American nation, and used to counter (or undermine and subvert) Native currencies and economic systems. The coins had peculiar representations on them and erasures of Nativeness that shed light on racial and political realities. Next, beads are discussed as intermediaries between settlers and Native peoples. Beads were also items of specific cultural importance for tribal nations in potlatch, regalia, and other exchanges. This chapter finds that, in the period under consideration, beads have taken on new political meaning. Discourses around beads, particularly that beads equate to the mere presence of Native women in archaeological contexts, are contested and it is agreed that these discourses undermine the more integral roles Native women played in the war (Rose, 2013; Wasson, 1994; Tveskov, 2007; Tveskov, 2017). When beads are worn, they express resistance to the colonial oppressor insofar as the wearer is signaling fealty to tradition. Vizenor (1994) might describe this as what he calls survivance, or showing pride and tradition in the face of colonialism present-day. Overall, this chapter interprets various meanings that were attached to these currencies and codifies them in their historical context during the war.

Chapter six addresses what has happened to currency since the 1850s, the timeframe that the last case study focused on, by covering important acts that led to the modern banking system. It then traces the shifts from physical, tangible currency to the digitization of currency where cash and coins are increasingly sidelined. To create a foundation for understanding Indigenous cryptocurrency in the second case study, this

chapter defines and demystifies terminology, history, and technical processes of cryptocurrency. It ends with a supplemental review on the ideology of cryptocurrencies and the gap in research on its use among minoritized groups, communities, and Native nations.

Chapter seven centers on MazaCoin, beginning with its history and background, media coverage, and the discourses disseminated about Native American peoples and technology. Further, it traces the coin's evolution from a purportedly tribally-specific form to a pan-Indigenous form. The chapter shows various ways cryptocurrencies can be encoded or embedded with specific meanings of nationhood, visually and discursively, as well as through the coding and technological choices.

In chapter eight, the concluding chapter, both case studies previously treated separately are brought into discussion with one another. The chapters provide supplementary answers to all the questions, particularly the question, "How do shifts in forms and meanings of currencies play roles in Native American and U.S. governmental and social relations, as well as our understanding of nationhood within a capitalist system?" As I have stated, despite the encroachment of capitalism from the 1850s-present, tribal nations have always found ways to challenge capitalism and U.S. paternalism, and one such way pertains to currencies. Where before this was through considerations of land-based natural resources, now it is also through digital spaces and places. The chapter illuminates several important aspects regarding how digitization and virtualization of currency have altered or raised questions about the degree to which currency is a product or domain belonging to individuals, nation-states and other

collectives. I highlight how Native nations shape this understanding. Lastly, the limitations of this dissertation are presented as well as suggestions for future research.

Final Thoughts on Intervention and Contribution to the Field

This dissertation makes a final intervention to the common research problem of only including or analyzing successful and popularized media in studies. The problem has recently been exposed in the media archeological subfield (Huhtamo & Parikka, 2011; Zielinski, 2006; Kluitenberg, 2007). My intervention is accomplished by contextualizing and providing both historical and contemporary examples of currency, some of which have even failed or have been discontinued in usage. For example, many currencies in the Rogue River War era-including gold rush coins and beads, which are presently out of mainstream circulation, and a cryptocurrency, which is not widely used but nonetheless is still being traded-are considered in this dissertation. These are sometimes referred to as zombie media, meaning media that still exist in some form as they linger in importance even in assumed obsolescence (Hertz & Parikka, 2012). Zielinski (2006) and Kluitenberg (2007) argue that technological innovations or media that have failed, or are considered dead, are as critical to media history as those that are wildly popular. Essentially, technological disruptions and failures are important in their own right and contextualize the sociocultural phenomena that surround its innovation, use, and demise. This approach allows for an inquiry into the imagination around particular media and richness of media cultures (Zielinski, 2006). As my second case study will show, analyzing media that are *considered dead* such as dated glass beads or shells, can actually reveal that they *are alive* in other ways, including in culturally important tribal ceremonial and everyday ways. While I hope this research contributes to the field of media and communication, I am attentive to contributing to Indigenous knowledge. For example, I am grateful that this dissertation may at some point sit in the Coquille Tribal Library for members to look at and evaluate after its publication, alongside doctoral dissertations from other tribal members.

CHAPTER II

LITERATURE REVIEW AND THEORETICAL GROUNDING

Scholars have studied and theorized currency (Simmel, 1978/1990/2004; Marx, 1867/1967; Zelizer, 1994) in Native American contexts (Mauss, 1959; Derrida, 1992; Bataille, 1948; Kan, 1989; Miller & Seaburg, 1990; Codere, 1996; Shell, 2013); but not exhaustively, and disproportionately around the theme of gifts and potlatch. The more classic works include Mauss' (1959) The Gift, which focuses on what he calls archaic societies in Polynesia, Melanesia, and the Pacific Northwest. He describes potlatch practices (there is another section on potlatch in chapter IV) of the Tlingit peoples, where celebrations are held and extravagant gifts are often given to neighboring tribes. Further, social hierarchies are established internally and externally with other tribes, and there is a deep sense of reciprocity or obligation to return gifts to the giver and then some (Mauss, 1959). As such, Mauss (1959) considers potlatch a total social phenomenon that is religious, legal, economic, and spiritual. He used them as a locus for his gift-giving theories and is the progenitor on the popularized debate of whether or not Native exchange is of the economic type. This spawned more literature including Derrida's (1992) Counterfeit Money where it is questioned if gift giving is even possible, entangled in a cycle of giving and obligation, and marked by the complexity of time. Another related work, Bataille's (1949) The Accursed Share, details how a nation can more clearly reveal their organization in their handling of surplus energy rather than monetary need or lack. His approach to surplus is unique in the company of other scholarly works on potlatch, and he notes that tribes might destroy massive amounts of riches with great use-value. Some of these works, particularly Mauss,' are critiqued for trying to learn

about themselves and their social systems through comparison to people they project as "others," and upholding colonial relationships (Osteen, 2002). They often write as if potlatches only existed in the past despite the fact that they are still important present day (Younker, 2005). There has since been critical reflection and responsible change. These changes have particularly been taken up by anthropologists who often take the brunt of these critiques; despite this happening in many academic disciplines, the problem persists.

As previously mentioned in the introduction, one of the problems that this dissertation seeks to address the problem of myopic judgment on the basis of culture, race, and nationality that colors much of the literature, both past, and present, on currencies in Native American communities. This is clearly illustrated in a troubling section from *Paid: Tales of Dongles, Checks, and Other Money Stuff* (2017), an otherwise interesting series of essays edited by Maurer and Swartz. Notice that this was published just a few years ago, marking a few centuries of the same type of issue. *Paid* is designed to read like a catalog for a museum of payment objects and debris that never happened. Before launching into vignettes of transactional things such as dongles, which are small electronic devices that can be attached to phones to spread financial information, cash, and magnetic strips, a forward by Bruce Sterling reads as follows:

Why have we done such awful things to ourselves, just for our all-too-mortal systems of money? Take the Native Americans of California, for instance. These fortunate people were living in an area of nigh-utopian natural wealth and beauty, so it's startling, and also depressing, to learn that these early inhabitants invested brutal effort and weird ingenuity in scraping and grinding coin-like tokens from

pretty Californian seashells. Not only were these wampum-like strings of "shell beads" of critical importance to their own hunter-gatherer society, but they seemed to have no trouble at all exporting this system of value to everyone they could reach. They were the Silicon Valley of seashells as money. People believe in money. But it just doesn't last. To judge by our modern ingenuity in storing money, shipping money, and repeatedly wrecking our society with vicious financial panics, nobody's ever believed in money quite like we moderns do. What was once merely the root of all evil is now the root of our every whirring data packet. It's a grim tale, and yet this fine book conveys a heartening sense of memento mori. (x-xi)

I understand that the author states that money is evil for *all*, not just Native American peoples. However, it is a problem that this author, like many others, finds it "startling and depressing" and "weird" that tribes (of which are not named, thereby seeming to homogenize Indians in California as merely one set of California Indians), engaged in their own monetary and cultural systems. It is another problem that this excerpt includes cultural comparisons and binaries that label Indians as not modern and themselves (read: White people) as modern. This excerpted text discursively transforms Indian people into "early inhabitants" and purely "hunter-gatherers." It is another example of the tired civsav (civilized/savage) dichotomy that renders tribes as primitive and colonizers as modern, due to their use of technology (LaRoque, 2010); and those binaries are dangerous.

The distance and opposition between civilization and savagery are, as LaRoque (2010) puts it, a "super-myth" that pervades both the colonizer's psychology and their

institutions and actions (p. 5). From another perspective, is it not startling and depressing that Silicon Valley tends to praise cryptocurrency that uses about the same amount of energy as the average American house uses in an entire week just to transact one bitcoin (Malmo, 2017)? Or that hardware from outdated ATM machines and computers have been exported, and are polluting other countries vis-a-vis logics of globalization, and are creating various health and environmental problems? Further, the author notes that tribes were living in "nigh-utopian natural wealth and beauty," which seems to romanticize and compliment tribal environments in the same breath offend their hunter-gatherer "ness" California. Although the territory was not actually called California prior to 1850, it was a place where shell money was produced in numbers of hundreds of thousands, if not more. These currencies' meanings differed from tribe to tribe and person to person, be they coveted and exchanged to display wealth, kept, or used to help broker international relationships. The site of Native manufacturing of Olivella is not the Silicon Valley of shells; the site of manufacturing code as a commodity (Silicon Valley) is Ohlone, Wiyot, Chumash or other tribal lands. Shell currency is its own distinct form that should not be written about in this manner.

Now that this problem is clearer, it is important to show how *From the Gold Rush* to the Cryptocurrency Code Rush? enters into a few more scholarly conversations that I collapse into three main areas. The first is around a growing body of literature regarding currency as communicative. The second is around currency as entwined with nations. The third is around de/post/settler colonialism and its connection to technologies.

Commonalities of these areas regard currency, culture, and meaning. In this section, I limit the scope by specifying chief contributions to support the claim that currencies are

communicative belongings situated within constellations of (inter)cultural, (inter)national, socio-technical, economic and other interrelated power-laden systems. This will be unpacked throughout this chapter. More literature regarding the specific case studies, including literature on cryptocurrency, will be included in the chapters that precede each case study. This is an organizational choice that helps to better frame each case study, and limits an already lengthy literature review chapter.

Currency as Communicative and Semiotics

Currencies in various forms are often image-based, and are thus representations of the ways people and things, as communicators, see and interpret the world within historically shifting contexts. Currency contains symbols in its various forms because of artistic renderings on currency, but more largely currency is symbolic of power, trust, relationships, esteem for oneself, values, and often of life itself, depending on cultural context (Simmel, 1978/1990/2004). This can be partially understood from a semiotic perspective (Barthes, 1972). Semiotics is the study of intersubjective meaning, through signs and symbols, and was pioneered by Peirce in the field of linguistics and more commonly cited in our field, Saussure (Culler, 1986). Saussure regards signs as being made up of signifiers (forms, denotations) and what is signified (concepts or connotations), that are associated with objects that create a more nuanced, emotive meaning (Berger, 2005).

Some studies of coinage or cash are attentive to the semiotics of currency (e.g. Dyer, 1989; Hornborg, 1999). This is an appropriate approach because currency is a system of signs and a corollary to intelligible speech (Wennerlind, 2001). In one related study, Ganteaume (2017) takes a semiotic approach to a variety of U.S. emblems

Americans have an ambivalent view of Native people. While he takes a critical approach, he also problematically states that he chooses to be an optimist, "It's the country saying to Indians, imaginary and real, past and present: without you, there is no us" (p. 165). It might as well read, "without killing and marginalizing you, there is no us." There are also other critiques of semiotics, for example, Maurer (2006) argues that academics will "continue to run in circles if [they] do not at least momentarily abandon the semiotic ideology that founds much of the history of reflection on money" (p. 36). This study uses semiotics and some structuralist thought, not as a paradigm to be contained to, but as just one tool to locate meanings in currency with.

From a semiotic perspective, currency and language, while different types of communication, have some similarities in that they are shared social systems that allow two or more parties to communicate and exchange with symbols (Llewellyn, 2016). Both have rules, codes, local and/or personal character, and are bound to identity politics (Wennerlind, 2001). They can exist in larger poly-form ecosystems, meaning places where many currencies are regularly used, and many languages are spoken. Lack of options often signal that power structures may be controlling the forms. For example, in the case of the mandated use of the U.S. dollar, or the strong preference of English language forced upon immigrants and Native people during the Assimilation Period (1790-1920). Options, however, imply choice, and people make choices based on what is available to them. Often these choices show how language is intimately tied to identity. Linguistic code-switching, for example, refers to the practices and strategies that people choose consciously and unconsciously to communicate with (Bakhtin, 1986). When two

or more languages are used, communities often find one well-suited for certain types of situations, and others ill-suited (Garrett, 2005). This is shown in studies of bilingualism that find that shifting between languages is highly communicative. Zentella (1997) discusses how Puerto Rican communities in New York speak Spanish when they want to joke, curse, express intimacy, or in-group values. Bills, Hernàndez Chàvez, and Hudson (1995) state that language choices are made to express loyalty to identity, and are based on distances to specific (speech) communities. These choices are made by factors such as proficiency, cultural norms, convenience, and subjective preference.

In a similar sense, choosing to engage in one form of economic transaction with a specific currency reflects its own set of logic. This is shown by Desan (2010) in a study that suggests that money is made in specific contexts to fulfill specific needs throughout specific societies. Desan (2010) uses the metaphor that money is the blood of life, circulating through society, and spreading cultural norms. Related, Zelizer (1994) offers an insightful argument regarding how mediums emerge to fulfill and address the needs and issues of the moment. In her study of money in the U.S., she states that until the 1930s, gifting with cash instead of an object was often seen as thoughtful, not estranged. She adds that different currencies are highly purposed, such as gift certificates for celebrations, food stamps for the poor, or cash rewards as incentives. She makes the case that a dollar is more than the number printed on it. Communities also ritualize and make habitual its symbol use. People make money leis for graduations, keep two-dollar bills as good luck charms, or toss some coins into a man-made pond with a wish that it may someday come true (Maurer, 2015). In both case studies that I will offer, many currencies exist at once. For example, coins, gold, beads, and shells in the first case study, and

cryptocurrencies, the dollar, and perhaps other forms like food stamps, and gift cards in the second. The shifting forms, concomitant use, selective choices, or lack of choices in currency, are expressive of meanings that will be discussed in the following chapters, and this is understudied in Native communities.

Currency as Economic, and Symbolic Markets

Marx (1867/1967) and Simmel (1978/1990/2004) view money as making everything measurable and modifiable into commodities, often simplifying the multiplicity of ways that things and services are valued in non-capitalist systems. According to Marx (1867/1967),

To find an analogy, we must have recourse to the mist-enveloped regions of the religious world. In that world the productions of the human brain appear as independent beings endowed with life, and entering into relation both with one another and the human race. So it is in the world of commodities with the products of men's hands. This I call the Fetishism which attaches itself to the products of labour, so soon as they are produced as commodities, and which is therefore inseparable from the production of the commodities. (p. 72)

In this excerpt, fetish is made analogous to religion, meaning materiality (in a capitalist sense) becomes an essential feature of people, their world views, and sense of self.

Further, Marx' theory of commodity fetishism describes how value begins to look like it is an inherent property of products. In his words, "the relations connecting the labour of one individual with that of the rest appear, not as direct social relations between individuals at work, but as they really are, material relations between persons and social relations between things" (p. 72). This view also suggests that money disorders human

behavior, exchanges, and relationships and becomes the go-between or the mediator between a person's want and their reality. In this sense, it has a troubling power over human relations, especially when considering that money has also only been around for a few thousand years out of 50,000 years or more of human experience.

Slippery to define, I refer to currency as forms in often complex systems, while money refers to the basic units accepted as payment in certain types of economies. The word currency suggests economic transactions, such as buying and selling based on socially agreed upon ways to guarantee value, typically, but not always, in capitalist systems (Gregory, 1982). There is also significance in considering commodity exchange where the money is more abstract, and other types of bartering (often marked by bargaining) and exchange (sometimes gifting), where currency is deeply tied to interpersonal relationships, altruism, reciprocity, and obligation (Mauss, 1959; Polanyi; Gregory, 1982). While many, including Bohannan(1959), argue that Indigenous peoples exchange practices are not, or were not, of the "economic type" and that comparing them can often be Eurocentric. These are semantic and culturally interpreted differentials. Gregory (1982) addresses this gap between Marx' view of commodities as alienable relationships between things in a marketplace, which ultimately reflect and create hierarchies of class structure/ownership, and exchange of gifts that build often lasting social bonds.

This is an appropriate point to stop and clarify that in this dissertation I use the term currency to describe forms, and their larger systems, in both Indigenous and Western contexts. I am aware that I am comparing two perceivably incongruent paradigms of currency when I analyze belongings that existed in communal (Appadurai, 1986), competitive, or totalizing (potlatch) Native systems and often estranged currencies

that existed in capitalistic colonial systems. While Native Americans had many types of currencies, there was not money in the same sense that is invoked by the dollar prior to the Colonial Era (which I define as the 17th century to the mid-19th century when Oregon was invaded). During the Colonial Era, there was also far less distinction between commodities, money, gifts, and barter items than there is currently (Godelier, 1978). This is in part due to the sheer lack of standardized currency created by the British to keep colonists economically restricted, and the fact that Indigenous currencies with different cultural value properties intermingled in transactional circles. I choose to call most forms in this dissertation currency because Native American peoples did use specific forms, including shells, that were often quantifiably measured with a value that could be spread. Items such as shells were utilized for culturally significant reasons, had intrinsic value, and were barter items that once popularized helped people attain other things (Yerkes, 1989). They later became generally purposed and increasingly viewed in terms of labor and commodity in the 18th and 19th centuries. Scalability, or the ability of things to grow or readily spread across the network, is something that differentiates barter items from more standardized forms. This is the case regardless of whether Native material culture was/is commensurable or ideologically in line with capitalist money.

There were ways that Native leaders eventually ensured their value, and that ultimately allowed more standardized belongings to be exchanged for a service, idea, person, object, relationship, or status. Not calling it currency would suggest that Native people did not know or understand different types of exchange in the 1850s in a markedly intercultural economy, which in turn is also quite Eurocentric. Considering Indigenous people as also conversant in markets disrupts a pure notion of Indigenous people as gift

giving and non-economic. Indigenous people were, in fact, negotiating capably between different ontological expectations of exchange.

This does not mean that modes of production and perceptions of their use-values, relativistic values, exchange values, or an object's spiritual qualities do not differ from culture to culture or when considering colonizer/colonized relations. In commodity exchange, for example, benefits to traders can be augmented by improving the technologies of production and ultimately commodity output (Bell, 1991). Some Native people trading goods in a community might instead not worry about exploiting labor and give what they have, as Coquille elders often call it, "saving some for the rest." While these types of arguments between anthropologists and economists about currency and commodity estrangement versus gift and kin are interesting, it is beyond the scope of this dissertation to spend more time covering what other scholars already have from their own disciplinary vantage points (see Appadurai, 1986; Gregory, 1997; Gosden & Marshall 1999). Ultimately, I call all the various forms currency throughout to be consistent, to disrupt a pure notion of Indigenous people as romanticized gift-givers, and in order to spend more theoretical energy on explicating other communicative properties of them.

Currency as Media/um, and as Necessarily Communicative

All technical systems are cultural systems.

-Harrell, 2013, p. 345

A media studies perspective allows for a way to understand how power is technologically expressed through currency. Media and/or medium⁹ are also appropriate

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⁹ The term media itself is in a constant state of flux with the terms media and medium becoming increasingly intertwined, and in this vein, a recent disciplinary conference was organized around the seemingly simple, yet convoluted question of "What is media?" ("What is? Media," 2016).

to typify currencies because they evoke a disseminative and communicative power, as well as plurality. In a more technical sense, Rasmussen and Stock (2016) state that media stores, transmits, processes and amplifies. Thus, simple objects, for example, even a sewing needle and ax, are media and necessarily tools, because they "relay a force that acts on an object" (p. 98). Currency fits this definition as it relays social and economic information, amplifies a user's negotiating powers, and distributes financial influence among particular social networks or domains of its use.

Currency can also be conceptualized as a technology, and as static or dynamic. It, in its essence, occupies a middle space and reconciles different wants, needs, or obligations between two or more parties (Menger, 1892). Technology, whether it is beads or cryptocurrency, is somewhat dynamic and agentic in that it is not independent but co-constructed by the social forces it organizes and unleashes (Feenberg & Friesen, 2012), and it is also semiotically charged. Similarly, sociology and media scholars such as Latour (1990) state that technology is society made durable (1900), and that technology is not value-neutral but instead can "[assemble] workers, users, even victims, who share in common a world it creates" (Feenberg & Friesen, 2012, p. 3). More simply put, the design of technology helps structure practice and power, and the people using them have agency. From a technological perspective, the forms of currency are also moved by infrastructure, meaning systems that make the transmission of money possible. For example, infrastructure that moves information from credit cards to vendors, or the cryptographic protocol needed for digital money. This infrastructure is largely governed by nations.

Currency is now also primarily defined within economies of nations and can codify power structures (Helleiner, 1988; Anderson, 1983). It is symbolic of order, giving nations various types of control. For example, numismatic sources such as coins, bills, and only sometimes visual representations of digital currencies, are often packed with iconography and information that is significant to a nation. They contain symbols of political systems, religious life, and economic order. Through a symbolic process, currency like other print media (e.g. mass-produced books, religious pamphlets), become intimately involved in the imagination and maintenance of community, national, and global relations (Anderson, 1983). According to Anderson (1983), the rise of print capital afforded the spread of materials and ideas, and ultimately allowed people to relate to one another in new ways. He argues that "the convergence of capitalism and print technology on the fatal diversity of human language created the possibility of a new form of imagined community in which its basic morphology set the stage for the modern nation" (p. 58). While he makes an argument about the sense of sharedness amongst those who spoke privileged or shared languages, currency united people with the use of mass media for a particular purpose and served as a privileged symbolic language that spoke to everyone. In colonized states, currency can be viewed as a form of print capital that was imposed upon the colonized. It carries the colonial understandings of nations as constructed, privileged languages, and shared ideas of value (Chatterjee, 1993). Certain forms of currency, typically from powerful nations, become privileged and pervasive currencies. According to Hart (2001) money is also the world's memory bank, remembering transactions, culture, and shifts in unequal power relationships. This is the case of the dollar in the U.S. for Native American nations.

In more recent work, Risse (2003), for example, argues that money is an important part of a community identity building process citing specifically the euro for the European Union (E.U.). The E.U. is now tied to the euro, and it symbolizes a collective super Europe, rather than their composite smaller nation-states. The euro in some ways makes the E.U. real, reifying its political order and serving as a means to create a collective identity within a larger "imagined community" (Anderson, 1983). Collective identity to the E.U. (as a construct), was shifted and codified on the money itself. Interestingly the United Kingdom decided not to get rid of the pound and are now grappling with their vote to leave the E.U. or to "brexit." Risse (2003) notes that there has been a mix of enthusiasm, ambivalence, and opposition to the Euro, suggesting that there are ways of identifying though national currency.

Greece is an important example, demonstrating how a country can lose a sense of identity and sovereignty, alongside shifts in currencies from its own (the Greek drachma) to the euro and within periods of financial crisis. Greece is no stranger to financial crisis, having weathered hyperinflation during and after WWII and leading the drachma to be widely thought of as useless (Kondonassis, 1977). But more recently, Greece suffered one of the "worst financial crises in modern history," met with political unrest (Panageotou, 2017, p. 358). When the euro launched in 1999, Greece did not meet the criteria to adopt the euro, but later did in 2001. However, Greece misrepresented its finances in order to join Eurozone (monetary zone accepting the euro), creating a scandal in the E.U. In the aftermath, Greece is left in hundreds of billions of dollars in debt that it cannot pay, and has had to cede a large amount of financial and governmental power.

According to Panageotou (2017),

Now that Greece has ceded control to the Troika¹⁰, Greek sovereignty is a chimera, existing in name only, and democratic processes have been arrested once again and castrated of their power. As Molotov cocktails rained down in front of the Parliament building in late July 2015, indicating popular opposition to the new measures, the leftist SYRIZA administration, cooperating with the right-leaning parties it has sworn to oppose, has voted through the most extensive economic restructuration to date. (p. 373).

While Greece has the ability to legislate over its own internal affairs, its financial sovereignty and decision making is beholden to external powers. Greece is still working to grapple with the loss of trust of the E.U., its own citizens, and the global economy.

In another study of currency and nations, Carruthers and Ariovich (2010) bring attention to the events of the American financial crisis of 2007 and 2008. This situation clearly demonstrated that "modern financial systems, built on solid foundations of credit and supported by massive amounts of capital, can nevertheless be surprisingly fragile" (p. 1). The U.S. government bailed out some of the leading financial institutions, raising the issues of corporate governance and inequitable distributions of wealth. Carruthers and Ariovich (2010) point out that even strong institutions, backed by large amounts of capital and relatively strong infrastructure, can be fragile. This work cites other more explicitly global credit crunches, and Peebles (2010) states that even depersonalized debt "eventually comes due; the citizenry of the nation-state suddenly discovers, to its chagrin, its non-alienated attachment to debt instruments that it may not even have contractually initiated" (p. 232). According to Panageotou (2017), all 21st century financial crises

10 Troika refers to the organizations that lent to Greece during the financial crisis.

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should be thought of as global. Further, bail out packages and crisis management are marked by international politics and dysfunction (Panageotou, 2017). In these cases, banks often grappled with a lack of liquidity and the trust between citizens and that government. The global economy was tested.

While this literature shows how currency is involved with remembering the world's transaction and financial crises, it presents a gap regarding how currency also remembers colonialism and other meanings such as tradition. Steryerl (2006) poses the questions, "What if things could speak? What would they tell us? Or are they speaking already and we just don't hear them? And who is going to translate them?" (para. 2). After, she discusses how Walter Benjamin takes this idea a bit further and proposes a materialist view that things have a systematic language which is mute, magic, and can be understood within a commune of other things. This correlates currency to linguistic semiotic signs, and signs make sense in relation to one another (Culler, 1986). However, in this dissertation I am not concerned with magic, I am concerned specifically with how colonialism surfaces in forms of currency. I am also concerned about how forms of currency, shifts in currency, and ultimately the meanings produced by those currencies may differ for Native communities.

Shift to Colonialism Literature and Theory

In my analysis, I turn to theories pertaining to colonialism that understand colonization of Indigenous communities as structures, grammars (Calderón, 2014), historical events, and lived experiences (Million, 2008). Most of these theories are critical in that they assume colonialism can also be challenged and resisted. Literature and

thought in this area is drawn from applying textual, discourse, and belonging analysis, described in the following methods chapter.

Colonialism

Theoretical areas that speak back to issues of colonialism include postcolonialism, decolonization, and critical Indigenous theory. These theoretical areas have important overlaps, and differences, but ultimately perform important oppositional work through critique and calls for social transformation. Colonial and postcolonial theories tend to focus largely on external colonialism and internal colonialism (Tuck & Yang, 2012). External colonialism refers to the extraction of Native resources such as diamonds, grains, fish, and human labor among others. Decolonial theories tend to focus more on internal colonialism. This refers to the forces within the borders of a nation which seek to maintain the status quo of dominance, or often Whiteness (Tuck & Yang, 2012). For example, surveilling and criminalizing people of ethnic minorities. However, both internal and external colonialism are happening at the same time in the U.S., since there is little to no spacial divide between colonizers and Native people in America, meaning they live in the same general space (Wolf, 1999). Settlers are in America in a totalizing colonial state, extracting Native resources, having moved Native people to reservations, internally policing them, appropriating their culture, and making what they believe will be a permanent home on their lands (Tuck & Yang, 2012). In the process, colonizers develop their own version of sovereignty and nationhood, and seek to eliminate challenges from Indigenous peoples. Most strands of decolonial theory state that land must be given back, and that this is the overarching priority (Tuck & Yang, 2012). Other

strands work to chip away at colonial residues and build the base for a decolonized future

A facet of settler colonialism is the deployment of false narratives which serve to comfort settlers in their practices of stealing and genocide. These narratives are referred to as settler moves to innocence (Mawhinney, 1998; Tuck & Yang 2012). This is a means for settlers to assuage their guilt over what they have done, as well as a way to extend and maintain their settler state of being in the future. For example, settlers create a version of Indianness as savage, men as brute and violent, and women often as hypersexualized and civilizable, in order to rationalize their ancestors' "brave" efforts in trying to "civilize" them to adhere to Eurocentric standards (Pearce, 1988). An important theory for this phenomenon is called "imperialist nostalgia" (Rosaldo, 1989). Under this theory, imperialism is made palatable for perpetrators of injustices, and settlers build monuments and memorials of Native people to relegate them to the past. This will be shown in the first case study, where I detail how Native people are memorialized on currencies. Other settler moves to innocence can be subtler. For example, Americans claim and rationalize through their history that colonization happened hundreds of years ago, ¹¹ and that Native American peoples should just get over it. These moves to appear innocent seek to undermine Native American epistemological foundations, lifeways, identity, and foremost, their claims to the land.

Postcolonialism

In this section, I will discuss more about postcolonialism and decolonialism, their shared goals, and their differences, starting with the work of Shome and Hegde (2002).

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¹¹ In perspective, hundreds of years is a very short time in tens of thousands of years of history that Indigenous people have lived in North America.

The authors argue for the confluence of communication and media studies with postcolonial scholarship, and demonstrate how postcolonialism is unique in its ability to critique colonization, offer real solutions, and place these issues in larger international and geopolitical contexts. They ask scholars to avoid stopping at the description of the facts of colonialism but to take an emancipatory political stance and extend interventionist theoretical perspectives. This strategy seeks to undo and redo historical structures of knowledge production with problematic roots, seeking transformation.

Postcolonial theory recognizes that the production and privileging of Western or Eurocentric knowledge is problematic for Indigenous people, and that to call out and "unsettle" is to perform important critical work. The authors state, "institutionalized knowledge is always subject to forces of colonialism, nation, geopolitics, and history" (p. 251). Scholars including Foucault (2002) on knowledge, Gramsci (2000) on hegemony, and Said (1978) on the Other, are formative in postcolonial approaches to communication and media studies.

For example, in Said's (1978) work on orientalism and his conception of Other, he offers that the notion of otherness is tied to knowledge, and power acting through knowledge to achieve political agendas in its goal of domination. Orientalism is a political vision in which the West that defines itself in contrast to an imagination of the Orient, the Other (Middle East and Far East). He argues that orientalism is largely a myth of discourse stemming from academic and media texts that imagine the Orient in fictionalized, traditional, exotified, and otherwise pejorative ways. Said states that those in positions of power to define others tend to do so in their self-interest. LaRocque (2010) also describes how colonial texts operate as an affront, and are tools used to designate

racial superiority and inferiority. They are based on power to define, represent, and determine themselves in oppositions. It is a problem of fraught knowledge and power acting through knowledge for the purpose of domination (LaRocque.; Foucault, 2002). This thinking has proven fruitful for not only thinking about the Middle and Far East, but also in looking at a variety of imperial relations, such as Native American and Indigenous Studies, making it valuable for the intellectual development of Postcolonial Studies.

In the case of settler colonialism in the U.S., Americans envision themselves as different from the pejorative stereotypes or discourses they deploy about Native people. Interestingly, however, is that many Americans actually also want to be or believe that they are Native American and "play Indian" (Deloria, 1999). Settlers simultaneously colonize while acting envious of what they believe is the cultural coolness (in a Bourdieu (1986) sense) of being Native. The idea of playing Indian is rooted in cultural appropriation, the taking of elements of a different culture (Rogers, 2006), and is a colonial fantasy (Deloria, 1999). Cultural belongings, including intricately beaded regalia, artwork, and the most culturally appropriated form, the headdress, are "cool" in the sense that they are meaningful belongings to Native peoples. But that does not mean that they should be worn by White people for their own amusements. This occurred in the Colonial Era. For example, during the Boston Tea Party when patriots dressed as Indians and dumped tea into the ocean to protest taxation, it is also reflected on images and belongings. For example, in the first case study, I analyze headdresses and appropriated images of Native American peoples that are stamped into coinage. This also occurs present day with appropriations of sexy Indian Halloween costumes, electronic dance music festival outfits, and caricatured mascots. Americans regularly wear clothing or

prints of tribal significance, and hoard the cultural artifacts of Native American peoples.

And to defend themselves, they deploy the rhetoric of having ancestry they may not really possess. This is a settler move to innocence.

Essentially, Americans want to play Indian, and claim the positive aspects of a culture they fetishize, while being complicit in the marginalization of Native American peoples who often live with the negative aspects Americans have created for them, as part of the colonial process. For example, Duran and Duran (1995), use the phrase postcolonial stress disorder to characterize the alcoholism, depression, suicide, and identity crises that tribal members can face as a result of grappling with the realities of colonization. Million (2008) also offers "felt" theory as it relates to Native people's experiences with colonial realities, specifically in relation to sexual abuse and gendered violence, which happens at much higher levels in this population. She defines felt theory in a way that is rooted in real life issues and contexts as, "truth in the emotional content of this felt knowledge: colonialism as it is felt by those who experience it" (Million, 2008, p. 272). Forced relocation, assimilation, and imposed poverty have created a host of psychological and physical health issues for many Native American peoples today. Many of these issues can be addressed with Indigenous ways of healing, and with recognition of how these issues are inextricably linked to hundreds of years of continued colonial imposition.

The effects of colonialism on Native American tribes have been widely studied, often in the context of specific tribal nations (Klopotek, 2011; Simpson, 2014; Jacob, 2013). This is beneficial because it serves to honor the individuality of tribes, rather than a pan-Indian collective. Despite the challenges and injustices of colonialism, Native

American peoples have survived, and will continue to survive. And solely focusing on the negative aspects of colonialism is not productive or holistic. As stated, Vizenor (1994) suggests that Native people should take a position of pride and contemporary presence over only focusing on being victims.

Decolonialism

Though postcolonial studies tend to overlap with decolonial studies, in that they both critique colonialism, those interested in Native American peoples and Indigenous nations in North America, like Canada and the U.S., generally prefer the term prefix "de" to "post." The prefix post, for some, suggests that we are past colonization; that the settlers or colonial forces have actually given land back to Indigenous people, which is more in line to some degree with political conditions in perhaps some African countries or in India (though not all of India and not all countries in Africa were "given" back). This is a problem as "settler sovereignty and jurisdiction are assumed to be always-already settled, over, complete," though it is ongoing and actively contested (Mackey, 2016, p. 14). In *Decolonizing Methodologies*, Tuhiwai Smith brings up a question that Aborigine activist Bobbi Sykes asked at an academic conference on postcolonialism, "What? Post-colonialism? Have they left?" (p. 24). This question is of course meant to underscore that colonialism in the U.S. is still happening.

Current upholders of colonialism in the U.S., namely the state and the federal governments, pat themselves on the backs for supposedly restoring tribes to pre-colonial realities, and for "granting" tribes sovereignty and some reservation land. Tribal nations own less than 1% of total land in the U.S. when 100% was originally theirs (Miller, 2012). This is also a "move to innocence" or claim that makes them feel better about the

genocide of Native people (Tuck & Yang, 2012). Letting t tribal nations control their own lands, people, and destinies, which includes giving them their land back, would move the U.S. to a postcolonial state. Simpson (2014) argues that Indigenous people should engage in a politic of refusal—a refusal of Western epistemology, traditions of domination, and general ways of life. Moreover, she states that this should be done "without the sanction, permission, or engagement of the state," meaning that it cannot happen by acquiescing to the colonial system (Simpson, 2011, p. 17). This regards an active state of resurgence and resistance.

Technological Considerations

Raibmon (2005) demonstrates that colonial definitions of Native authenticity, what makes a Native person a Native person, are often rooted in a past anthropological view of Native people as timeless. Discourses of authenticity or being a "real Indian" were created by people like missionaries, settlers, and government officials in the late nineteenth and early twentieth century, to create binary oppositions between whiteness and Indianness. Often times this sense of authenticity is based on the types of technologies that are used. An expectation that real Indians have bows and arrows, not guns, for example, or only use beads and food stamps, not cryptocurrency demonstrate this clearly. This draws some similarities to orientalism, and the civ/sav dichotomy mentioned at the beginning of this chapter. This is how Indigenous people are constructed as savage, while White people are presented as civilized. Raibmon describes how there were challenging demands of Native people to adhere to a sense of authenticity in the Colonial Era, while at the same time adapting and creating new technology that signified modernity.

Another popular example of expectations of technologies and discourses comes from Philip Deloria. He compellingly opens his book *Indians in Unexpected Places* (2004) by thickly describing a mid-twentieth century photograph captioned "Red Cloud Woman in Beauty Shop, Denver, 1941." The photograph is of a Native woman wearing a beaded buckskin dress, sitting under a hairdryer and getting her nails manicured by a White woman. Deloria then states,

I have shown this photograph to many people over the last few years, and, almost always, someone chuckles... If the laughter is not overtly racist in nature, it nonetheless suggests that broad cultural expectations are both the products and the tools of domination and that they are an inheritance that haunts each and every one of us. To chuckle at Red Cloud Woman without malice is perhaps possible. To separate oneself from the history that produced the chuckle is not, and that history contains a full share of malice and misunderstanding. If we ignore the humor of the anomaly and focus instead on expectations, we might find the grin wiped from the face of America. (p. 4)

This photo presents a moment in which White expectations of Native Americans adhering to a tired and romanticized notion of primitiveness (see Torgovnick, 1997) is contrasted with modernity. "Red Cloud Woman," (nameless in the titling of the photo), produces a chuckle for spectators because Native American peoples are expected to be a certain way that is/was apparently not congruent with use of modern technology.

Native American peoples' contributions to the use and creation of newer technology breaks down, and challenges, these racist assumptions. For example, Nakamura (2014) considers the role Navajo women played in technological innovation as

they worked on circuit board chips at a technology company, Fairchild. A semiconductor plant was placed on the reservation, and Nakamura describes the contexts of racialized digital and high-tech factory labor. Native American peoples, through industrial jobs and technological inventions, have time and time again proven technological advancement, yet are still stereotyped in other ways. In another book, Deloria (2004) points out that Native American peoples often leapfrog technologically over the rest of America as early adopters. He discusses how Native American peoples drove cars a half-century before World War I. Ironically, Indians used their cars to taxi White land surveyors who arrived on more "primitive" horse and buggy modes of transportation, or on foot, to scope out general allotments for sale. One strategy to resist colonization is to actively point out and challenge the epistemological formations or assumptions of colonizers, regarding what a Native American is or should be in relation to technology.

Another strategy of decolonization is envisioning and representing technological futurity. This regards documenting and building a future that serves Native peoples, and uses tools like art, science fiction, and networked computer systems. It is often referred to as engaging Indigenous or Native futurism (Dillon, 2012), and as Jameson (2005) suggests, the future is constituted in the present and built upon the past. Native people often consider looking multiple generations ahead, thus futurity is at the core of Native epistemologies. However, Indigenous futurism's work is afforded or inspired by the theoretical contributions of Afrofuturisms. Afrofuturisms urges Black people to take control of science and art to imagine a radical future, drawing critically on science fiction, music such as the Parliament-Funkadelic collective with George Clinton, comics and films (Womack, 2013; Anderson & Jones, 2015).

This school of thought is particularly relevant to the cryptocurrency case study, and demonstrates how Native people are using digital technologies that reflect Indigenous cultures and traditions to claim new spaces. Some examples are video games, cryptocurrencies, futuristic art, and post-apocalyptic literature, and use of virtual mediums that tend to have strong technological components to them. For example, The 6th World (Becker, 2012) is a short science fiction film in which a new Navajo Nation on the planet Mars is imagined. In the film, the tribal nation has increased its sovereignty and resisted the colonizer, endeavoring a leading role in space exploration. There is also literature on the increased presence of Native people in digital spaces, like the Internet. Gaertner (2015) shares the example of CyberPowWow, an interactive digital art gallery that created a new tradition of online ceremony aimed at community building. In this space, visitors engage with the artists about their artwork, within a territory created by Indigenous peoples for Indigenous peoples. Overall, Native futurism is decolonizing in practice, reclaims land in cyberspace, probes, and speaks back to the question of, "How do Native Americans, as people constructed often as technologically backward, live lives in relation to technology and how do they use this technology to engender a sense of futurity?"

Conclusion

This chapter walked through several bodies of literature relevant to the dissertation's guiding questions. First, I introduced the current status of literature on currency and Native communities, revisiting the problem and gap. Afterwards, I moved into a review of currency as a communicative symbolic form. Next, I reviewed the literature on currency from a media studies perspective, and more specifically on how

power is expressed through and by communication technologies, followed by a discussion on how currency is entwined with understandings of nations. The chapter ended by describing theories, schools of thought, and literature about colonialism, as well as its relationship to technology.

CHAPTER III

METHODS

This dissertation's core content consists of two case studies that are preceded by brief chapters that function to provide backgrounds, or limited sweeping histories, of Native American and colonial currencies, as well as policies and traditions around them. The two case studies, later described in detail, span a time period from the 1850s to present-day. The first case study is markedly historical, and concerns currency in the context of the Rogue River War of 1853-1856. The second is contemporary, focusing on MazaCoin and the idea of cryptocurrencies for sovereign tribal nations in a digital age. These are two episodic and distinct case studies that focus on different currencies, both land-based and digital.

In this chapter, I provide a description of the case study approach, the body of information collected and consulted, and the specific analytical methods used in the process of completing each case study. After, I offer a statement of self-reflexivity about the subject position I embodied during the process of designing and completing this study. Then, I detail some of the ethical challenges and benefits of producing research that aims to be accountable to Native peoples. I highlight how this dissertation was designed and completed with sincere intentions of being beneficial to tribal communities as opposed to extractive (e.g. taking away items or forms of knowledge from tribes in a non-altruistic manner). Several sections of this chapter are written in the first person, a choice that allows me to assume responsibility for my methods.

The following guiding questions will be answered using the methods described in this chapter:

- What are the cultural meanings that are embedded within specific forms of currency?
- How are practical and technological strategies enacted around currencies to strengthen, constrain, or otherwise shape tribal sovereignty?

For the "Indigenous Cryptocurrency and MazaCoin":

 To what degree do racialized discourses circulated through media and historical accounts contour these meanings?

In looking at both case studies together:

• How do shifts in forms and meanings of currencies play roles in Native American and United States governmental and social relations, as well as our understanding of nationhood within an overarching capitalist system?

Qualitative

In order to ascertain the meanings of currencies in specific Native American and colonial contexts, and to shed light on national and cultural relationships that are intermediated with/through currencies, this dissertation uses qualitative approaches.

These are concerned with finding interrelationships between a host of categories and interpreting them (McCracken, 1988), and to help guide the process of describing, defining, expanding, interpreting, and explaining, all of which are overlapping and interrelated. For example, defining what a bead is, and what it means, cannot happen without an interpretation of its extrinsic qualities and cultural specificity. Informed

explanation of a bead's perceived values cannot happen with prior assessment, and interpretation, of its symbolic functions.

Within the qualitative tradition, I rely primarily on interpretive, critical, and Indigenous methods as opposed to solely empirical-analytical methods. The latter of which often tends to emphasize objectivity and measurable outcomes. Critical Indigenous research (CIR) scholarship often points out that positivism, and the belief that there is one truth or one right answer, is rooted in Western scientific methods that are tied to colonialism and imperialism (Tuhiwai Smith, 1999; Brayboy et al., 2019). Objectivity is quite slippery, and LaRocque (2010) and Tuck and Yang (2014), among other scholars, discuss how objectivity is not real. It is actually a self-serving tool or technique used in Western argument to manage its own history and quiet or make absent the words other others, particularly dissenting others (LaRocque, 2010; Tuck & Yang, 2014). Interpretive and critical methods are appropriate for this study because they are concerned with presenting and analyzing phenomena, and material culture, in a more anti-colonial fashion. These methods can produce more subjective and critical forms of knowledge and allow for a focus on meaning-making for people and collectives of people in relation to larger cultural or socio-political contexts and struggles. While qualitative work is often described as less structured than other paradigms of research, Mason (2002) contends that qualitative researchers must prioritize creating structured, systematic, and rigorous studies.

Case Study Research. Focusing on currency in two distinct contexts or cases, one during the Rogue River War in the 1850s, and the other for Indigenous peoples considering currency technology in the digital age, I employ a case study approach as a

means to be transparent and systematic about strategies and analytical choices. Case study research is, in essence, an umbrella or overarching method that results in the deep consideration and description of phenomena in relation to theory and context (Yin, 2009). In addition, this approach is particularly useful in answering the how (descriptive nature) and why (explanatory nature) of a situation (Yin, 2009), and those types of questions about currencies guide this dissertation.

This case study approach is also appropriate because of its parallels with historical methods. To build micro and macro level historical narratives, historical methods rely upon the location and evaluation of primary sources, consultation in oral histories, and analysis of the archaeology of ideas and things (Tosh, 2015). Although case studies tend to be organized structurally differently than histories, the two have many similar qualities, and privilege experiential and in-depth understandings of social, temporal and material topics. These approaches allow research to go beyond description.

Case study approaches have a number of other perceivable strengths and weaknesses. One weakness, for example, is its overall reputation in academics as a non-scientific or informal default method that tends to portray one-off cases or events in medicine, law, or ethics (Gomm, Hammersley, & Foster, 2000). It can also be viewed as susceptible to criticism concerning subjective knowledge production. However, as previously mentioned, subjectivity is preferred and highly valued in a number of traditions including Native American and Indigenous studies (Simpson, 2007), and compelling and varied forms of evidence and analysis can address research questions or thesis statements well. In this regard, a major strength of case study research is that it

allows for the use of several sources of evidence or data to explore and help understand the phenomenon in real-life contexts (Yin, 2009).

This dissertation became saturated with information collected over time, and required flexibility and awareness that novel and unexpected themes and issues would emerge in the information collection process (Mason, 2002). Often times "data" or information, viewpoints, documents, or histories differ in Native American and/or non-Native understandings, though this is not a strict binary. In this dissertation, differences in the meaning and value of information came up frequently, and I found it important to ascertain how it was produced, why was it produced, who was it produced for and to that end, who it marginalizes, includes or excludes. For example, a paper map I included from the Colonial Era is held up as the highest form of epistemic proof that colonists use to make claims of land ownership even to this day. However, this map form is entirely invalid among many Native people who know maps are constructed falsehoods, based on many other forms of epistemic truths. For example, knowledge is encoded in oral stories, including those that describe that land is not "owned" by anyone at all, but that it belongs to nature itself (Mackey, 2016). This raises the importance of considering ontological questions, or the nature of realities, and how that differs from nation to nation, culture to culture, person to person, and person to other beings.

Preview of specific methods. The specific methodologies and approaches used in this dissertation, under the larger umbrella of case study research, are textual analysis, discourse analysis, interviews, archeology, lifeworld engagement or participant observation, and historical methods. These will be detailed in this chapter, as I walk through the information collection and analytical choices for each case study. Utilizing a

variety of methods, as I do, is consistent with Yin's (2009) rationale for triangulation, which highlights the ability for multiple methods and sources of data to corroborate findings and "address a broader range of historical and behavioral issues" (p. 115). These methodologies supplemented one another and ultimately resulted in more varied opportunities for analysis within each case. The cases themselves were selected on the basis of my interest, idiosyncratic opportunity, and their relevancy and ability to answer or shed light on this dissertation's guiding questions. In the following sections, I share how I become involved with each case and why my positioning within them is important. I begin with "Case Study One: Land Based Currency in Colonial Oregon."

Archeological, Historical, and Archival Research and Partnerships

I was invited to participate in a Southern Oregon University Lab of Anthropology (SOULA) project that archaeologically and ethno-historically reconsiders sites of importance during Oregon's Colonial period. This project was brought to my attention by Southern Oregon SOULA Director Dr. Mark Tveskov and the Coquille Tribal Historic Preservation Officer (THPO). A letter of support from the Coquille Tribe, of which I am an enrolled member, reads as follows:

This project affords us the opportunity to tell the story of colonization and changing Tribal culture and sovereignty in a holistic and cohesive manner. The Coquille Indian Tribe supports projects that better inform its Tribal members and the public about the social and cultural history of southwest Oregon. By looking

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¹² Despite previously slipping into the cracks of mainstreamed historical attention, Oregon tribal consideration has been paid to this war. The Siletz, Grand Ronde, Coquille, and Cow Creek Band of Umpqua Tribe of Indians are listed as coresearchers on SOULA's project (Tveskov, 2015). Many Oregon tribal nations, including some listed above, are prioritizing the colonial period as critical to understanding their/our place and history present-day.

at currency as a component of a much larger story, this project will engender a spirit of healing as the story unfolds. (Rippee, 2016)

Importantly, this letter acknowledges that currency is but one element that guides the understanding of larger issues.

A number of sites of significance including Battle of Hungry Hill, Battle of Big Bend, Geisel Monument, Harris homestead, Fort Lane, Miners' Fort, Tseriadun, and Limpy Creek were surveyed. One of the main settings of this case is Gold Beach, a city that mythologies and still celebrates gold history and colonial history. ¹³ During the summer of 2016, I participated in, and video documented, archeological excavations of sites in Gold Beach on Oregon's Southwest Coast and other areas in the state. I also spent two and a half years completing post-excavation research. One of these sites is named Miner's Fort, which was built in the 1800s by gold miners, and another is called Geisel Monument State Heritage Site. This monument is located on the former homestead of a pioneer family who was attacked and had their home burned down in the war, in retribution by Native peoples. The site is now encircled with pine trees, and has picnic tables used mostly by drivers looking for a convenient rest stop along the 101 freeway. The land surrounding Miners' Fort, less than a five-minute drive from the Geisel monument, overlooks the ocean and is now occupied primarily by a herd of cattle. Prior to the excavation, remote sensing, electromagnetic induction, ground penetrating radar, aerial tools, and earth resistance surveys helped to locate important features and objects and produced images that demarcated boundaries of the sites (Tveskov et al., 2019).

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¹³ For example, the city website boasts of the "shiny stuff" also found in 1853 along the mouth of the Rogue River, and the city advertises itself by offering that "people who come to Gold Beach for one thing usually end up discovering a whole lot more. In short, there's still plenty of gold in Gold Beach" ("Gold Beach History," para. 13).

A typical day consisted of an early morning rise, a caravan of student and professional archeologists driving to the excavation site, a full day of documentary filming and excavation, and shoveling and sifting through dirt, followed by time to complete, document, and process notes on experiences and artifacts/belongings. Aspects such as location, size, and color were noted, and most of the belongings were lifted from the soil and put in bags to be stored and brought to SOULA facilities. This did not occur without critical consideration. For example, we questioned the ethics of extracting belongings. Ultimately, this process was discussed collaboratively, in partnership and agreeance among tribal communities and various stakeholders, done conservatively, and with the altruistic purpose of better understanding and correcting fraught histories (Tveskov, 2015; Tushingham & Brooks, 2017). As Schaepe, Angelbeck, Snook, and Welch (2017) assert, archeology and place-based research can be therapeutic and counteract cultural stress. After each day of excavation, there would be group cooked meals, nighttime conversations around the fire, or a trip to the local bar, followed by a night's rest in tents alongside a creek in a recreation vehicle park. On four evenings, talks were held by a Historian Ben Truwe, Professor and Lead Archeologist Mark Tveskov, Siletz Tribal Historic Preservation Officer Robert Kentta, and Linguist and Researcher Patricia Whereat Phillips as part of a public lecture series. This provided deeper context and meaning of the sites, and war, to the community of Gold Beach and to the archeology students and participants.

I consider my involvement as peripheral ethnographic participation in a critical archeological project. This was an opportunity to be of service to my tribe, to observe the excavation, and to also partake in a unique opportunity to demonstrate the validity and

benefits of archeology, not just media archeology in a Foucauldian sense (see Huhtamo & Parikka, 2011), for communication and media studies. This stance, subject positioning, and approach allowed me to better connect with the material belongings that provide grounded evidence, and texture, to this dissertation. Putting my hands in the ground, getting the opportunity to sift through soil for a month, holding beads, talking to community members, and creating an important relationship with SOULA was far more experiential, in-situ, holistic, and personally meaningful than simply asking for the images of the artifacts, to later analyze out of context in a lab after the work was complete.

As explained above, the belonging-based material cultural information collection was accomplished during the excavation through photography. I used my smartphone, a professional still camera (see Appendix C), and a video camera, and took notes on the belongings found. Ultimately the assemblage consists of beads, crucibles, coins, metals, bullets, bottle caps, a weapon, a perfume bottle cap, and trade materials among others. I paid particular attention to documenting the currency-like belongings, namely coins, because of their relevance to answering the guiding questions.

Artifact-based Material Cultural Analysis as Belonging Analysis

The material culture, such as beads, coins, and gold, is analyzed with a generative analysis method that I am calling *belonging* analysis. The analytical technique honors artifacts, not as generic sterile items that should be handled with white gloves and that are destined to be held in a neo-colonial museum (Classen & Howes, 2006), but as more connotatively personal or meaningful belongings (Schaepe et al., 2017). As stated in the introduction, things, stuff, tools or as I choose to call them, belongings, belonged to real

people with real lives and real stories. Currencies, as the belongings of focus in this dissertation, belonged-larger cultural systems. Within these systems, many people that transacted had established relationships, and exchanges, with them. For example, currencies such as shells and beads were made from natural resources, and were possessed perhaps by a person or tribe who potlatched or otherwise used them in clothing, jewelry, ornamentation, and as other tools. Or, often times trade beads belonged to Europeans who knew the value that they had as cultural intermediaries with Native people (Graeber, 1996). The metals and raw materials of coins and paper money first belonged to the earth or trees, then they were possessed by colonial peoples, then the state, and thereafter were manufactured into coins or other tokens. As an increasingly global economy emerged, these currencies eventually belonged in perhaps more estranged, and artificial ways, to individuals and groups; currency is both personal and impersonal.

To analyze currency in this regard, I draw from and combine aspects of textual analysis and acknowledge settler grammars, defined in the section below, that are embedded within currencies and expressed in intercultural communicative exchanges. Textual analysis generally allows researchers to understand or interpret meaning in various texts, artifacts/belongings included, and reflect on the conditions in which they were produced (encoded), distributed, and consumed (decoded) (Hall, 2007). This relies on the assumption that texts are culturally significant and expressive of larger meanings, and further that specific elements of a text help perform the work of producing those larger meanings. Specifically, I annotate aesthetic and practical features of the belongings, describe the ideologies that are expressed through their creation, existence,

and use, and I make conjectures about their significance within the archeological excavation and historical moments.

Additionally, I draw from some of the terminology and techniques of semiotic analysis. Specifically, I am attentive to icons, indexes, and symbols. Icons describe signs which resemble, imitate or copy. Indexes regard causal and illusory relationships, or connections, between signs and other objects. Symbols are arbitrary relationships between signifiers and signifieds, and meta-symbols transform symbols into almost universal stand-ins, for example, a dove or an olive branch as a symbol of peace (Rosenthal, 1994). In studying currency, the vast majority of the signs analyzed are iconic in nature, particularly bills and coins that have images that imitate and represent people and designs. Building upon this methodology, Barthes (1972) adapted linguistic semiotics to cultural studies and focused more on the ways media texts can be read and how they produce larger cultural myths. For example, that currency itself signifies national identity.

Semiotic methods are also useful in this dissertation for providing a framework to debase taken for granted meanings, theoretical assumptions, and cultural myths. For example, the clear colonialism that surfaces in texts. This dissertation also goes beyond descriptions to understand what else can be gained by looking at currency as a communicative artifact in a pragmatic manner. When textually analyzing a coin in the case study and situating it within a body of other coins, I also expose settler grammars and latent taken for granted colonial meanings embedded in currencies, as well as the technological and practical strategies around them. Coins are also the most information dense and icon-rich belongings I analyze. And as I will describe in the case study, they

express distinctive settler grammars. Calderón (2014) proposes the concept of settler grammars to help explain the networks of ideas, institutional practices, myths, and discursive logics that function to support the colonial ideology. Calderón (2014), in her work on social studies curriculum as a colonial text, acknowledges the ways in which settler colonialism is naturalized, typically through a "dialectic of Indigenous presence and absence" (p. 313). This dialectic employed by settlers recognizes that Indigenous people exist or are present but sometimes only in an assimilationist sense and only in a way that frames settler survival and settler superiority as paramount (p. 313). The making of Gold Rush coins includes a host of production and implementation strategies that provide windows into colonialism. With the combined textual methodologies' strengths in exposing and interpreting embedded meanings and the histories and features and strategies that racialize currencies, belonging analysis uniquely works to help answer the dissertation's guiding questions.

Document-based Material Culture Information, Consultation, and Analysis/Integration

Document-based material cultural information gathering occurred in several phases before, during, and after the excavation. The assemblage of materials I consulted consists of war chronology documents, journalistic sources, economic records and trade post information, photographs, certifications and letters, maps and visual renderings of battlefields and relevant sites, oral accounts, tribal records, museum placards, and signage at archeological sites.

Prior to excavation, I consulted historical letters, diaries, and newspaper articles pertaining to the Rogue River War, the Gold Rush, and economies of the time. These

were primarily collated from an online archive titled, *Southern Oregon History Revised* (Truwe, n.d.). Other documents were collected from historical newspapers, including *The Daily Astorian*, *The Oregonian*, and archives including Southwest Oregon Research Project (SWORP) conveniently housed in the University of Oregon Knight Library.

After the excavation, follow-up was needed. Primary sources, such as photographs and certificates, were requested from consultants, including a man who is a descendant of a Tolowa woman who played an instrumental role as a cultural intermediary in the war. Additionally, I asked for information from Coquille tribal elders and two jewelry makers with ample knowledge of overall tribal history and particular knowledge on beads and shells used during the 1850s to present day.

When choosing these sources, it was my intention to use them in building a historical backdrop that provides context and newer perspectives about the war, as well as the significance of currency forms and exchanges that occurred during the war. Most were analyzed with a historical methodological approach of assessing and integrating sources after taking copious notes on them (Tosh, 2015). When integrating the sources in the case, I was attentive to, and included some, critical comments on how the data was originally created and gathered, and by whom. This is done in order to acknowledge that some data, including many Oregon newspapers in the 1800s, tend to be sympathetic toward pioneers and racist toward Native people. It is necessary for this to be noted and critiqued in order to be accountable to Native people.

Purpose of Interviews

Though I analyze and historically consider material culture, both belonging and document-based, I thicken the cases with interviews for several reasons. Firstly, historical

research need not only be text-based. Adding living voices, transcribed into text, contributes an element of presence by highlighting what people are saying about the belongings now and also based on their historical memory. However, there are limitations to those accounts because the case is set in a historical period over 150 years ago. None of my consultants were alive during that time and while memories are valid forms of evidence, they are passed down and may fade over time. A second reason why interviews are weaved into the case study is to better explicate the belongings and their meanings in tribal communities, and to add Native perspectives that are often excluded from histories. I refer to the people that I interview as consultants, not subjects because they are all experts in their own right. For example, tribal elders that I consulted are keepers of stories told about the Rogue River War, and what happened after their families were taken to the reservation. Since Native people did not have written language at the time, and did not write letters at the time like settlers and White government officials did, I want to honor Native epistemologies and include the words of people who have their own opinions about the war. Ignoring these forms of knowledge has been a major critique of scholarly work on Oregon's colonial period that I want to address. For example, Beckham's (1973) Requiem for a people: The Rogue Indians and the frontiersman was among the first contemporary inquiries into Colonial Era in Oregon, but Beckham uses mainly "white evidence," letters and documents, rather than "Indigenous" knowledge. As Riggs, a descendant of the Rogue is quoted in Philips and Riggs (1971), "I don't think it's all in the book. He never got no Indian documents on there. It stands to reason he'd favor the whites" (p. 981). 14 Lastly, I use interviews because they give texture by

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¹⁴ There are also criticisms about how the author acquired documents from Coquille scholars and, as a result, he does not have a good reputation in the eyes of many Native people.

supplementing details, adding side stories, and bringing different layers of truth and untruth to light.

Interview Process and Analysis

I view the interview process mostly as personal, meaningful, and informative conversations, as opposed to systematic and strict data, and reject that researchers should avoid "real" conversations (Chilisia, 2012). However, the following section will describe the interview process in a more structured and methodical way, in order to be transparent about my process. Included is the date range that the interviews or consultations took place, the quantity and duration of interviews, whom I reached out to as consultants, some of the places in which the interviews took place, the style of interview and materials, such as loose questionnaires consulted, and the recording, transcription, and notetaking. All interviews were Institutional Review Board (IRB) compliant and adhered to the informed consent process, which includes giving consultants the informed consent form to review, affirming their consent to participation, letting them know it is entirely optional, and that they could change their minds about participation, detailing the study, and debriefing.

During the month-long excavation, I recorded twenty interviews with tribal and local community members, archeological participants, Native consultants, historians, and state park employees for a documentary I was making. Afterward, additional interviews, specifically earmarked for this project, were held with more consultants. These consultants are primarily Coquille and unaffiliated Oregon Native people. From this sample, I integrated seven interviews into the case study. These consultants were selected in a purposive manner, meaning that they possessed the unique variety of knowledge and

experience I was looking for (Lindloff & Taylor, 2011). See Appendix A for the list of consultants. I chose to highlight the responses of five women I consulted in the chapter, in order to honor the respect we have for women in our tribe. This is because women are credited for passing on cultural knowledge (Hall, 1984). By focusing on a limited amount of interviews, and the quality of interviews over quantity, this dissertation employs a methodological approach that allows more time for understanding consultants' perspectives in-depth (McCracken, 1998). During all interviews for both case studies, I was upfront and positioned myself as both a PhD student and a Coquille tribal member.

Questioning and Materials

I first reached out to the consultants, typically by email or in-person, and arranged the interviews between October of 2017 and May of 2019. In most cases, I made plans and asked to hold interviews in locations significant to tribal histories, or locations that were comfortable for the interviewees. This is a methodological choice encouraged by Younker (2003), which can be referred to as place-based elicitation, and recognizes the fact that experiences are intimately shaped by the locations in which they take place and benefit memory recall. I draw on semi-structured interview techniques and ethnographic conversations, which speak to a formal and informal nature of interviews (Agar, 1996). McCracken (1988) describes that the value of interviews lies in their ability to glimpse into the worldviews of the consultants, and to have conversations that help provide details that make stories come to life. More importantly, I wanted to honor the wisdom of knowledgeable people by letting them share what they believe and know to be important. Honoring their knowledge is a postcolonial interview methodology (Chilisia, 2012).

topic, or that there were others that knew more about the topic, and this was a reflection of them being humble.

Prior to each interview, I spent time reflecting on the consultants' backgrounds and crafted semi-structured interview guides (see Appendix B), essentially informed notes, in order to best use and respect the consultants' time. This loose question guide centered on the subjectivities of the interviewees/consultants, but importantly, I left space for the conversations to happen naturally. Asking generic questions is often not an effective way to build rapport with people, and it rarely results in meaningful interactions with Native peoples. For example, when I talked to a tribal consultant who was a jewelry member, I asked her the types of beads that she was using now, and how long they had been around. By letting her talk, and tell the stories she thought were important, I was better able to understand how the materials had changed since Oregon's Colonial Era. When talking with cryptocurrency consultants, I asked about what projects they were working on, and about how coding parameters afford different use cases of the currency. Overall, these were predominantly open-ended questions that elicited explanations and illustrations (Agar, 1996). Topical areas centered on concepts laid out in the literature and theoretical review sections. Some questions focused on the value and cultural significance of currency, the political nature of currency, and the choice of certain currencies over others, tribal relationships with the federal government, historical accounts, and lastly questions of sovereignty and cultural presence.

Interviews were audio recorded when the consultant consented, and lasted between 45 minutes and 2 hours. I then transcribed these interviews in Microsoft Word documents. After transcription, I listened again, and the transcripts were checked for

accuracy. In cases where consultants asked for their interviews to not be audio recorded, I paid special attention to transcribing as verbatim as possible. Notes were also taken on the laptop that I brought to each interview both during and after the interview.

Analysis

My analysis of interview material is informed by Corbin and Strauss' (1990) coding process, which involves annotating transcripts, looking for patterns, similarities, differences, and key moments of insight. I paid attention to noting the frequency and intensity of thematic mentions in the transcripts (Lindlof & Taylor, 2011). However, I am also aware that coding can be a colonial method that attempts to generalize knowledge, and that holds biases based on predetermined theory (Tuck, 2014; Chilisa, 2012). I soften the use of the coding parameters of frequency and intensity by understanding that frequency, when bared, refers to ideas that were referred to the most. Understanding that intensity refers to the most embodied, powerful and relevant exemplars from transcripts is also important. Quotations were selected for integration into the case based on their ability to bring a human voice to theoretical concepts important to the dissertation, as well as their ability to contextualize and personalize findings revealed in the belonging analysis.

Case Study Two: Indigenous Cryptocurrency and MazaCoin

There are some significant parallels in the methodological approaches employed in the "Land Based Currency in Colonial Oregon" case study and the "Indigenous cryptocurrency and MazaCoin" case study, and the latter is also archeological in the sense that it excavates meanings. In this case, I excavate and build meaning from virtual, digital or immaterial culture for cryptocurrency. This includes visuals, its infrastructure,

and journalistic media that discusses it. Instead of focusing on things from the dirt, as I did in the first case study, I am looking at something that exists in cyberspace, and cannot really be seen or held. This choice to have similar methodologies for both cases is made in order to maintain a sense of cohesiveness and organization. Because of this, I will refer back to the prior descriptions of the interview style and textual analysis used in the first case, and reiterate where required. I will also make it clear how I became involved, and why these methods are appropriate and/or customized to fit the second case. Further, I highlight meaningfully different methodological considerations in this case study.

My interest in issues or topics pertaining to the Oglala Lakota Nation began in the years preceding the spring of 2014. Around that time, I was given the opportunity to lead a group of undergraduate students at Loyola Marymount University, an institution I both attended and adjunct taught at, on an alternative break service trip to the Pine Ridge reservation. The group learned about the nation's history and their long and complicated relationship with the U.S. that is marked by their mistreatment and colonially imposed poverty, health issues, and disenfranchisement. Importantly, the group also learned about the tribal nation outside of the pervasive stereotype of poor and dire living. They learned that the tribe is a nation, as opposed to a culture, and that they have a unique government structure and many strong artistic, technological, and economic endeavors. After this experience, which was both challenging and worthwhile as a faculty member and member of another very different tribal nation, I remained interested in educating myself on the various systemic problems that faced the nation, as well as the positive aspects and contributions of the tribal nation and its members. In keeping up with news in the area, I learned about MazaCoin through hearsay and online articles. MazaCoin is again a

cryptocurrency created in 2014 by a Native person with some ties to the Pine Ridge reservation and Rapid City, South Dakota. MazaCoin initially endeavored to be the national cryptocurrency of the Oglala Lakota Nation. However, as the case study will discuss, throughout the course of my information collection and analysis, it became clear that MazaCoin was not, nor would it become, a nationally affiliated economic success. This case is contemporary and complements the other historical case study.

Pre-research, Observation, and Life-world Engagement

Working from the ground-up, I first engaged in a process of participant observation within tech circles and spaces, in order to build a foundation to understand cryptocurrency. The first locations of study were in digital spaces and online communities where I spent five months building a background by watching YouTube videos, familiarizing myself with Reddit communities that were engaged with cryptocurrency, and MazaCoin more specifically, and downloading a virtual wallet and buying a small amount of cryptocurrency to understand the process. I took notes on programming languages and systems that make cryptocurrencies possible. I did not buy MazaCoin, in order to prevent a conflict of interest and to maintain a critical distance. In the winter of 2017, I participated in industry-based observation of cryptocurrency processes at CBT Nuggets, an IT company in Eugene, Oregon. I conversed with the CEO and an employee, and reflected on a meeting when computer scientists sketched out the design and detail of what a successful Native cryptocurrency might look like. This included considering the pros and cons of linking casino systems to build demand and create opportunities for viable merchants to accept the coin. We also considered utilizing newer use cases of blockchain technology that underlies cryptocurrency such as voting,

identity verification, privacy functions, and financial distribution. This meeting was audio recorded for reference with permission from the CEO, and I took notes in a Microsoft Word document. This is an appropriate methodological approach because it assisted in understanding what a successful Native cryptocurrency might entail. This methodology also allowed me to later better answer the third research question, and to describe the practical and technological reasons why MazaCoin was not objectively successful.

Other engagement also took place at a cryptocurrency conference, Day4Crypto conference, held at the Westin in downtown Denver on March 10, 2018. I attended the conference from 7:30 a.m. to 7:30 p.m., listened to talks, and networked with prominent leaders in the cryptocurrency industry. The conference was co-hosted by a company that later was investigated by U.S. Securities and Exchange Commission (SEC) over allegedly offering securities without registering with the federal government (Palmer, 2018), which signals the precarious nature of cryptocurrency as an industry facing regulatory changes. Some of the talks were recorded on my laptop with permission from the organizing staff from Salt Lending.

Material Cultural Texts

The assemblage of visual textual materials that I collected consists of screenshots of visual icons taken from MazaCoin websites, cryptocurrency trading websites, and their social media sites. I also consulted legal documents, a white paper regarding MazaCoin, and digitally archived treaties between the U.S. government and Lakota peoples. Lastly, I consulted data surrounding the materiality of digital spaces, terrains, and technologies that make cryptocurrencies possible. While not tangible in the same sense as a coin or bead per se, e-records, coin coding parameters, and hardware and software are

components important to cryptocurrency. Similar to the first case study, this case study uses textual analysis and draws on semiotics and the theoretical frames detailed under the prior section head, "Artifact-based Material Cultural Analysis as Belonging Analysis."

Journalistic Media Sources and Discourse Analysis

I collected online news articles about MazaCoin from Forbes, Al Jazeera, The Verge, Newsweek, The Telegraph, The Native Sun, and Indian Country Today during the date range of February 2014-February 2017. I selected these articles based on their nominal mention of MazaCoin, with a strategy of creating a purposive sample that reflects the diversity of the tribal, local, national, and global media outlets reporting on it. Consulting this range of news sources invited a wider range of findings and allowed for a comparison of local and more international sources. It is significant that reputable international news outlets reported on a North American tribal nation's technologies, and it is also significant that newspapers local to South Dakota often understood the political and economic climate far better than news outlets that are located thousands of miles away.

In order to analyze and integrate these sources, I loosely employ critical discourse analysis. The specific aim of discourse analysis in this case study is to draw out and expose settler colonial and racialized discourses, and to ascertain the degree to which they contoured the overall meaning of MazaCoin per the dissertation guiding question, "To what degree do racialized discourses circulated through media and historical accounts contour these meanings?" Deloria (2004) conceptualizes discourse as an ideology in motion in his book *Indians in Unexpected Places*. Ideologies, or webs of an idea that structure our world and maintain power dynamics, serve as the content while

discourse is the vehicle. Or to put it another way, discourse is a social process of communicating ideology; it typically does the job that ideology sets out to accomplish. Talk, texts, and objects are reflective or reproductive of discourses. Critical discourse analysis (CDA) untangles and makes apparent these discourses and the layers of meaning, or ontological residues of knowledge they rest upon. Van Dijk (2008) discusses how discourses must be understood in relation to social power. Critical discourse analysis as a methodology regards the dismantling of what is taken as natural, taken for granted, or is widespread, and points out where these discourses differ from alternative ways of knowing or acting. Political discourse as it pertains to race funnels through media, particularly mass media, and inheres or charges meaning into objects and actions. Often CDA is completed by presenting one or more historically grounded alternative discourses, and exposing settler grammars connects with this approach.

Interviews

Similar to the first case study, interviews are used to thicken textual analysis and add contemporary voices. A total of twelve consultants were asked to participate in a purposive manner between October of 2017 and March of 2018. See Appendix A for the list of consultants. Some place-based elicitation techniques were considered in several of these interviews, as they were held in spaces of specific relevance to the topics. For example, during the cryptocurrency conference, I interviewed a conference organizer who is a community cryptocurrency outreach specialist. Also, prior to the conference, I emailed cryptocurrency leaders in Denver and Boulder and set up interviews that were held after the conference between March 11-12, 2018. These were held in the workplaces

of the individuals. Any additional follow-up correspondence occurred through email afterward

Other consultants who I interviewed include an instructor of a financial course for Native American economic development, a professor of law, a cryptocurrency user, a computer scientist, two Native women, and a token structure consultant who lived and worked in South Dakota where MazaCoin was created. Most of the interviews took place in person. Since other consultants were spread geographically across the U.S., some interviews took place over the phone. In total, four of the interviews with Native people, including a lawyer, instructor of a financial course for Native American economic development, and the token structure consultant, were held over the phone for their convenience, recorded and transcribed per their request. Lastly, I treat secondary sources containing interviews from Harris, in videos scraped from YouTube, as material for this dissertation, and I am transparent by crediting the producers of the content. I was not able to conduct an original interview with Harris, who might have been an ideal consultant. This is due in part to timing, in that after this dissertation research received IRB approval to hold interviews, MazaCoin was considered a "dead" currency. Harris was already disenchanted with the media for false reports on the coin (Consunji & Engel, 2014), and seemed to be not as available, or willing, to speak with researchers or reporters. I used only transcripts of multimedia interviews that included audio and visuals because I could verify that it was actually him speaking, whereas if I pulled interview data from text-only online news articles I would have to trust that the reporter transcribed each quotation verbatim and in the proper context. My interview strategy was designed to include a

range of voices that could provide technical and practical expertise, design insights, legal and financial implications, and opinions of Native people on Indigenous cryptocurrency.

Similar to the first case study, interviews lasted between 45 minutes and two hours. Interviews were audio recorded when the consultant consented, transcribed on a Microsoft Word document, and checked for accuracy afterward. Notes were again taken on the laptop that I brought to each interview, during and after the interview. Many consultants asked for their interviews to be kept pseudonymous, with their real names excluded, because of the potential illegality of certain cryptocurrency endeavors, and because they wanted to maintain a low profile. In most cases, I refer to the consultants by their occupation, title, or relevant identity information within the case study, in order to be transparent about the subject positioning of the consultants and their credibility. If the consultant specifically requested their real names be included, I honored this request. In the same manner described in the first case study under the section head, "Interview Process and Analysis," I analyzed the interview transcript and pulled out exemplars to include in the case study, through a method of coding for frequency and intensity.

As can be inferred from this lengthy chapter, the process of collection of the data was rigorous, as is common in case study research. The last step of the analysis process involved putting the two case studies in conversation. This is done in the final chapter to address that last question, "How do shifts in forms and meanings of currencies play roles in Native American and United States governmental and social relations, as well as our understanding of nationhood within an overarching capitalist system?"

Reflexivity and Subject Position

In this section, I offer self-reflexivity by discussing my subject position, tribal affiliation, research experience, and the impetus of the research, which is called for in Native feminist tradition (Udel, 2001). I have a subjective positionality as an enrolled member of the Coquille Indian Tribe. I know that I am a descendant of Gishgu and Susan Adulssa Wasson, Millie, and Marianne, and trace my ancestry from women. There are only a few Coquille people of whom we all trace our ancestry to. My past half-decade, which was largely colored by my move to Eugene, Oregon, and by writing this dissertation has, as the Coquille Tribal Historic Preservation Officer stated in a previous excerpt, "engender[ed] a spirit of healing." Just a few hours from the ancestral homelands of the Coquille Indian Tribe, the University of Oregon and the School of Journalism and Communication were ideally located, and supportive of my scholarly and personal goals.

The seed for this dissertation topic was planted after one of my first meetings with a tribal member, during which the importance of dentalium was reiterated to me. This shell currency, or resource, was utilized in past and current Coquille tribal life. I had previously only seen them hanging from coat racks in family members' houses, on beaches, or around tribal members' necks on special occasions. I became interested in some of these materials, and also other immaterial markers of being or reclaiming what it means to be Coquille. The moneyness of this shell interested me, and led me to consider what could be gained from studying currency from a combined media studies and Native American studies perspective, as opposed to a disciplinary numismatic approach. I also continue to see what is happening in the world of currency and payment. Though digital

forms are a clear trend, I am focusing on how it affects, and is being shaped by, Native American communities.

I identify as a Coquille and White woman, and I look visibly White to most people. This is, of course, reflected on, questioned, and negotiated. Merskin in Bird (2018) invokes questions such as, "What is an Indian supposed to look like anyway?" and "Why should I disavow an important part of who I am?" I do not think it would serve the Coquille nation if I ignored my citizenship, and ignoring it would carry on a process of cultural genocide. Indian nations *are* nations, not races and culture.

I believe in the rights of tribal nations, and care about my extended family and nation. This uniquely positions me to approach this topic through an emic lens, one that is of a community insider to some extent (Pike, 1967). However, the views expressed in this dissertation are of course that of my own, and of my consultants, not that of the tribe itself, and obviously not of the steadily growing number of Native nations "in" America. Admittedly, the best part of this research is that it allowed me to connect more with my nation, and to better understand histories of the Pacific Northwest and Pacific Southwest; how events that occurred in the 1800s shape the tribe now, why things or belongings matter, and why place matters. Importantly, I absorbed how we are now a nation that is working as business-minded, family-oriented, very generous, caring and politically engaged, and in the spirit of honesty and to not romanticize, we, like every nation, have our own sets of challenges and problems.

I am better able to understand the importance of getting to stand in a spot where you came from on the Oregon Coast, and to grasp that all of your family has been there too. Whether it was my grandma in the 1930s collecting shells, and as a quirk would only

collect shells in numbers of three, or my dad in 1970s, or a relative longer ago. A place is both a part of belonging and critical to identity. Material things derive from those places too, and come about from people expressing ingenuity with the resources around them. Having seen dentalium necklaces, or other belongings, in my families' houses from a young age is also important to tribal identity and belonging. These ties to previous generations are not based on blood quantum and politics that serve as a tool of racism to undermine tribal sovereignty and hinder cultural survival (Jaimes, 1992). Ties to previous generations are based on encoded memories wrapped in DNA. Vectors of memory, currency in this dissertation, or longhouses, or baskets, photos, languages, stories, material, immaterial, or otherwise, are important in reminding tribal members of those ties. Remembering is important, and learning to remember is something that has taken me time to do.

I can now relate to other family members who told me that I would be accepted back in the nation despite my absence from tribal activities in my early twenties, when I was busy finishing my BA and MA degrees in California and Hawaii. Out of what feels like pure luck, I have had opportunities to travel the world and gain a global sensibility. I also understand that my privilege has led me back to Oregon, a place where I most certainly will live in the future. When any tribal member comes back to Oregon, to visit or to live, it is a homecoming that should be celebrated. I have surely celebrated for the past five years, but I have also come to process, and become more aware of, the negative sides of colonialism. My experience coming back to Oregon was not really about nostalgia or about self-discovery, but it is more related to understanding a shared

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¹⁵ This idea was introduced to me by my former professor Brian Klopotek.

experience. The benefits of tribal identity, as well as the trauma, like the termination recently in 1954 and cultural losses, is shared through generations. It is in our DNA. Healing happens in small and ongoing ways, and for me, a small bit of it happened when I moved here. I got to be around my extended family, but I also got to work with the tribe and be a very small part of an on-going sovereign nation-recovering and building project.

Some of this research, particularly the Rogue River War case study, happened only because I was invited to participate by the THPO, among other people in the tribe. I was accepted to serve on the Culture and Education Committee and was later honored to serve as the Chair. Getting to work on policies, learning how to store, handle, and honor cultural belongings, participating in language revitalization efforts, and simply getting to be around people that care about Indigenous matters, and general well-being of the community, has been a privilege. I am thankful for the opportunities to connect with my family and my ties to Coquille land, which is full of safe places. Oregon, and the Pacific Northwest more generally, are now completely home.

My work on MazaCoin, and my visit to Pine Ridge, was an entirely different experience than my experience working in Oregon. In Pine Ridge, I was a community outsider; my perspective was etic, and I was a White person in a place that held a considerable amount of understandable angst towards White people. I was treated as such in some instances, and in others I was treated very well. My subjectivity led me to be conscientious, often to the extent where I was constantly worried if I was doing the right thing, whether I was following the rules, and tried to be doing something that would be of benefit in some small ways. I focused mostly on textual analysis and did not interview within the perimeter of the nation to be respectful and maintain a distance.

In the research process, I considered ethics and how that relates to colonization and decolonization. Tuck and Yang (2012) underscore the idea that decolonization is not a concept to take lightly. Decolonizing is about giving land back, and understanding colonialism in various ways is a tool to highlight these claims to land. As such, research is action that is accountable to building knowledge, rather than extracting. Tuhiwai Smith (1999) best describes the legacy of this kind of research in Indigenous communities:

The word itself, 'research', is probably one of the dirtiest words in the Indigenous world's vocabulary. It angers us when practices linked to the last century, and the centuries before that, are still employed to deny the validity of Indigenous peoples' claim to existence, to land and territories, to the right of self-determination (p. xi).

From researchers stealing Native belongings and imprisoning them in museums, to researchers drawing blood from tribal members to deny them of citizenship and test drugs on them, to "salvaging" the ethnographic documents of Native people and moving their ownership away from tribal families, the legacy of academic research and maltreatment of Native people is something the academy must continue to feel shame about and reconcile with.

Because of this academic legacy, I also considered other strategies such as ethnographic refusal, a term often employed by Kahnawake Native feminist anthropologist Audra Simpson (2007). Ethnographic refusal refers to researchers refusing, or deciding against, making anthropological records available to the academic public. The purpose of this choice is to move from harm based colonial narratives that

obscure slow violence to privileging narratives from, and by, the concerned community (Simpson, 2007). This refusal strategy presents an ontological turn to discard methodology, refusing to use or present particular ethnographic materials that are harmful in various ways (Simpson, 2007). Simpson argues that analytic tools for anthropological cultural analysis are often exceedingly ritualistic and procedural, privileging accounts that stress stereotypes that frame Native American peoples as harmonious and timeless rather than as struggling against various governing bodies. Since I had to consult dated sources, particularly in the Rogue River War case study, I refused many sources and struggled with wanting to refuse even more sources that were colonial, or contained other problematic material. I ended up including some that were racist, or that talked about Native women in problematic ways, because that is the truth of how things were, and in those cases I was refusing to ignore them. I ethnographically refused to share too many belongings or images of them in that chapter that might jeopardize the safety or integrity of sites of tribal cultural importance. In the previous literature review, I tried, where possible, to include research by Native scholars, but also found that I needed to turn to studies in anthropology, Native American studies, history, media studies, and economics to provide a fuller understanding of the breadth of literature and data pertaining to the dissertation.

At several points, during the time that I designed, carried out, wrote, and reviewed this dissertation, I grappled with ethical situations. I continuously asked myself about the potential benefits or harms that could come of it. This work was emotional and full of choices that were difficult despite it perhaps not seeming so to those unfamiliar with tribal research. For example, I had to ask myself, do I choose to analyze certain

belongings? Do I have to read the strict procedural consent forms before having a conversation about the research topic with my own family members? Do I need to try to ask for approval from a nation even if a cryptocurrency was not even their official currency? Am I representing people correctly? Should I be working on a more important topic? And should I go through lengthy and expensive trips to share research someone may or may not want? I came to realize that this is part of the process of this type of research, and Poka Laenui (2002) in Chilisia (2012) offers that there is a process of decolonization that involves rediscovery and recovery, mourning, dreaming, commitment, and action.

In considering ethics, I also searched for ways to make this research more "global," or at least more meaningful "across time, space and culture" (Markham, 2009). For example, while I look at more specific tribal nations to avoid discussing a homogenized Indian identity and to limit the scope, I also note that there are overarching structures and ideas that are tied to the oppression of Indigenous peoples worldwide. This is also tied to larger global conversations about Indigeneity and the oppressions that are often shared and linked. As Moreton-Robinson (2015) underscores, "White possession is the common denominator [shared], even though its specificities and manifestations vary" (p. xx). Social justice matters, racism, sexism and otherwise, are considered not just a topic of some qualitative research, but something we must, as ethical researchers, divulge and address in order to promote emancipation (Denzin, 2010). Though Denzin's words sound slightly dramatic, qualitative research can be what he refers to as "a call to arms."

Conclusion

Throughout this dissertation, I discuss land-based and digital currency in different eras of significance for Native communities, unravel and shed light on meanings of various currencies, and provide an understanding of how they speak to larger issues of nationhood, colonialism, and sovereignty. While I chose to study currency, something taken for granted, it is a small piece of larger stories and all of the pieces are important. This chapter began by explaining case study research methods, and why they are appropriate for this dissertation. I then walked through the specific research process, and explained how choices were made in order to answer specific questions for each case study. I also included notes of self-reflexivity, and the ethical considerations working on Native research. In line with decolonizing research approaches and collaboration, I asked multiple Native consultants to review my writing in order to be sure I was representing and framing issues, items, and histories responsibly. These people are busy, thus this was a genuine gift that they gave to me and I am grateful for it. Afterward, I received and incorporated the feedback. Although I am critical of my work, I felt better when a Coquille elder told me that she was "pleased that I told it how it was," which I interpreted to mean that I was at least considering the perspectives needed to tell fuller stories.

CHAPTER IV

A BRIEF INTERTWINED HISTORY OF INDIGENOUS, COLONIAL, AND U.S. CURRENCIES

[Part of Native American] history is a beaded string of transactions, leading back from today to the first exchanges of the social contract...—We require an audit of the collective soul, to weave again the picture of its true history.

-Martien, Shell Game, 1996

Currencies of North American colonists/settlers have always had a relationship with Indigenous belongings and currencies (Shell, 2013). From a technical perspective, U.S. currency can be viewed as building upon the infrastructures, as well as appropriating and adapting their extrinsic characteristics. This occurred, in addition to using and adapting currencies from Europe and currencies that trickled in from South America and other parts of the world by traders and settlers. There was a clearer boundary around what constituted, and separated, an Indigenous currency from a Euro-Western currency prior to the 15th century. The eventual concomitant usage of currencies was engendered by conquest, trade, and appropriation. Indigenous and U.S. currencies in the Colonial Era were not isolated from one another, and as this chapter will make clear, their history is markedly intertwined. Currencies, in what is now the U.S., were heavily reliant upon Indigenous originated land/animal-based currencies (shells, animal teeth, metals) until the around the mid to late 1800s. After this time period, when most Indigenous people were either killed by violence or disease, moved to reservations, or forced to assimilate into mainstream U.S. culture, currencies produced by the U.S. government and their policies became entirely non-tribal. By this, I mean that shells significant to a specific Indian

nation cannot pay for rent, and one cannot readily buy anything in a grocery store with a necklace or fathom of trade beads.

This chapter focuses on land-based currencies and practices. This is not an extensive history, but I build a backdrop that is useful in understanding the conditions that the forthcoming case study is situated in. This chapter is organized episodically, and the second half is chronological. This is not meant to be read as if currencies in earlier history are less effective or culturally superior than the ones mentioned after. As a whole, this chapter foregrounds that various types of currency are reflective of identity, available resources, aesthetic rarity, and ultimately intercultural power.

West Coast Shells, Beads, and Other Valuables

In order to overcome a double coincidence of wants (Menger, 1982), when one tries to barter and the other does not want/need what the other has, a communicative form often needs to be introduced to intermediate. Indigenous people used forms/belongings such as shell money, obsidian, woodpecker skulls, turquoise, mica, and copper valuables, among other available resources to communicate and satisfy an obligation. Most of these had embodied value, and it is a human value to collect or behold things that are rare and valuable in one's environment, and it is a human trait and/or necessity to sometimes want or envy what the other has (Tuan, 1990). This, regardless of whether it is a piece of gold, or a shell, or a very dirty piece of paper with the face of a dead president on it, is important. It is valuable because one person believed or purported it to be valuable, and then a network of people agreed or acquiesced.

In the Pre-colonial Era, and the Colonial Era, sometimes shell currency intermediated a group or individual's desire or lack, and a group or individual's

possession/belonging. On the West Coast, dentalium and olivella were often these intermediators. Dentalium, sometimes called alkachik or alaquah-chick (meaning Indian money), are tusk-like shells from scaphopod mollusks and they had/have profound meaning before and beyond the economic to tribes such as the Coquille, Tolowa, Yurok, and many others (Lewis, 2016). These shells were harvested off the coast of Vancouver Island, and washed up in areas along the West Coast, then they were processed through grinding. Typically, dentalium is white or off-white in color, but can sometimes be stained by iron in the soil or various coloring agents available from the environment. Varying in size, the values of the shells were determined based on the length and aesthetic quality of individual shells, but they were also transacted with in strand form (Taxay, 1970). An article in the *Morning Oregonian* states that a string of marine shells was the unit of currency costing around thirteen to fifteen dollars per yard and that tusk shells would be sold to Indians for around twenty-five cents to ten dollars each, depending upon their length in relation to a person's knuckles in the 1800s (Olney, 1885). The strings of beads were measured by the lengths of a man's arm with short shells above the man's elbow, and long shells below (Olney, 1885). Tolowa peoples sometimes had/have tattoos on their forearms indicating equidistant lengths and measured dentalium with them (Younker, 2003). This suggests that there are different metrics of worth in addition to them having cultural significance. Some Coast Indians also controlled a "monopoly" on shell money in the area except for dentalium because they were cultivated further north (Olney, 1885).

While Native people can trace dentalium back to time immemorial, Erlandson, Vellanoweth, and Caruso (2001) found dentalium shell artifacts on San Miguel Island

from an Indigenous occupation 6,600 years ago in an archeological study and suggest long distance trade was well established around 3,500 years ago. This moved shells up and down the coast from Vancouver Island for barter and potlatch practice. This shell is also culturally significant to tribes outside of the West Coast including Lakota peoples in North and South Dakota. Though they could be traded with Native people on the West Coast and could also be dug out of the ground in the Midwest and found on the East Coast (Wood & Liberty, 1980). Some bands of Plains Indians created and still make elaborate headdresses out of them, and use these and buffalo bones in their jewelry, among a host of other materials. Other tribes like the Hupa and Karuk, for example, had purses of wood or elk antler with a hole at the top specifically for dentalium shell collection (Lewis, 2016; Ames, 2010).

They are still used today for regalia and other commercial and artistic purposes, for example, at Coquille mid-winter gatherings and cultural events the shell is often used in the making of jewelry. The difference now is that they are more likely bought online from Amazon or a specialty bead store out of necessity, ease, and the general conditions of the time. Rather than coming straight from the sea or moved across trade routes along rivers, they are bleached and shipped in plastic and cardboard boxes. Another difference now is that the currency aspects of dentalium are lessened because they are now used primarily for aesthetic symbolic functions. However, they still retain the intergenerational significance and express cultural pride despite their more processed or artificial materiality.

Olivella, another type of money-like shell, are snail shells in disk-like shapes and were common in California, particularly Northern California. When the shells are

polished and strung, the form is referred to as poncos and these were also regularly traded in river routes, for example up and down the Columbia River (Barajas, 2012). They had values based on familiar measurements: quality and distance, or rarity, and socio-spiritual variables (Taxay, 1970). Attributes such as portability, size, and standard-ness allowed them to circulate generally throughout societies, namely between Indigenous and settler societies.

In trying to make analogies about Indigenous currency creation: finding the resource, smoothing it, distributing it, socializing it, scholars have often turned to comparing them to mints or other colonial currency production centers. For example, Miller (2012) suggests that Ancestral Puebloans of Chaco Canyon in New Mexico mined and manufactured natural resources and that Chaco is considered the location of the first mint, in 3000 B.C.E., with turquoise largely being the medium of exchange. Similarly, Santa Cruz is referred to as the first mint, producing shell money out of dentalium and olivella (Gamble, 2017). The use of the word mint and manufacture, however, can conflate these different forms and how they are valued in different societies. Mint connotes the pristine newness of a coin after being radically altered in a factory. Despite perhaps shaving down shells, or polishing them, this is not really what was happening with Native currencies. Indigenous currencies like dentalium, olivella, pine nut beads, woodpecker scalps, and turquoises had certain collectibility rooted in nature. They are found items that could be secured and stored by wearing them or by hiding them, and later people become motivated to project the qualities of the found objects by representing them through more mass produced, replaceable, and synthetic things.

For example, glass beads made by Europe in the Colonial Era also circulated globally (Walder, 2008), and were used alongside shell beads and other currencies at the time. These forms of currency were pervasive and reflected mass overproduction, expedient replication, and an urge toward consumerism. This is reflected in documents from bead manufacturers in Venice and Murano Island that state that 360,000-900,000 pounds of seed type beads were exported to Oregon, Washington, and California per year during the height of production years (Crull, 1998). According to Graeber (1996), the reason why beads were mass used and well suited as a medium of exchange is that they are not divisible, and are highly portable, and durable. More likely, they were common in the 1800s because of the power they wielded in creating a network, and their ability to be agreed upon mechanisms of communication or cultural intermediaries between Natives, settlers, and migratory traders. They can aptly be described as a technology that allowed cooperation, but often also deceit when they were used for coercion, counterfeiting, and flooding of certain markets.

Potlatch

In addition to trade routes along rivers, one way that shell currency and other valuables were distributed between tribes was through a tradition of potlatch. Potlatch comes from Chinook jargon and translates to, "to give" or, "to give away" and can be broadly understood as economic and gift-giving celebrations. They are a means of intercultural communication, a way to "buy locally" from the surrounding communities, and they serve as complex exchange and banking systems (Younker, 2005; J. Younker, personal communication, March 25, 2019). Potlaches are also part of a larger system that focuses on the memory of interpersonal/tribal obligation and building relationships

(Piddocke, 1965). For example, tribes could often borrow from other tribes with the intent of paying back with interest in times of need. This forged relationships and chiefs or head(wo)men could create lines of credit for future generations.

Potlatches were/are not a pan-Indigenous practice, but are unique to the Northwest Coast and were a means to express both self-esteem and admiration for others, and according to Barnett (1938), they were also viewed as a way to self-aggrandize and manage status. During potlatches goods were accumulated, lent, exchanged, and were again held for a number of occasions and celebrations including birth, death, puberty rites, and marriage (Kan, 1989; Miller & Seaburg, 1990), as well as for apology, debt management, and winter ceremonies (Raibmon, 2005). The Tlingit tribes, for example, held extravagant mortuary potlatches in the 19th century marked by traditional crying feasts, songs, and multiple days of both mourning and celebration (Kan, 1989). Although war was not uncommon in "pre-contact" time the Kwakiutl potlatched with other tribes in lieu of war or fought with goods (Codere, 1996). It is true that tribes often gave extravagant gifts to negotiate social hierarchies, and chiefs would sometimes even kill slaves (Bataille, 1949), but many accounts fail to recognize the value of traditional practices without ethnocentrism. Vertovec (1983) for example, criticizes studies that have likened potlatches to an economic or social system of megalomania, often based on Boas' "pure description" ethnographies (p. 323). Other studies including one from Bataille (1949), mentioned in the literature review, looked specifically at the destruction of goods of great use-value like oil and copper artifacts and described how potlatches actually have unique ways of addressing overproduction.

Potlatches were viewed as dangerous and were outlawed by colonists at several points in history (Miller & Seaburg, 1990), including the 1855 potlatch ban in Canada. The practice was placed within a common racial discourse of Indians as primitive and engaged in extreme wastefulness. It could not be understood by colonists without comparison the values of a capitalistic system. This is problematic, as Raibmon (2005) discusses her view that "goods exchanged in Northwest Coast potlatches are not reinvested into means of production according to the demands of the marketplace, and therefore do not fit the definition of rational capitalism" (Champagne, 2007, p. 37). They were viewed as a threat to Protestant ethics and the larger capitalist order as Indigenous people would engage in potlatching often for months, forgoing earning salaries, and acting against colonial expectations (Raibmon, 2005). Potlatch, however, expresses different economic systems than were common elsewhere in the world, and these differences and their philosophical underpinnings were weaponized to delegitimize Indigenous peoples. Sovereignty was undermined when tribes were prohibited from engaging in their practices, and ultimately potlatches were misinterpreted and judged.

More recently Coquille and other Chinook tribal members have revived the potlatch tradition, and have written about them from emic and contemporary perspectives. For example, Younker (2005) organized a potlatch in 1997 for the first time in 150 years with the Coquille Indian Tribe. This potlatch was held at the University of Oregon and is significant because this was the first time since the Reservation Period that tribal governments came together for this kind of occasion. Historic cultural and intellectual property including maps and ethnographic documents were potlatched among Oregon's tribes (Younker, 2005). Potlatches are now largely viewed as positive and

foster partnership and friendship among tribal nations and other communities, something that can be important to the survival of tribes present-day.

Wampum

While the West Coast circulated specific shells and had different gifting practices, the East Coast is well-known for another shell form, wampum. This shell and the material culture made with it are significant ceremonial and intertribal information technologies that morphed into a more abstracted form when settlers adopted it.

Wampum are processed tubular shells that can be made from a number of shells, but most commonly clams. Purple or black wampum can only be made from breaking into the center of the shells (Ceci, 1990). They are also more standard in size and shape than other shells making their form fairly consistent and scalable. Since wampum was made in large quantities, traditional feasts were held by tribes in order to make use of the clam meat and bring tribes in commune (Taxay, 1970). After processing, wampum served a variety of purposes in trade, economic transaction, religious practices, and was often woven into belts imbued with cultural meaning. It was a monetary form or exchange medium but prior to the 1800s it was also, and often, more importantly, used for adornment, gift, and as a social technology (Nassaney, 2004).

Iroquois myth placed pronounced use of wampum around 1400, and colonial encounters mediated through wampum interplayed uniquely with colonial relations in the centuries following (Keagle, 2013). Wampum helped create alliances and was a tie to cross and intercultural interactions between tribes and colonists in the 17th and 18th centuries and especially during the fur trade (Snyder, 1999). Creese in Cipolla (2017) states that "wampum was the ideal medium for such shifts in value since its particulate

form allowed it to move fluidly between commoditized transactions with Europeans, relational-affective bodily ornamentation, and collective representations as treaty and diplomatic belts" (p.78). It was a mutually understood medium and spoke to different models of economies and exchange.

Wampum is so intimately tied to the story of U.S. currency that "from wampum to Wall Street" is a catchphrase (Shell, 2013). It is among the first forms of currency appropriated by settlers on the East Coast, was considered legal tender in New England until around 1662, and gave colonists a sense of authority over economic affairs whether it served as cash money or as legal tender affair (Peña, 2001). The colonies began to manufacture it themselves and often used counterfeit wampum made of porcelain to try to cheat or negotiate with Indigenous people and other traders (Shell, 2013). This contributed to the devaluation over time, where its worth equivalent was sixteen white beads per penny in 1660, and twenty-four per penny once the colonies abandoned it as legal tender (Martien, 1996). After it became overabundant, it became viewed as a collectible commodity instead of a legal currency.

A popular myth suggests that Manhattan Island was bought from Indigenous people for a small amount of beads and other trade goods, some that could refine wampum (Francis, 1997). However, many Indigenous ontologies suggest that land is not able to be bought nor purchased; it is its own spiritual entity, and this alleged transaction should be read as invalid. In cases like this, Indigenous people had to alienate themselves and externalize their prior understanding of wampum while it became a symbol of continual alterity for colonists who saw wampum mainly as a commodity for other things like fur pelts (Schmidt, 2014). Indigenous people struggled with the changes and

colonizers monopolized their resource, wampum, that they needed for their holistic wellbeing.

Wampum was also used as a ledger or record keeping system, a part of monetary transactions, and as a diplomatic tool. Wampum diplomacy referred to giving wampum and creating wampum belts to serve as treaties or agreements (Shell, 2013). These belts are hundreds of pieces of wampum woven into elaborate forms and then often paired with mnemonic devices to remember and contract specific agreements between nations. For example, the Two Row Wampum or Gusweñta belt (1613) (see Figure 1) that I mentioned in the introduction is pictured above. This wampum belt is a sovereign to sovereign agreement between Haudenosaunee peoples and representatives of the Dutch government. The purple rows represent two boats, one of the Dutch and the other of the Haudenosaunee way of life. The belt itself is a "living contract" that "Each nation will respect the ways of each other and will not interfere with the other (Onondaga Nation, n.d., para. 7-8). Another well-known best is called the George Washington Belt or 1794 Canadaigua Treaty Belt (see Figure 2). This belt is decorated with the symbols of 13 men holding hands signifying humanity and partnership between tribes and the U.S. (Onondaga Nation, n.d.). The 13 human figures represent the 13 states and two figures and the Long House represent the Haudenosaunee (Onondaga Nation, n.d.). This demonstrates how affective relationships were brokered, maintained, and broken around wampum; wampum is far more than just a shell.



Figure 1. Two Row Wampum or Gusweñta (Powless, n.d.). Image Courtesy of the Onondaga Nation.



Figure 2. George Washington Belt or 1794 Canandaigua Treaty Belt (New York State Museum, 1908).

In 1690 a new wave of currency change was ushered in. Wampum was largely replaced with what was then called paper wampum, or bills, similar to what is used now (Shell, 2013). At the time, American money still had a relationship, if not obsession, with Indigenous people. This paper wampum typically had artistic renderings of Indians on them with Indians standing by the river bank with White men, looking out to the sea, hunting (Shell, 2013). It often showed Indians facing the side with elaborate headdresses on. This contradictory symbolic act of depicting Indians on currencies, while simultaneously killing them and demarcating them as the savage other in real life, plays into a colonial fantasy that I discuss at length in the analysis of coins in the forthcoming first case study. This representation and affinity are in line with Deloria's (2004) argument that colonizer deploys contradictory images of Native as nostalgic or savage in their self-interest.

Wampum and paper wampum is also known as the mother of the fur trade (Ceci, 1990), used to buy fur belts of beavers and other animals. However, as the population of species declined, and wampum predictably deflated in value steadily from 1600 on, Native peoples, their currencies and traditions, were further disenfranchised. They were often forced to sell land in exchange for rations and money, entering into fraught contracts.

The Treaty Period, 1789-1871, and the Removal Period, 1834-1871, that followed were times when the U.S. government largely sought to make treaties with Indigenous people and get rid of what they termed the "Indian problem" (Tani, 2015). Prior President Washington said in a letter to Senator James Dwayne, Delegate to the Continental Congress in 1783, that they would get their land as soon they needed it, and that it was cheaper for them to move tribes to reservations that it was to war with them:

It is the cheapest as well as the least distressing way of dealing with them, none who are acquainted with the Nature of Indian warfare, and has ever been at the trouble of estimating the experience of one, and comparing it with the cost of purchasing their Lands, will hesitate to acknowledge. (Washington in "From George Washington," 1783, para. 12)

Rhetoric like this served as a political justification.

One of the acts responsible for the most land loss for Indigenous people is the General Allotment or Dawes Act of 1887. This act allowed the President to survey Indian lands and break them up into allotments for individual Indians. Indian lands outside the allotted acreage were then sold to non-Natives. This act was supposedly created to help Indians assimilate into American life, but what it did was break down traditional tribal

communal life, steal land from tribes, and lead to more forced removal. The Dawes Act also benefited some non-reservation Indians in the face of genocide. Tribal nations like the Coquille and Coos, for example, could legally obtain trust lands in their territories. But when land, as an asset, is reduced, tribes cannot make money off their resources like minerals, forestry, water, and housing. That currency is power, it is the ability to live well, to care for people, to become educated, to do many things that are good for tribal sovereignty (Klopotek, 2011; Miller, 2012). Land cannot be separated from Indigenous ways of knowing as land formations are tied to language, can have names and human-like qualities, and remind people of how they should act morally (Basso, 1996). Land is a teacher to people in Indigenous understandings and ties generations together (Tuck, McKenzie, & McCoy, 2014). Land is ultimately imbued with cultural currency and the raw potential to make actual currency, but its value is also intangibly profound.

Conclusion

This chapter provided part one of a two-part account of the intermingled history of U.S. and Native currency, focusing on a few shell currencies and potlatch. There were multiple currencies in use, each with their own histories, ties to specific tribes and locations, as well as logic to their use. For example, value was partly based on their length, in the case of dentalium and measurement with tattoos, or based on quantity and surplus when considering potlatch. What follows is a chapter that looks at specific Native and settler currencies, bounded in a space, Southern Oregon, and in a time, during the Rogue River War in the colonial era. After, part two of the history will be offered followed by the second case study.

CHAPTER V

CASE STUDY ONE: LAND BASED CURRENCY IN COLONIAL OREGON

This chapter focuses on meanings of specific Native and settler currencies, which are not mutually exclusive, as the history chapter discussed. First, I detail a brief overview of the era, the Rogue River War, and the relationship between Native people and settlers to provide necessary context. As described in the methods chapter, this case study relies on archaeological excavations in Southern Oregon, and draws on interviews, documents, and semiotic and belonging analysis. A quick preview of the findings I will present and discuss in the chapter follows.

Gold and other metals served as a fetish for colonizers; a means to claim land, impose power and war on tribes in order to extract the natural resource (Cronon, 1983). Raw materials were then refined, processed, pressed into coins, and stamped with signifiers of a then-forming American nation. After minting they were disseminated, pushing out mass quantities of coins with stamped representations that both valorized and demonized Native people, while thoroughly racially appropriating them. The coins, in the context of colonialism, are belongings that signify an identity crisis of the U.S., and when placed in the larger story of the Gold Rush and Rogue River War, come alongside genocide in Oregon. However, to settlers, these coins were ascribed different meanings rooted in futurity and survival. They represented the accumulation of wealth, or the early American dream, backed by the Manifest Destiny Doctrine of the 1850s.

As the chapter progresses, I discuss how beads share some basic similarities with coins as they were portable, aesthetic, durable, and countable. However, this chapter expands beyond the physicality of beads and focuses on how they served as cultural

intermediaries, providing a mechanism of exchange with Native people in an increasingly intercultural economy. In my interviews with consultants, it was stressed that Native people, contrary to existing literature (Farris, 1992), were discerning and active consumers of these beads, and used them to foster a number of interpersonal relationships. Glass, and other trade beads, were incorporated in Native material culture and everyday life during the Rogue River era including adornment, art, potlatch, purchases, and in celebrations of life and death. The transition from beads to coins, as a legal tender, was an archetype shifter, and with the standardization of coins came the limitation of Indigenous economies, unless they appropriated the new form. At the same time, I work to answer the guiding question, "How are practical and technological strategies enacted around currencies to strengthen, constrain, or otherwise shape tribal sovereignty?" The chapter clarifies how strategies around currency, particularly with coins, are employed by the U.S. to constrain tribal sovereignty and reify colonial power structures. But in drawing on consultant interviews with Oregon Native people, I end with a story of survivance (Vizenor, 1994). I describe how beads and shells, once used as currency in the colonial era, are also strategically rearticulated into necklaces and other belongings that express survivance present day.

I separate this chapter into two parts:

Part One. Iconographic Currency and Decoding Colonial Pasts: A Close-Analysis of Coinage

Part Two. Non-Iconographic Aspects of Currency, Decoding Colonial Past and Articulating Sovereign Presents: A Close-Analysis of Gold, Beads, and Necklaces Here again, are all of the guiding questions:

- What are the cultural meanings that are embedded within specific forms of currency?
- How are practical and technological strategies enacted around currencies to strengthen, constrain, or otherwise shape tribal sovereignty?
- How do shifts in forms and meanings of currencies play roles in Native American and United States governmental and social relations, as well as our understanding of nationhood within an overarching capitalist system?

Background

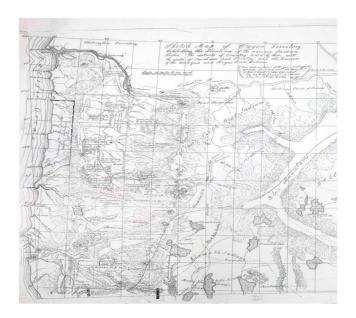


Figure 3. Map of Oregon Territory (Beldon, 1855). This is a map that was "lost" until recently. A treaty promising some Native tribal nations of Oregon land was never ratified with the Federal Government because this map was said to have been lost. Image courtesy of Jason Younker.

Chronological Timeline of Events Important to Oregon's Colonial Era

Table 1

Date **Event** Brief description, when needed 1848 The Organic Act This act allowed Oregon to be declared a territory Gold found in California 1848 A wave of settlers arrive in Early Notably, European and Chinese 1850s Oregon immigrants come looking for gold. 1851 Gold Found on the Coast, North of Bandon, and in Jacksonville, Oregon 1853 Table Rock Treaty 1853-56 Rogue River War 1854 Gold found in Curry County 1854 Nasomah Massacre Approximately twenty from Nasomah Band of Coquille Indians killed (Wasson, 1991). 1855 The Battle of Hungry Hill Led by Captain Smith, and ended with the defeat of the U.S. by Tekelma people (Tveskov, 2017). 1855 The height of the Rogue River War Lumpton Massacre begins after vigilantes killed over twenty-five Indigenous people on the Table Rock Reservation. Indian Agency employees were killed and homesteads were burned in revenge (Sutton & Sutton, 1969). 1856 The Battle of Big Bend 1856 Ending of War Most Native people in Oregon were moved to reservations. 1856-7 Treaty that was never ratified promising Native peoples land

The Rogue River War (1853-1856) is part of a larger string of wars between Indigenous peoples, of what is now called Oregon, and settlers amidst the backdrop of early American imperialism. The fur trade and most relevant to this study, the Gold Rush, pushed waves of thousands of miners and settlers into Oregon in the middle of the nineteenth century. The Oregon Donation Land Claim Act of 1850, in particular, emboldened U.S. White male immigrants over 18, and according to Section 4, "half-breed Indians included [sic]," to take 320 acres of Native land each (Robbins, n.d. para.

1). They could take 640 acres if they had wives. Most of the 2.5 or more millions of acres that were claimed under this act were west of the Cascade Mountains and part of the Willamette, Umpqua, and Rogue Valley. The government gave away land before they had even purchased it from Native people.

As settlers dispossessed lands from the Indigenous people that resided there prior to White settlement and/or since time immemorial, they also brought with them a concentration of diseases including smallpox, malaria, measles, cholera, and influenza (Schwartz, 1997). This reduced the Indigenous population in the Pacific Northwest by a conservative estimate of 80% from the beginning of the 1700s to the beginning of the 1800s (Boyd, 1999). Settlers also aggressively enacted practices of domination such as violence, rape, robbery, and genocide that contributed to a backdrop of war (Beckham, 1971; Tveskov, et al., 2014). The Rogue River War does not fit neatly into the contemporary constructs of warfare, as it had no front lines, involved guerilla warfare, and Indigenous women served as cultural intermediaries and battle leaders (Tveskov, 2017). However, certain battles became touchpoints to understanding the larger war. Tveskov (2017) spotlights the Battle of Hungry Hill (1855). In this battle, the Oregon

territorial volunteers, and companies of the U.S. Army's First Regiment of U.S. Dragoons, were defeated by the Takelma peoples. Tveskov underscores the humiliation of the defeat at the time, particularly as U.S. losses were due in large part to the leadership and tactical prowess of a Takelma woman called Queen Mary, as well as Tekelma leaders Tyee Geore, and Tyee Limpy. Native women were key to this victory, and this gendered fact was largely ignored in other accounts. This battle, in particular, was minimized in service to a myth of "moral" pioneers' ultimate defeat and likely an embarrassment that a Native woman could cause so much damage (2017). Another major battle began on May 26th, 1856, between Shasta people and Captain Smith and his company. This battle, however, ended in victory for the U.S. (Beckham, 1971).

As tensions escalated, settlers and Indigenous people engaged in treaty negotiations, some that were signed and ratified and most others that failed in various ways. A number of other battles, and the Lupton Massacre of Takelma people, violated some of these treaties, including the short-lived Table Rock Treaty (1853), which aimed to bring peace to the Rogue Valley (Beckham, 1971). This treaty outlined that land from Southern Oregon would be taken from Indigenous people to establish the Table Rock Reservation. These treaties in Oregon were often marked by coercion and difficult circumstances, and they were signed by Indigenous leaders with x-marks. X-marks instead of signatures, because written alphabet and treaties like this did not exist before White people as land was not salable in this way (Lyons, 2010). However, these x-marks should not be read as naïve because they were choices made with the belief in "assent," or a positive conviction that something new or better could come with the contract or relationship to the U.S. (p. 33). Despite attempted mediations, the war persisted and

Indigenous leaders had to face the options of rebellion, making alliances, or relocation. There are several other factors that compounded the problem. For example, Schwartz (1991/1997) discusses how the wars were prompted by political strife and economic desire for what he terms "blood money" in order to bring federal funds into the Rogue River Valley. However, Cronon (1983) most persuasively argues that the most effective method to look at the colonial period is through the lens of land, people, property, and capital; explicitly how capitalism has a profound effect on vast ecological changes.

This sentiment was shared by both settler and Native accounts from the period, as well as Native people reflecting on the era present day. Consider the following accounts, which I will let speak for themselves, and disentangle the sentiments later in the analysis. In a letter to the Secretary of the Interior dated in 1859, Commissioner C.H. Mott wrote:

Indians occupied a widely extended country, abounding in game, fish, berries and roots, at one period of the year frequenting the coast and rivers, where an easy and competent subsistence was obtained in the salmon and shellfish, at another penetrating the forest for game and the prairie and valleys for roots and berries, with the posts of the Hudson Bay Company always in reach, and at which guns, powder, ball, blankets, tobacco, beads and everything pleasing to the eye and taste of a savage [sic] might be had in exchange for the products of the chase and the trap. They were free to roam [sic] wherever nature promised the readiest means for a comfortable support in mountain or swamp. Upon the discovery of gold the rapid settlement of their country by the whites circumscribed their wandering [sic], curtailed their hunting resources, demoralized them with alcohol and disease, and thus made it necessary to initiate them into the reservation system

from a wild state [sic] and before they had contracted by intercourse with the whites anything more than the vices of civilization, *drunkenness* and *prostitution*. In an interview, my consultant, a former cultural director for her tribe, shared the impact that the Gold Rush and other ecological processes driven by capitalism had on tribes during this era:

It was one of the most significant impacts on our communities because I think by the time White settlers got to us they were no longer interested in negotiations, they had negotiated their way mostly across what is known as the United States. By the time they hit the West, what is known as the West, they didn't want to negotiate any longer they were tired of it they wanted us removed and gone so they could access gold and timber. Period.

1856 Ending of War

Oregon Territory's Superintendent of Indian Affairs Joel Palmer, sometimes described as more civil than most superintendents (Spaid, 1954), though thoroughly complicit in genocide, recognized the brutality of antagonistic settlers and defended Indigenous people to some extent. His solution, however, was to propose another treaty option and persuade the Commissioner of Indian Affairs, and other government officials, to purchase land from different bands of Indigenous people to be earmarked for several other reservations, which was afforded by the 1854 Indian Appropriation Act (O'Callaghan, 1951). Eventually, the Rogue River War ended with federal reservation policies, which outlined the removal of Indigenous people in the region to the Coast Reservation, Grande Ronde, and Siletz reservations by 1856¹⁶. This exodus from

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¹⁶ The consequences of the war did not just affect one tribe, but rather most in the area endured a forced relocation.

ancestral homelands was devastating and inhumane, and many members of Oregon tribes refer to February 22, 1856 as their trail of tears.

Some Indigenous people found ways to stay behind and survive by making choices to hide, marry White men, ally with settlers, migrate elsewhere, and/or slowly assimilate, per U.S. policies, into American culture (Wasson, 2001). There was suffering irrespective of whether they stayed or left. One land cession treaty that Palmer negotiated, promising tribes lands, was sent to Congress in 1857 but never ratified. This dispute over ratification later became legal grounds for some tribes to sue for the land dispossession and relocation (Wasson, 2001).

Taken as a whole, this period is akin to what Wasson in Lewis (2015) refers to as Oregon's Holocaust; the systematic killing and removal of Native people from their lands, and a breaking-up of familial and tribal life-ways. This period had repercussions for tribal sovereignty and the mental well-being of those who experience postcolonial stress. All else that was lost; lives, Indigenous epistemologies and technologies, ideas of land as sacred and not a commodity, are all immeasurable. To move back into the currency focus, loss of sovereignty was based on value placed on the land as property, belongings and people. Those are mediated through notions of ownership, cash, commodity, currency and the significance ascribed to them.

Archaeological Note

Archeological and ethno-historical work, done with a critical orientation, can challenge historical memory. This is done by consulting belongings, and consulting a number of stakeholders, including Indigenous people, tribal governments, landowners, and the public, to provide historical correctives. Being new to archeological excavations

back in 2016, I remember Chelsea Rose, SOULA Archaeologist saying, "It's not what you find that's important, it's what you find out." The following chapter concerns what I found out, by turning to a belonging assemblage that contains metals, beads, and two coins. I look to the stories of, and around, the belongings to start larger conversations about what was gained and lost during this era.

Part One: Iconographic Currency and Decoding Colonial Pasts. A Close-Analysis of Coinage

In the early 1850s, coinage in Oregon was both hyper-local and global. For example, one of the most local coins, produced by the private Oregon Exchange Company in Oregon City, are called stamped beaver gold coins (see Figure 4, and came in five and ten dollar denominations (Scott, 1932). These coins attempted to standardize value, filling a need created by a lack of trust in currency created with the influx of too many competing forms. This included currencies that were essentially valuables; such as beaver skins, bills, tokens like shells, and gold dust, which was problematic because it was easy to rig gold scales or add other materials to the dust to make it heavier. There were well over ten types of currency being used in specific markets and the ones that are Indigenous are sometimes referred to as alaquah-chick. While local and varied, currency was at the same time markedly global with Mexican and Peruvian coins being the most popular and trusted international currency in Oregon at the time (Scott, 1932).



Figure 4. Image of stamped beaver gold coins (Oregon Historical Society, n.d.). Image courtesy of Oregon Historical Society Research Library.

By the mid-1850s, currency was just starting to become more nationally standardized with the establishment of five U.S. mints operating in Charlotte, Dahlonega, New Orleans, Philadelphia, and San Francisco. The opening of the San Francisco mint in 1854 made gold bullion the official currency of the area with the government mandating that private coinage, including stamped beaver gold coins, be turned in and melted (Scott, 1932). Mints, which are factories that serve as a mechanism of government, expressed power and authority as they churned out coins that then trickled up and down the coast, aiming to replace and standardize the various currencies in dynamic circulation.

As tokens, coins are manufactured metal that is archetypally, but not always, rounded into small pieces and used as a form of money in exchange. During the first iterations of metal coins, they had value tied to their composite material, meaning that the amount or weight of the metal used in a particular coin represented its worth in the open market. This was typical, until the U.S. ultimately broke away from the gold standard more than a century later in 1971 (Gregory, 1997). Despite millions of coins being

minted, only a small fraction of coins from that time period are known to still be in existence today.

At least three of those limited number of coins were excavated in the Oregon colonial archeological contexts. In this section, two of those coins will be analyzed, with the aim of decoding colonial pasts and identifying settler grammars. Evidence to support this analysis is largely based on representational considerations. Coins, as well as most forms of decorated currency, tend to speak most to this semiotic category of icons, referring to the artistic rendering of people and things on a coin that stand in for those people and things.

When owned and used by Native people and settlers they are also indexes, signaling the competency of the owner to participate in intercultural transactional communities and to code switch between the different forms. After this analysis, the scope will be broadened to discuss how the practice of representing Nativeness on coins, in both icons and symbols, is still common present-day and performs specific cultural work.

Analysis: Coins and Representational Considerations

This first excavated coin is a transformed 1854 quarter dollar coin of silver metal that is about three centimeters wide (see Figure 5). With a distinctive shape, the coin was cut with a hot tool into a multi-point (minimum of eight teeth) star with a hole near the center. In this case, melting, reforming, and repurposing the coin was a practical strategy. Quarter dollars, prior to 1854, were commonly melted because the silver used in the making of the coin was found to be worth more than the face value of the quarter (Numismatic Guaranty Corporation, n.d.). Coins like this were also a common ingredient

in the making of small tools, as their heat malleable silver metal was often easier to come by than raw silver and other metal materials. Extrinsic qualities of this coin suggest that it was used or made specifically as a spur (Tveskov et al., 2014). Already circular and of a similar size needed for a rowel, coins were easy choices for spur adaption, for either the rowel or button part.



Figure 5. Altered quarter coin (SOULA, n.d.). Image courtesy of SOULA.

The alteration of the coin suggests the rugged realities and necessities of life on the frontier (Tveskov et al., 2014). For one, metal materials for spurs, and merchants that sold them, were increasingly hard to find and produce in an area that was not only struggling economically, but was a place marked by profound conflict and war. The unpolished nature of the coin, and its presence amid other archeological belongings (semiotic signs), such as an alcohol bottle, signal that the coin-spur was likely fashioned out of necessity (Tveskov et al., 2014). Far less likely, the coin could have been fashioned into a spur to express status, implying that coins were very readily available to that individual, and could serve as an aesthetic novelty.

A coin-as-spur's purpose is to urge, force, or direct animals in a direction and typically they are fitted onto the backs of footwear and used in horse riding. This

particular coin also had elements that are appealing to settlers and acted as a very practical tool needed in the taming of animals. Spurs, like cowboy hats and boots, are part and parcel to the cowboy character and serve as a marker of status and rank in various colonial military contexts (Slatta, 1994). Now considered a quintessential image of America and the West, the cowboy played significant roles in the efforts of Westward expansion with the goal of achieving Manifest Destiny. As such, they were agents of landscape transformation. While herding cattle, for example, the altered spur is a metaphor that suggests conquer-ability of livestock and land.

In more concrete ways the coin also serves as a "metaphor for the intersection of the global and local" in Fort Lane, where the item was recovered (Tveskov et al., 2014). Coins, tokens of an increasingly global economy, were manufactured in mints in the U.S. This one could have been from San Francisco or perhaps Philadelphia, having worked its way into the region. Millions of quarters like these were produced in 1854-1855 and moved as they were transacted in a time marked by mass migratory practices.

To focus more explicitly on representational elements, most American coinage and most prominently on both half dollars and quarters like the one used for the spur, eagles decorate the coins with spread wings (see Figure 6). This reflects a trend in the late 1700s when the eagle became a meta-symbol expressive of the freedom and individuality of America, as the bird was incorrectly believed to only exist in that nation (Breining, 1994). It also reflects individualism as eagles are solitary birds. While most of the spurcoin belonging is missing due to its dramatic alteration, the unaltered coin contains a few more important semiotic elements. On the unaltered coin, an eagle is perched atop a branch. The left half of that branch represents an olive branch and the right are three

arrows. The Olive branch signifies peace, and the arrows, a common weapon of some Native people in the era, signifies war. On the back of the coin is Lady Liberty, seated and holding a shield in her left hand. Further, she is encircled by thirteen stars that represent the thirteen colonies, which I will discuss more closely in a later section. Below is the year, 1854, with two arrows facing outward from the year mark.



Figure 6: Seated liberty quarter (Numismatic Guaranty Corporation, n.d.a.). Image screenshot by the author.

These arrows are significant beyond their function of connoting war, and the balance between war and peace. Mint Director at the time, George N. Eckert, decided to include the arrows in order to differentiate that year's quarter from more expensive quarters, made of more silver in previous years (Martin, 1973; Numismatic Guaranty Corporation, n.d.). The decision to reduce the silver content was a result of the Coinage Act of 1853 that sought to move interest toward gold coins and reflected a shift toward U.S. adoption of the gold standard.

A full, unaltered excavated coin contains some of the signifiers present in the spur-quarter, such as an olive branch and thirteen stars, but is richer in terms of semiotics (see Figure 7). It is an 1853 half dollar coin designed by James B. Longacre (Numismatic

Guaranty Corporation, n.d.). This coin is imprinted with elements that when decoded, speak to how America imagined itself in the colonial period, thus an ideal coin for helping answer the first guiding question of this dissertation. The front displays Lady Liberty facing the left from the neck up with an expressionless face, curled hair, and a coronet. Lady Liberty, a national symbol of freedom, is the most prominent piece of the coin's design. Lady Liberty signifies American femininity and social status. She holds symbolic power but is not a queen, as her wearing of a coronet as opposed to a royal crown suggests. Around her head are thirteen stars, and around the stars is a rim. The reverse side of the coin displays 1853 in the center and is encircled with an olive branch wreath.



Figure 7. Half dollar coin. Image by the author.

The thirteen stars underscore that America was to be comprised of their thirteen colonies, Delaware, Pennsylvania, New Jersey, Georgia, Connecticut, Massachusetts, Maryland, South Carolina, Virginia, New York, North Carolina, and Rhode Island. This leaves a clear erasure of tribal nations. The thirteen colonies were a band that imagined themselves in a particular way, and shared in the idea, or as Anderson (1983) phrases it "horizontal comradery" around a justified or godly backed fight for independence. They

were ultimately precipitators of the nation-building project and democratic experiment. American currency is still saturated with signifiers of these same colonies. For example, there are thirteen layers of brick on the pyramid which is imprinted on the left side of the reverse American one-dollar bill and there are thirteen stars above the eagle seal on the right side of the same bill.

This coin, like the quarter, contains an olive branch wreath. Traditionally, these branches are signifiers or meta-symbols of peace. There are a few ways this theme of olive branches can be decoded. It could refer to the Olive Branch Petition of 1775, the year after the revolution, in which John Dickenson addressed King George III in hopes that a sense of peace could exist between Great Britain and the newly formed America (Boyer, 1953). It underscored that the colonies were not as much disenchanted with King George III's rule, but rather the overarching ministerial rule that subjugated them (Boyer, 1953). The King refused the petition thereby not "accepting" said metaphorical olive branch, and the colonies intensified American nationalism in the years following.

Olive branches are also Greek signifiers of peace dating back to at least five centuries before common time (Rosenthal, 1994). However, it is most likely that the olive branch took on Christian symbolic meaning for colonizers, as colonizers were predominantly Christian and came to America in order to practice their religions in relative freedom (Rosenthal, 1994). Throughout the Bible, there are verses that speak of the olive branch as a signifier of reconciliation, peace, and holiness. For example, the olive branch is a piece of the story of Noah's ark, which centers around a great flood. This flood is common in many religious texts, including the Quran, but as the Christian narrative unfolds, Noah is warned by God prior to the flooding to build a large ark or ship

which could hold a variety of the world's animals. In order to determine that the flood was over, and that life outside of his ark existed, Noah released a dove to seek some evidence. Genesis 8(11) of the King James Christian bible reads: "And the dove came in to him in the evening; and, lo, in her mouth was an olive leaf pluckt off: so Noah knew that the waters were abated from off the earth" ("Genesis 8:11," n.d.). The branch signifies harmony after tragedy, and particularly when olive branches and birds coconstitute imagery, peace is connoted.

This imagery demonstrates how America imagines itself as peaceful and Christian, and as such liberally stamps signifiers of peace and freedom, including olive branches among a host of others on their coinage. The irony is that America is rather offensive in wars, especially those waged on Indigenous people to steal land. They rationalize defeat by appealing to their perceived exceptionalism and desire for a self-serving peace that made their nation building project as expedient as possible.

Other Coins in Circulation

Full dollar coins were also in circulation that year in 1853 (see Figure 8). However, after 1854 the dollar coin design was replaced with something that appears to be an Indian head portrait. The coin displays a woman's head facing left from the neck up with rudimentary features, an expressionless face, and a headdress. This bears some basic similarities with the Miss Liberty coin and it is plainly a product of a genre that has staying power. One just needs to dip into their coin jar to note that faces are a staple feature of coins. But representationally speaking, the face on the coin can be described as a caricature or stock image of an Indian, with little or no way to distinguish tribal affiliation. The reason why the image is general relates to the idea that generalizing

Native people or homogenizing all tribes is a result of an increase in nationalism for settlers, where they sought to generally define Native people and cast themselves as categorically different and superior (Berkhofer, 1978).



Figure 8. Full dollar coin (Numismatic Guaranty Corporation, n.d.b). Image screenshot by author.

Upon a closer look, rather, it is Miss Liberty with a headdress or Miss Liberty in Native American drag. She becomes framed as an "Indian Princess," and is, as a symbol, experiencing "crises of identity" (Deloria, 1998, p. 156). As Deloria (1998) suggests, when in times of crises, whether it be colonial encounters, wars of later decades, or disenchantment with features of capitalistic lifestyles, Americans turn to tropes and perceived culture of Indians to evaluate themselves and construct a corresponding identity in relationship to them.

Miss Liberty "taking" the headdress is reminiscent of a common practice for a leader who defeats a nation to take their crown. Miss Liberty with a headdress connotes the dethroning of Nativeness in America, illustrating that there was a new power. But there is also simultaneously other cultural work that is being performed on this coin, where an American icon is appropriating markers of Nativeness. Miss Liberty, by

attempting to look Native, functions to make herself look as if she is actually *is native* to the land, to America. This is an example of a settler grammar that naturalizes colonialism and makes America seem like it was the first reigning or supreme power of the land. The practice plays into a theory that O'Brien (2010) calls "firsting and lasting." She describes the device of firsting as a "straightforward scripting choice that subtly argues for the sole legitimacy of New English ways. Furthermore, the practice of firsting implicitly argues for the inherent supremacy of New English ways" (p. 6). She is granting herself the power to appropriate but also foreshadows the belief that many Americans hold, that they are native to the land or perhaps even descended from an Indian princess. This reflects the popular misguided adage that Americans are all Native now (Huhndorf, 2001).

As a belonging placed on the heads of people of importance, a crown and headdress have some basic similarities, but more profound differences. Headdresses or war bonnets worn by White people exemplify perhaps the most strident examples of cultural appropriation (White, 2017; Deloria, 1998), and interestingly headdresses have come to stand in for Nativeness, despite the fact only a very small percentage of Indians, including some Plains Indians like Lakota peoples, actually occasionally wear them.

Before Wild Wild West shows of the 1880s and later Hollywood as a cultural industry homogenized all Indians into headdress-wearing war-painted Indians (Rollins, 2011), coins began this cultural work.

Expanding the scope of this discussion, it is notable that "Indian heads" are not just present on Gold Rush coins, but on a number of coins including the one-cent coin, minted from 1859-1909, ten-dollar coins in 1907-1908. The first with the "In God We Trust" motto, the right facing Indian head buffalo nickel, was designed by James Earl

Fraser and minted from 1913-1938, among others (Yeoman, 1956; Numismatic Guaranty Corporation, n.d.). The switch to coins bearing the design of Indians is seemingly peculiar, in that Indians were a population that the U.S. was waging genocide on, raising the, "why would you revere people that you want dead?" question. However, the reasons for the valorization of Native people through representation is deeply rooted in colonial fantasy and appropriation.

Native representation on coins is both an emblem of fascination with otherness and valorization of defeat and guilt. Settlers killed Indigenous people but sought to "recuperate indigeneity in order to express its difference" (Wolfe, 2006, p. 289). Rosaldo (1998) offers imperialist nostalgia as a framework for understanding these seeming hypocrisies:

Imperialist nostalgia revolves around a paradox. A person kills somebody and then mourns the victim. In more attenuated form, someone deliberately alters a form of life, and then regrets that things have not remained as they were prior to the intervention. (108)

Imperialist nostalgia helps explain how images, like those on the coins, serve to eulogize and absolve guilt. They become taken for granted tokens that contain selectively edited imagery of those that were conquered, and they serve as a discursive vehicle to bolster colonial identity formation and maintenance in the present.

On the other hand, Native faces decorate coins and are in the company of other coins with revered symbols including Miss Liberty. But it is the self-serving selectivity of signifying good Indian or bad Indian (Berkhofer, 1978) that presents historical incongruence. This is based on the idea that stereotypical representations of Native

American peoples were and are quite commonly based on a dualism: romanticized and nostalgic; the stereotype of a spiritual, indigenous, earthly and aesthetic tribesperson, or the savage, bloodthirsty and inhuman (Berkhofer, 1978; Deloria, 1998;). Oscillating between the stereotypes of Natives peoples as savages and countercultural heroes are deployed in accordance with colonizers' interests (Deloria, 1998). It is calculated. In turn colonial forces held the power to appropriate Native people, assuming authority over the ways that they could be represented, conflated them as symbols of freedom, and mass disseminated these settler grammars via coins.

There is also a gendered component to this. Representations of Native men in media are often framed through ideologies of the warrior and of the noble, both overlapping and distinct. This finding is consistent with other representational literature that underscores that the most pervasive aspect of Native male representation is hypermasculinity (Klopotek, 2001). Previously, Deloria (1998) brought attention to hypermasculine images of noble and (in)noble savages, according to colonial interest. For example, when rationalizing conquest, the evil brutal savage trope was often deployed. Further, the warrior is framed as a strong, battle-ready leader and often a strong orator to encourage defeat (Pearce, 1988). Alternatively, the noble Indian or old chief stereotype possesses earthly knowledge and wisdom but can also be feminized to rationalize conquering (Deloria, 1998). These gendered representations, particularly the stoic Indian on the Buffalo Indian head nickel, are visible even on the more rudimentary art on these coins.

Other iterations of the coins, circulated between 1849-1889 during the Rogue River War era, include an "Indian Princess" design (Numismatic Guaranty Corporation, n.d.). This presents a different terrain of representation and cultural work. Colonial discourses create an image of Native women as sexually available to white heterosexual men, and tied to the conquest of land in the "New World" (Greene, 1975). Typically, this conjures up mythologized Native women like Pocahontas, who tends to be framed as "noble Princess tied to "America" and to sacrificial zeal" (p. 713). This romanticism, of women, in particular, is not productive or honorific but rooted in essentialism. In turn, representation of Native woman on coins and in other mass media more generally, tend to express exoticism, materialism, nobility, and beauty. Consistent with these findings, a wave of newer coins falls squarely into these stereotypes. Outside of the Rogue River War era, Sacagawea is the most recent Native heroine to appear on the dollar coin. Notably, she is actually based on the appearance of Sacagawea, as opposed to simply Miss Liberty morphed into a Native identity. This coin was designed by Glenna Goodacre, with a minting from 2000-2008 (Numismatic Guaranty Corporation, n.d.). The coin displays Sacagawea, a Shoshone woman, with her son Jean Baptiste wrapped on her back. She is depicted as a young and beautiful mother, carrying a baby with a White man. At age 13 when she gave birth, the nature of consent is contestable and plays into myths. One myth is that Native women, she and Pocahontas, being the most commonly evoked women, are colonizer's helping hands. Sacagawea helps a White man by bearing his children, and by helping guide the Lewis and Clark expedition. The U.S. celebrates that story as what Tuck and Yang (2012) describe, a settler move to innocence. This paints the U.S. in a positive light as opposed to a human trafficking, genocidal country. To her left are the words "in God we trust." White Christian America, of which most settlers were part of, rationalized their conquests by claiming that God supported their efforts,

and because of this, colonialism and Christianity are also intertwined. Christianity as an institution was complicit.

Coins with Indian iconography, used by both settlers and Native peoples, are now popular among collectors and commonly sold at 200-600% their dollar value, and in some cases exponentially more. This puts coins with Native renderings in the same collector category as arrowheads, Native art, and other belongings/artifacts; Native things and representations as something buyable and able to be hoarded, somehow able to be appropriated and commodified. These coins can be interpreted to signify postcolonial righteousness, and directly feed into the mainstream belief that decorating anything with synthetic ideas of Nativeness "honors" Native culture. This instead turns multidimensional Native people into static images, freezing people in time. ¹⁷ These appropriations also work to problematize the way Native people are seen as "real," in comparison to powerful media images of erotic and sexualized Native women and hypermasculine, stoic Native men (Hundorf, 2001).

Bringing this Back into the Rogue River War Context

These coins, and the iconography that they express, were likely taken for granted by the person that the coin belonged to, as most people do not carefully examine and perform semiotic analysis on their spare change. Regardless, these were material belongings that connected them to a collective American identity imagining, or what Anderson (1983) calls a national consciousness. Considering the meaning of coins beyond their representational elements, led me to interview a SOULA Archeological

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¹⁷ The work representations like this perform help to explain racism even present-day. For example, in the case of why President Trump frequently calls a Senator that claims Native ancestry Pocahontas, a racial slur.

consultant Chelsea Rose on coin's value in the open market and their potential to help people survive during the Rogue River War.

This is speculative, but if owned by a settler in the specific archeological context, that coin held potentiality, the ability to help rebuild and imagine life after the trauma of this war. Rose stated how the currency could provide a sense of the imaginary:

This is somebody's livelihood. This is the money that they have saved or stashed and that they could use to rebuild their lives after this conflict ends. The folks that are inside [location redacted] didn't know which way the war is going to go, and what would happen when they're able to leave the hearth and walls. This coin could have represented their future.

However, having a coin in a battle context, with whatever potentiality it may have represented, can also be deemed impractical. As Rose continued she stated,

The coin was useless for the month or so that [location redacted] was occupied.

The lead bullets were more valuable because that's what is going to help them survive. Once they leave here, that's when this becomes valuable—or its value in what it represents, like the beads and table that is also of little usage in a siege—it represents the future.

Without highly reliable centralized banking systems in Curry County, coins were often hoarded and stashed, differently than the often mindless sense of security we place on electronic ledgers today. In this sense, it was more material or at least seemingly more tangible. Marx (1939) offers some insight into the meaning of the coin in this circumstance by offering that there is a distinction between coins and money, in that coins represent the object of exchange while money is only what happens when the object

of exchange is temporarily withdrawn. When withdrawn, it exists as a power or a potential to purchase anything. It could contain a sense of magic, or the ability to transform itself into a desirable outcome. The meanings ascribed to this currency in this context are rooted in futurity and survival.

Due to other contextual clues, specifically the number of settlers that were known to have been where coordinates that the coin was found, the coin likely belonged to a settler. However, the coin also could have belonged to a Native person because they had a variety of ways to acquire coins, and used them regularly in transactions. For example, during and after the war, tribal nations received some provisions, including cash and coin money, based on treaties and agreements tribes received. For example, money was mentioned in this bill of goods sent to the Rogue River Indians by Schiefellin and Walker (1854):

1 blanket	5.00
3 lbs. bread	.75
10 lbs. flour	1.60
3 lbs. bread	.75
cash to buy medicines	4.00

Native people could acquire coins from provisions, work, taking them, making them, and through various types of exchange with settlers.

It was not until 1863, with the passing of the National Banking Act, that coins and currency, as we know and are accustomed to, were more rigidly mandated as legal tender ("National Banking Act," 1863). The United States Coinage Act of 1873 ended bimetallism (silver and gold) and stipulated strict enforcement of the gold standard where

economic units were based on a fixed weight in only gold. Though this act also reduced the use of Confederate currency, it had consequences for tribes on the West Coast by making the economy stricter and disallowing or shutting out varied Indigenous currencies. Beyond the terrain of representation, there are other meanings ascribed to the relationship between colonial currency for Native people from a market stance. The move to coins, and other American currencies, became a standard and with it the slow exclusion of Native people to transact in particular economies. It meant Native people would have to accommodate, appropriate, and/or more aggressively integrate them to participate in colonial and intercultural economies.

Part Two: Non-Iconographic Aspects of Currency, Decoding Colonial Pasts and Articulating Sovereign Presents. A Close-Analysis of Gold, Beads, and Necklaces

Natural resources are meaningful components of currency. Part of the technological development of currency, or any media, are the choices to use specific resources from specific places to produce them. A resource of high significance is gold, both as a currency in and of itself in various forms such as dust and nuggets, and as gold bullion, an ingredient used in the making of coins. These processes involved various systems of weighing, measuring, and testing of contamination in the dust. Kramer (1990) considers this typical of a "frontier economy, the hard currency of gold dust and nuggets provided a ready source of exchange and prosperity," and something the first merchant class in the area relied on (p. 21). The multiple forms of gold in circulation suggest that negotiation and experimentation involved in its innovation stage, as is the case with most technology.

In the decade following 1850, total worldwide production of gold reached 17,605,018 ounces ("Bureau of the Mint, 1990"). This massive quantity was due largely to American gold fields in the West, and the process of the mass migration of people and extraction of gold resources and other metals from the earth is referred to as the Gold Rush. One important boom began in 1853, when gold was discovered in Curry County, Oregon, near the archeological sites. This was home to a few bands of Native people such as Tolowa and Tututni, as well as other Native people in the area who had married in, for example.

SOULA Archeologist, Chelsea Rose detailed the movement of miners on the West Coast and the role of the Gold Rush in attracting settlers to Oregon:

Southern Oregon really functioned as the extension of the California gold field.

Gold was discovered here in the 1850s and people are working their way up through California, and as mines are becoming crowded they keep moving further and further north and they eventually find gold in Oregon. The town of Gold

California is often reified in Western historical memory as the dominant place of the Gold Rush, and this functions to draw attention or memory away from other states that were sites of the larger Gold Rush. As gold became sparser in California, as finite natural resources do, people refocused their fixation on gold elsewhere, in Oregon.

Beach was settled by these miners working the black sands in search of gold.

One story dating back to around 1850 provides a vignette for different paradigms of socially agreed and disagreed upon value between Native people and settlers. I first learned of this story from Rippee (Coquille Tribal Historic Preservation Officer) when I asked her about the degree to which Indigenous people actually participated in the gold

industry and used it as currency during the Rogue River War. She told me a story that she learned through Brenda Brainard, Coos tribal member:

Two Indigenous men came up to side of the Rogue River and saw two White men mining for gold. As the story goes, the two Indigenous men saw a nice pouch full of gold and took it. Before they ran off, the dumped the gold out of pouch. Later they were tracked down and shot and this is sometimes thought of as the event that helped lead to the start of the Rogue River War. K. (Rippee, February 3, 2019)

Similar stories are written but from a pioneer, not Native, perspective. For example, an account by Joseph Lane (Lane County is named after him) recalls memories of a "skirmish" in spring of 1849 or 1850 between Rogue River Indians and a camp of miners and other settlers. It should be noted that the letter is markedly racist, and most from White people at the time were unsympathetic and referred to Indians habits, as if they all have the same, as treacherous, savage, and some as stupid. In the same letter that marks Indians as treacherous, Lane also praises himself for having a Modoc Indian as a "pet boy" servant.

Lane stated that a group of Indians had taken their valuables including sacks of gold dust in the night. Six weeks later, Lane assembled a group that included 8-10 (another account states 40) Klickitat Indians and their Chief Quately, adversaries of the Rogue River Indians, to have what he refers to as peaceful conversations with Rogue River Indian's Chief Sam and Chief Jo (these were not their first names but conferred in some way with White people) to get the gold and other valuables back. Instead Lane, with Quately, apprehended Chief Jo. After what is framed as friendly conversations with

Jo and Lane, Chief Sam came with some of the valuables and had a meal together, but the gold dust was not returned:

Of the gold dust none was returned, nor could we learn from [them] anything certain. They, however, said that they did not know that the dust was of any value, that they had emptied the sacks on a point of rocks that lay at the opposite bank of the river, out of water only at low water mark. Our failure to recover the gold was a great disappointment to the parties concerned and worried me (Lane, 1878, para. 7.)

Another account from Mulkey, said that in the same event,

\$100 of the gold dust that had been taken from me. The rest of it, about \$3,500, they had thrown in the river. They had taken from our party the year before over \$20,000 in gold dust, and of this entire amount they had only saved \$100 in nuggets, throwing all of the rest away. (Lockley, 1913, p. 6)

Those specific Indians, if the story is accurate, could have dropped the dust because it was not of any use-value to them and kept the fine pouches (Beckham, 1971). It is also possible that they knew its exchange value and just said that because they knew what it could purchase. For example, the guns, food, and supplies they needed to protect themselves in altercations with these people. This was a common type of historical account. One from Meldrum (1854) states that in 1839 eighteen hundred dollars was taken from him in gold dust, two hundred dollars of that was gold and silver coins, as well as horses and clothing on August 31, 1839 (Meldrum, 1854). While these stories frame Native people as thieves, even though White people were stealing their entire

homelands not just property, it nonetheless suggests that Native people had access to, or negotiated, gold and colonial currencies.

Sometimes that negotiation involved refusing them as valuable, and this is a result of different ontological assumptions. For Indigenous people, like perhaps the two men from the story, gold did not seem valuable. This is a reminder that the allure around gold is socially constructed, particularly because gold on its own did and does not have a lot of use-value. It has to be transformed socially to be more than just a yellowy, malleable, composite of alloys. Gold cannot be used in basic survival, as it is not food. It could be used to produce products like bowls or other tools, but there are other materials that are easier to build with and that are more easily extractable.

Gold Fever

Gold coins, like those described in part one, and various objects made from metals were in circulation and use in the Rogue River War era, often reflecting or signifying the ethos of gold fever. Settlers that came to these regions were said to have gold fever or an obsessive, consuming desire for gold. In the following quote Rose touches on this metaphor:

Gold is what brought the settlers to this part of Oregon, and the speed of migration is what fueled the tensions that led to this conflict. So called 'gold fever' spurred unprecedented migration into the mountains and isolated areas of Northern and Southern Oregon, and created new challenges for the people who were already there. And so to see the Gold Rush in all its shiny glory, you can see the gold fever.

If gold fever is akin to an addiction, the pleasure-producing substance is gold and it is agreed upon not just by the moral judgement of individuals but larger cultural systems. In this regard anything can produce this if a network says it does, be it shells, cryptocurrency, leaves, animal skulls.

Rather its desirability or addictive nature is rooted not in its inherent use-value but in the possibilities of exchange and market value. Marx (1867) discusses how exchange value arrives by comparing said commodity with other commodities, labor, and ideas, which are commodities in a capitalist system in and of themselves. Gold could buy settlers acres of land, land could bring with it stability, security, and potential prosperity. Prosperity could bring social status, a perceived strain of self-actualization. These objects and ideas were valued against each other.

Gold also has historical allures or semiotic ties to wealth, grandeur, and godliness, but during the Gold Rush, gold came to signify or become tied to an ideology of the American dream. This means that working hard and laboring in the "New World" comes with the promise of upward mobility for settlers. This dream was made actionable when the government passed acts, namely The Oregon Donation Land Claim Act (1850). This dispossession of Native lands made creating a life around the industry of gold easier for miners and immigrant families. Often these settlers were families looking to better their circumstances by acquiring land, agency, opportunities, and materials and to flee poverty in other countries (Whaley, 2010). Not only did this benefit the individuals, but it benefited the government in that settlers were doing the work that the government wanted, removing Indigenous people.

Settlers rationalized their stealing of resources in a number of ways. One way was by asserting that they were racially superior, that it was religiously approved of, and that by doing so they were working both individually and collectively in exceptionalism toward the fulfilling the project of America. In my interview with Robert J. Miller, J.D. he shares how this was allowed:

The gold miners were probably illegal at the time but they're making the U.S. richer, they're literally moving Natives, they're killing Natives and so in one sense the United States sort of closes its eyes to it, and there comes what we would call Manifest Destiny, which I claim is just the Doctrine of Discovery.

This was a practical strategy that the U.S. weaponized. Much of these rationalizations were rooted in the Doctrine of Discovery (Miller, 2011), which upheld a concept of terra nullius or open and free land and stipulated that lands not owned in accordance to European law were empty (Miller, 2011). Despite Indigenous people living on the land, the lands were interpreted as unoccupied and Indigenous people often found the concept of land ownership foreign altogether. Land belonged to itself (Mackey, 2016). Essentially, settlers never minded guilt the genocide of Native people because they could remind themselves that they were indoctrinated with a divine right to a land that was not theirs.

Final Thoughts on Gold and Resources

This belief of settlers, that everything was theirs, gold, land, women, did not go by Native people without contestation. Thus this era was marked by ongoing tensions between Native people, gold miners, and homesteaders (Kramer, 1999). But more broadly, as Cronon (1983) suggests, conflicts can be characterized by settler desires for

an array of natural resources with the potential to be stolen, and the environment became radically altered. This desire to tap into the sovereign lands and rich environments of Indigenous people has historically been the paramount reason for land dispossession and mistreatment (Robbins, 2005). Gold happened to be the most sublime of all desired resources. Gold to settlers meant one thing, but the meanings ascribed to this currency for Native people were rooted in the extraction of metals from their tribal lands and their ability to be appropriated to transact. This gold was used as tender and became a material of the new wave of U.S. currency, and in its processing gold was converted into the coins, discussed at the beginning of the chapter, that then sought to replace other currencies.

Beads

While gold was perhaps the most infamous of all currencies in the era, and a peripheral signifier of the materiality of Westward expansion, beads, and other smaller, more abstract items well-integrated in Native reciprocity and bartering systems, were arguably just as viable. This is supported by scholarly works that highlight the pervasiveness of beads in tribal practice and in larger intercultural economies in Oregon (Strauss, 2008; Farris, 1992; Crull, 1998). This is also supported by the materials found in this archeological study itself, with the conservative cataloging of over twenty-five beads in Miners' Fort alone.

Miners' Fort is significant for several reasons and is a site of historical memory for a particular captivity narrative, with which the war was framed (Beckham, 1971; Schwartz 1997; Whaley, 2010; Tveskov, 2017). Captivity narratives, among the most common literary frame of history at the time, cast white women as pure, symbols of

femininity and civilization, and ultimately work to villainize Native people (Vaughn & Clark 1981; Derounian-Stodola, 1998). One of the few and staple books that discusses Rogue River War, Beckham's (1971) *Requiem for a People*, begins by discussing the following captivity narrative.

The Geisels, a family from Germany, were retaliated against during the Rogue River War by Native people. As immigrants, the Geisel family traveled a far distance from Germany for a version of the American and cultural values of Manifest Destiny, settler colonialism, and capitalist individualism. According to an article in the *Evening* Star (1890), John Geisel, the father, mined fine gold dust on the beach near their home in what is now called Gold Beach, Oregon ("More Thrilling Than Fiction," 1980). He was able to supplement his income through stock on the prairies, and also by providing lodging for travelers coming through the area, and he hired Native people to work for him ("More Thrilling Than Fiction," 1980). As the story/captivity narrative goes ("Biography: Geisel family," n.d.), on February 22, 1856, a Native person who had worked for the Geisel family entered their home with other Native people, killed John Geisel and their sons, and burned down their home. They then took Christina, his wife, and her two daughters hostage to a Tututni camp. In captivity narrative fashion, this ignores the previous attacks on the tribes which triggered the attack. Under threat, around one hundred people living in the lower Rogue Valley then sought refuge in Miner's Fort, close to the Geisel's home. Archeological and ethnohistorical evidence suggests that the town stayed for over a month in the fort fighting Native peoples until U.S. forces came to end the occupation (Tveskov et al., 2019). The length of the occupation, and the active violence during that time, resulted in many belongings being left behind.

Several types of beads including glass and crystal beads from Europe, and trade beads of varied colors, shapes, and sizes were excavated from this area. I limit the scope of the analysis by focusing on beads from one archeological site. Below is a table of the beads found in Miners' Fort and their quality, colors, and approximate sizes in width (see Table 2) and images of the beads (see Figure 9, Figure 10, & Appendix C).

Table 2

Beads from Miners' Fort

Quantity	Description	Size
2	Burgundy with a gold stripe	³ / ₄ cm
2	Burgundy with faceting	³ / ₄ cm
2	Dark brown with faceting	1 ³ / ₄ cm
3	Red glass	¹ / ₄ cm
1	Salmon colored glass	¹ / ₄ cm
2	D 1 '411 1' 1 1	1/2
2	Red with black interior holes	1/3 cm
2	Black	1/3 cm
1	Yellow	1/3 cm
1	green glass	1/3 cm
1	Blue glass	1/3 cm
2	Medium blue glass	½ cm
1	Turquoise clouded glass	³ / ₄ cm
1	Clouded medium blue glass	³ / ₄ cm
1	Light blue glass	½ cm
3	Medium blue	¹ / ₄ - ¹ / ₂ cm



Figure 9. Sampling of beads (SOULA, n.d.). Image courtesy of SOULA.



Figure 10. Beads in palm. Image taken by author.

Beads have unique visual features, organic and artificial compositions, and most from the assemblage are made of glass. Glasses, generally, are non-crystalline solids, heated and cooled to form items of material culture. Glass objects, beads specifically, trace back to the third millennium B.C.E. and were considered luxury decorative items as opposed to those of great utility (Biron & Chopinet in Janssens, 2012). What makes beads interesting, as belongings of inquiry in the 1850s, is how long the technologies had been around and their social qualities as both decorative, aesthetic items, and objects with transactional power. As such, they tend to speak most to the semiotic category of symbols in that they are historically used for symbolic purposes such as prayer, in gaming, in art, as a sign of wealth, and as currency.

Their presence in archeological excavation specifically, has some other practical and semiotic suggestions. First, beads are a commonly found belonging in archeological contexts in North America because glass does not deteriorate as easily as corrodible metals, and beads were a ubiquitous item traded with French, Dutch, and European traders (Janssens, 2012). Native people in Oregon and California could acquire colored beads through trade, often through mercantile outposts. Fort Umpqua, built by Hudson's Bay Company in 1832 was among the closest to Gold Beach (McArthur & McArthur, 1992). Toward the end of Rogue River War in 1856 another post was built near the

Northern bank of the Umpqua River near present-day Gardiner, Oregon for trade and military purposes (McArthur & McArthur, 1992). Another mechanism of acquisition was through trade with people coming from California, but intertribal exchange occurred far more in Oregon and Washington "post-contact," because they were not confined to mission systems like Native people were in California (Panich, 2014). According to a Coquille elder, during the Rogue River War era tribes continued to produce their own shell beads in addition to acquiring them through trade along the Willamette, Rogue, and Klamath rivers. Trade beads may have reached the Rogue River Valley in the latter half of the 18th century, with evidence suggesting that Hudson's Bay Company traded with Native peoples in the area in early 1827 (O'Neill & Tveskov, 2008). These are all more local flows of the beads.

There are also global flows associated with these beads. For example, Blue Russian beads are among those excavated. These beads were coveted because of their color, and these as well as larger faceted beads were considered higher on a continuum of value than Native land-based beads (Miller & Hamell, 1986). Dubin (1987) suggests this is because Native peoples did not have a natural dye for blue, and that blue beads were rarer, as the market was inundated with other colors (Jargstrof, 1997). These beads moved their way from Bohemia (Czechoslovakia) to the hands of Russian traders and into Native America in the 1700s and 1800s (Dubin, 1987). Dubin (1987) also traces a trajectory of the beads from production in Venice to Hong Kong, after shipping by English trading companies. There are also a few tube beads in the belonging assemblage that could have been manufactured in Italy, England, Belgium, France, and China, and are distinct in their manufacturing, formed from small bubbles in glass that are stretched

(Janssens, 2012). Most of the European trade beads were comprised of soda-lime-silica glass differing in color (Hancock in Janssens, 2012). Seed, pony and crow beads were among the most popular beads in the era and were primarily used by Native people for decorative, embroidery purposes and can range between 1 and 2 mm in diameter.

The beads could have belonged to any of the 100 people in the fort; about five Native American women, five Native American men, one African American man, 11 children, eight White women, and 70 White men (Tveskov et al., 2019). The presence of these beads in Miners' Fort sheds lights on certain economic and aesthetic realities. For one, finding a variety of different beads necessarily suggests that options existed in the marketplace. Beads as Native currency facilitated social and economic interactions between members of the community in ways that required sophisticated communicative competence. A Native woman consultant and the former cultural officer stated that, "we would be able to say we want the big detallium, the big fat ones, we want seven strings of this and four strings of that... I mean and they were able to set up, and how many abalones, and we want thirty baskets." Scaramelli and Scaramelli (2005) also discuss how Native people often chose beads on the basis of color preference, selectively incorporating them into use. One type of bead brought by traders did not simply replace other types of shell beads. Rather it is more likely that Native people used land-based beads made of shell and glass or crystal beads together to create jewelry and other items. This requires an ability to incorporate something new in a way that suits the aesthetic choices of person or tribe.

This incorporation of aesthetic and new beads in regalia, or other cultural belongings, is also part of a traditional practice of potlatch, described in the background

chapter. Many tribes in Oregon were, and are, potlatch tribes and display of wealth and wearing of wealth is an expression of identity, esteem for oneself and others, and sometimes had an air of competition.

For example, beads were part of both women and men's clothing and are often incorporated into both everyday wear and ceremonial regalia. A Coquille elder, who wished to be recognized as having two Coquille parents stated,

In regalia, dancing celebrations, the more beads you had the more money you had.

But then that changed when the Gold Rush started and then they started valuing gold and that's all they wanted. Whenever the fur trade dropped off at different times, whatever popularity was with different beaver costs and all that came later.

People had baskets too but they didn't have value like beads had value.

Another Native woman consultant and former cultural director of her tribe stated that beads, like the ones found in the dig, have a prestige element:

It's something new, not having it and they were often shiny and pretty and my neighbor didn't have it, you know? It's a form of prestige and showing of wealth, that I can afford to trade enough to get this string of trade beads that you don't have, so it's about showing wealth again.

Sewing beads on clothing, typically seed and pony beads, or displaying them in other ways was a means to both store and express wealth. It was also a way to demarcate affiliations, as tribes had distinct ways of arranging beads. This practice expressed ingroup values in ways that the consultant suggests would not be able to be replicated with other forms of tradable items like baskets or gold.

Bringing beads and currencies back into Rogue River War context. It was not just that Native people wanted beads, but settlers desired Native beads and knew the worth that they had. For example, soldiers were known to steal beads from Indigenous graves in the Rogue River War era. The following is one recounted story that details a theft:

A large Indian village which had formerly stood on a slight eminence near where the soldiers were camped had been burned down the autumn before. In front of the village and nearer the river was their burying ground. Some of the soldiers had accidentally found some Indian money (*alaqua chick*), hanging on a pole over one of the Indian graves, and the curiosity or cupidity of others was aroused, and those of a sacrilegious turn of mind began to overhaul the graves for more of the same kind of money. They were rewarded in one instance by finding nearly three hundred dollars in U.S. gold and silver coin in the grave of some celebrated chieftain who had been slain in battle or had quietly given up the ghost in his native village. ("Continuation of the story," 1879, p. 3)

"Bead wealth" for Native people was also a way to display social status in death (Milliken et al., 2007), and in the previous example, burial beads would have an indexical connection to death. This stealing of beads by soldiers stirred retribution from Native people whose burial grounds were desecrated. These soldiers demonstrated the value they placed on Native belongings, in this case, beads. They did not value the people that had passed away, often those that they killed, nor the Native people that were alive that wished to honor their ancestors.

The gendering of beads. When beads are excavated in archeological contexts, they are also indexes, suggesting that people were there. However, it is limiting to just arrive at the conclusion that "pots=people," an old archeological equation that suggests that the finding of artifacts simply equals the presence of people or trade at the time (see Dores Cruz, 2011). Rose (2013) states that specifically the "beads=babes" equation, or that the presence of beads means simplistically that there is a presence of Native women, is quite flawed because of underlying gendered assumptions. The finding of beads in military or Gold Rush archaeological contexts is often associated with the presence of Native women and plays into the stereotype of Native women as domestic servants with limited skill sets and/or prostitutes (Rose, 2013). Rather, Native women were often skilled fighters and negotiators, able to broker exchanges that benefited their people (Wasson, 1994; Tveskov, 2007; Tveskov, 2017). Further, beads do not only pertain exclusively to Native domains of women, but of men, and other genders like two spirits as well. This beads=babes equation is based on gender binaries created by Europeans, not Native people.

During the war, beads, baskets, cash, and other currencies were also used to attain people in various ways; such as laborers, as spouses, or as collateral during the war. What follows is one story that was retold frequently during the archeological excavations. Take for example the captivity narrative that was told at the beginning of the beads section of this chapter regarding the women of the Geisel family being taken as hostages. As the story continues, a few weeks after the "capture" on March 7, Charles Brown, a Russian fur trapper who had settled in the area, and his Native wife, Betsy Brown of Tolowa/Chetco tribe, agreed to leave Miners' Fort to try to get Christina Geisel and her

Athabaskan, she could broker the release of the Geisels. In exchange, other Native women being held at Miners' Fort, and an additional number of blankets and monies, were given to the Native men. However, while Betsy Brown and her language skills gave her linguistic capital (Bourdieu, 1977) and allowed her to serve as a cultural intermediary, Charles Brown is historically given this credit (Tveskov & Rose, 2019). Betsy, like other Native women in Southern Oregon who were often economically capable and multilingual, was uniquely positioned to communicate cross culturally (Tveskov, 2007; Wasson, 2001). She used Athabaskan language skills, in addition to an assemblage of currencies, to exchange for the Geisel women. In this case, individual sovereignties could be bought.

The currency was a prop of sorts in a conclusion to the Geisel story. Ultimately, a check served an anomalous role in the aftermath of the Rogue River War for Christina Geisel, supporting Zelzier's (1994) claim that there are underlying unimagined social meanings of money. An article from the *Daily Morning Astorian* in 1890 details what was then good news for Christina Geisel:

The committee on pensions the other day listened to a speech by Representative Hermann which sounded more like a romance than serious history. It was in behalf of the pension of Christina Edson–formerly Geisel. She was truly the heroine of the early Oregon Indian wars. The representative described to the committee how, on the dreadful night of February 22, 1856, the Geisel family were massacred on the Pacific coast... It is sufficient to say that the committee unanimously recommended the passage of the Hermann bill giving this pioneer

woman of Oregon \$25 per month for the balance of her life. (p. 1)

In an ironic misfortune, an installment of the compensation was stolen and she was killed.

The checks were to be compensation for the tragedies she faced with the loss of her family. It implicitly communicated what was already explicit. The lives of white families, immigrant families, were worth money and compensation, while the killing of Native people was often sanctioned and encouraged.

Another example of how women brokered with currencies during the war clarifies the difference between purchasing women (as commodity in war) and compensating (placing great value upon the worth of women). Consider one letter to Palmer from a settler who wished to marry a Native woman, a common relationship at the time:

Mr. Palmer

Sir, in regard to moving the Indian woman, her people was willing [and] presumed that I will get a situation on the reserve. Mr. Palmer, if you can possibly give me a situation on the reserve I will most assuredly go. You may think strange of thinking so much of an Indian woman. She is not a full blooded Indian. She is a half breed, and she is shrewd and understands business, therefore I think as greatly of her and it is hard for me to see her go away. I bought [her] of the Elk River tyee. I gave seventy fathoms of elkachic ["beads"] and fifty-seven dollars in cash. The whole amount is \$238.00. I never would [have] gave so much for [her] if [I] had not expected to keep her. I am perfectly willing to marry her, and she is to marry me. I am not ashamed, Mr. Palmer, to marry her. Mr. Palmer, I hope you will give me a situation on the reserve. I understand farming and

blacksmithing; this [is] my occupation, and I hope you give me a situation. Being the way that I am situated give me an answer as soon as possible. (Hind, 1856)

This letter suggests the value placed on Native women by one settler, and how that is mediated through notions of cash and beads. The settler talks about the Native woman as if she is his possession with phrases such as "bought her" and "keep her" and tries rationalizing his feelings for her because she was multiracial. The intention of bringing this up is not impose a semiotic opposition or moral judgement on any market, but to show how the semiotic understanding is framed differently. The compensation of women with gifts for marriage was not uncommon in Native communities at the time and still happens now in most communities in various ways (e.g. Western engagement rings). However, this is framed very differently by a Native consultant who does not believe Native ontologies see women as commodities.

A Native woman and former cultural director of her tribe stated,

It is not called what Westerners say, dowry, because that's purchasing. That's very much like purchasing that woman and chattel, but in our community, it was very much like, your woman, your daughter is so important to your community that we are going to compensate you for her loss. We're not buying her; we're compensating you for her value. Of course, it went up if she knew how to weave or she snared rabbits really well or could cook or whatever and because that community is losing her so they're compensating. It's a different viewpoint in our community.

These rest on different ontological assumptions of worth. Women were the most valuable people to many tribes in Oregon. There were strategic marriages between tribes at the

time, as is the case in many, if not most, other cultures and nations. Women were seen as the highest type of intercultural ambassadors (J. Younker, personal communication, March 25, 2019).

Discussion: Reflection on how Beads, Necklaces, and Beading Practices of the Past Help us to Understand Who We Are in the Present

The last section discussed beads that were individual, not preserved as complete pieces of jewelry, in the context of the war and the excavations. The idea that beads are not used widely as currencies today suggests in media archeological terms that the media is dead, or zombie. Their buried nature, under several inches of soil, also suggests that they are postmortem. However, these beads, seemingly dead from a Western perspective, are actually alive in many ways and have several significant meanings when considered in the contemporary moment. To end this chapter about coins, gold, and beads, I will share an example of how beads, similar to the ones excavated in the archeological context, are carefully and artistically strung together (read: not connotatively manufactured) to make necklaces, a belonging of significance. In order to move past the trauma of the war and how that is mediated through material culture, I want to end by sharing a story of survivance.

A few months after the archeological excavations, I consulted with a Coquille elder and artist to gain insight into the excavated beads' meanings from her perspective. What I found out, however, was how those beads not only elicit stories of the Rogue River War era but they elicit meaningful intergenerational memories, the Assimilation Period, the Restoration Period, and connection to lifeways. She shared stories that her father told about contested locations of war, and how Native people were coaxed into

going into the water in their canoes and were attacked on one occasion. She told me how certain transactions would happen with beads, and the value of Blue Russian beads, agates, and dentalium in the family. During our discussion, she showed me an image of a necklace (see Figure 11) made by a family member of ours, Laura "Lolly" (Hodgskiss) Metcalf, daughter of Susan Adulsa, who I did not know. Lolly is my great grandmother's half-sister as Susan Adulsa, my great, great grandmother, was remarried to a man named George Richardson Wasson before having my great grandmother.



Figure 11. Necklace. Image taken by author and used with permission of tribal elder. This is an image of another annotated image of a necklace made by Laura "Lolly" Metcalf, made around 1862.

In this photo, you can see many specific types of beads discussed earlier including white hearts, Blue Russians, and predominantly seed beads. In this necklace, some of the beads like the Blue Russians were used only one time, signaling that the bead was limited or it was special in some way. A replica of the necklace was made by a Coquille tribal elder and Tribal Council Member Toni Ann Brend. It was on display in an exhibit

"Strung Together" at the University of Oregon Museum of Natural and Cultural History for a period until February of 2017. The necklace became a touchpoint for tribal members who visited the museum and a point of pride that our elder was able to recreate the piece using traditional skills. It shows people that the Coquille people are still here and that we are connected to the past through belongings that were significant to our ancestors. This is also an example of a tribal member giving away a belonging in the spirit of sharing as opposed to museums taking it away and hoarding it. This reminded me of an article by Gosden & Marshall (1999) who suggest that objects tend to pick up meanings over time, connecting differently with people. These objects/belongings waver and take on new levels of significance and that accumulated meaning itself is often more important than the objects themselves (Gosden & Marshall, 1999).

Reflecting on this necklace also brought up memories of other items to the consultant that shared this necklace image with me. Specifically, a particular location possesses something rare, of subjective value. A Coquille elder with two Coquille parents stated,

My dad used to go to the beach and pick up all the agates. He loved doing that. It's equated to finding something that nobody else might have that you can show that someone might be interested when that comes to your house. Where do you get all these and find value in all these agates and dentalium that might impress someone to some degree.

She continued to discuss dentalium shells,

The value of them [dentalium] persisted though [after the 1850s], we coveted them ever since I can remember as a little girl. We [our family] thought it was

important to have... Value is your family traditions and to me, that's the traditions of whatever you grew up with all the years of your life. The important of dentalium, we always knew it was valuable but only valuable to us.

Wealth was often based on acquiring goods that had particular signifiers, including shininess, rarity, often pertaining to the realm of aesthetics and scarcity, but for her, there is also value on the basis of sentiment tied to the land. This is where cultural and intellectual property come into play. These items are valuable to us, they belong to us, our nation, our lives, our cultural survival. If a tribe donates a piece to a museum to share that is one thing, but if a belonging is imprisoned in a museum and we want it back that is an entirely different story.

Practice, Identity, Sovereignty

The social context and practice of making necklaces are also important. There are memories encoded in them because necklaces are made in the same or similar ways that the family members made them. This was what is often what is described as "the best way to do things" (Younker, 2003). When the dentalium are strung into necklaces, for example, Coquille artists typically string the larger end to match up to the smaller end of the next strung dentalium. The smaller ends should point together in the center of the necklace. It connotes bad luck if they are strung differently, and is less aesthetically appealing to us. If the shells are put in a string with no ordering or design, often less communication is conveyed. The position of the beads is code because it is readable information that can only be decoded by people with cultural knowledge.

Another consultant discussed the importance of community in jewelry making and using traditional materials. Producing them into necklaces and wearing them reflects

specific cultural values. Culture is not something that is always reflective of the past because when a tribal member even just spends time with another tribal member in the present, that is culture. The consultant shared,

It's you sitting around laughing and having good time and telling stories and jokes because all of those good feelings I think, I believe, go into those necklaces or earrings or whatever it is that you're making. That then get passed on to your recipients so basically you're putting goodness and wellness and health and laughter right into those things and passing them off as gifts, so it's perpetuating our cultures. It's practicing and continuing. It's coming together and sharing a common practice, and then it's passing it on to others that goodness those good feelings.

The necklaces are made in good social company and are imbued with the emotions of the artists. The necklaces themselves become indexical signs that those good intentions were there and can express in-group values.

One consultant, former cultural director of her tribe, spoke about her choice to wear necklaces with traditional currency on them,

I think it shows that I am still a participant in that I know who I am and I know that this is important. And by showing you who I am, I'm honoring my ancestors and I'm honoring you by respecting you to show you enough that I do have, I don't want to say regalia, but I do have money you know, whether that's dentalium or abalone or olivella shells or beautiful woven medallions. Whatever that is, necklaces, earrings that's a respect also that I'm paying you because we both understand that colonization that we are living under.

After making, receiving, or buying necklaces, wearing those necklaces is also communicative of survivance. Another Coquille consultant who teaches jewelry making at Coquille gatherings, Marsha Frost, said that wearing a necklace made with traditional materials means something profound,

We're still here. You didn't kill us all off. So we should be proud that we're a sovereign nation and that even though so much was taken from us we still get to try to gain that back through, um, through being connected the people and learning about the story. So we're learning how to do what our ancestors used to.

The act of wearing them is a shared statement that speaks to respect and understanding of tribal histories, and it is a political act. This shows that our ingenuity is a signifier of sovereignty and nationhood.

During the Assimilation Era, following the 1850s and lasting until the 1920s, if not present-day in less overt ways, participation in ceremonies and wearing traditional items were sometimes illegal, discouraged, or shamed. For example, on Oregon's Great Coast Reservation Native people would sing gambling songs but in other tunes and beats to try to trick the priests, who policed them, into thinking they were just practicing church songs (J. Younker, personal communication, March 25, 2019). Spaces of resistance emerged even in reservation conditions. Native men would grow their beards instead of their hair since having long hair was banned (J. Younker, personal communication, March 25, 2019). Native peoples would talk in their own languages when it was safe, hold ceremonies in private, and make jewelry inside their homes. The consultant who showed me the picture of Lolly's necklace suggested that while her mother owned regalia, it was often worn in the home, on infrequent occasion, or saved for posterity:

People did not wear necklaces or regalia because you couldn't be Indian in those days... We didn't start wearing it again until the tribe was recognized. You never let people know you were Indian. People coveted it and kept it in jewelry boxes but seldom would wear it. Sometimes in parades or when being interviewed or when people wanted to take pictures in regalia. But everything stopped because it was too racist to let anyone know if you're dark skinned.

The significance of making and wearing necklaces based on traditional items, or even commodified supplies that are similar to those traditional items, is highly symbolic. Many Oregon Indian peoples did not start wearing them again until around and after the 1980s when some tribes in Oregon were beginning to be restored. Now they are worn at meetings, at ceremonies, and in everyday life. Meanings are rooted in perpetuating traditional practices that were assumed to be lost around and after the Rogue River War. Any time a Native person engages with a cultural practice, be it speaking in their language, attending a gathering, making necklaces, or trading, they are communicating a message. It helps build a political or national consciousness to some degree, and it is survivance in action. Necklaces and other forms of Native currency-use signify and are a sociotechnical nod to tribal members' commitment to honor and survive in the past, present, and future.

Conclusion

This chapter considered a time when multiple currencies were able to exist at once, broker a combination of settler and Native relationships, hold representational meaning, and undergird economies in conflict. This was not a static one currency system, but an evolving, negotiated, dynamic system. Trust in Indigenous currency forms

was eventually lost as colonial forms became dominant and mandated. The Gold Rush spawned many forms of currency including gold dust, nuggets, and coins, with the latter being the preferred currency because it was harder to counterfeit. Dollars and coins tended to buy goods such as store bought-foods and supplies, while intermediate commodities and currencies like blankets, necklaces, horses, in addition to other coins and dollars would be used to purchase land, and "purchase" labor and people (Hind, 1856). The chapter ended by showing how beads and necklaces are used by tribes to communicate survivance, and are symbols of sovereignty and memory of the past, including those from the Rogue River War era. Looking at currencies and necklaces as communicative belongings reveals the multiple purposes they served and demonstrates how currencies of the past tell us much about history, but ultimately help to show who we are, and where we are with colonialism in the present. While the discussion was woven throughout this chapter, a more summative discussion will be presented in the final discussion and conclusion chapter.

CHAPTER VI

CHANGES AND DIGITAL: A BRIEF INTERTWINED HISTORY OF INDIGENOUS, COLONIAL, AND U.S. CURRENCIES

People act as if cryptocurrency was created in the last decade.

"Cyberspace has been under construction for the past two thousand years."

-Lewis, 2013

As explained in the last chapters, from the 1700s to the middle of the 1800s currency could no longer be divided into neatly packaged groups of Indigenous currency and settler currency. However, as the project of America became solidified, especially around the time of the Gold Rush, tender like coins and bills were created to make the U.S. economy more powerful and to codify its identity as an emerging nation. This standardization of currency allowed the U.S. to more clearly delineate the boundaries of their economy, and to dominate Indigenous currencies that did not fit into the system. First colonial people used and adapted Indigenous currencies to define themselves as separate from the British, but as the frontier line moved all the way to Oregon, the U.S. was doing anything in their power to dispossess Indigenous peoples, including eradicating their basic means to survive (Turner, 1893). If tribes had ratified treaties with the U.S., they often lived off of rations listed in those treaties for a period of time and made a living in other ways including as seasonal laborers and in local industries including fishing and timber. Native people who survived were claimed citizens of the United States under the Indian Citizenship Act of 1924 and went through forced assimilation during the Assimilation Era 1790-1920. During this time, they were forced to adopt all aspects of U.S. culture including language, standardized currency, clothing,

and educational practices. However, Native people also found spaces to continue their traditions or practices of resistance, often in private.

The following section will fast forward through a complex history, focusing on episodic timeframes where there were important changes in currency. This history of U.S. currency after the 1850s is also one shared with Native people because currencies were used and developed by all Americans. (This included Native people who often also identity now as American, often secondarily to their tribal affiliation). The end of the chapter focuses heavily on the shift to digital currencies and provides necessary background for the MazaCoin chapter. This cryptocurrency is framed as a form of resistance to the U.S. economy and the country's paternalism. Notably, with current conditions and regulatory frameworks, it is now a unique time when people can readily invest in, buy, and less readily actually use digital currencies created by Native people in America.

Historical Overview

The 1830s-1860s marked the Free Banking Era where both state banks and free banks issued their own currency that could be exchanged in gold. With the 1863 National Bank Act, the dollar became the only viable currency of the U.S., though other acts and waves of coinage sought to standardize currency prior. Although the National Bank Act can be categorized as a response to Confederate currency during the Civil War (1861-1865) and aimed to eradicate it (Richardson, 2009), the act also had effects on Native American sovereignty. It lessened their ability to determine their own economic culture, leaving their currencies unable to speak viably in the new monetary system.

The 1900s saw the creation of the Federal Reserve System and the Great Depression 1929-33. Toward the end of the century, the Monetary Control Act of 1980 signed by President Jimmy Carter marked the start of the modern banking system (Merrick & Saunders, 1985). It required banks to follow the policies of the Federal Reserve and allowed the government to fight inflation as well as deflation seen during the Great Depression. In the mid-1900s, money became less and less about physical bills and coins and more about objects without inherent value that act as instruments of banking transactions. For example, in the 1950s, Diners Club cards emerged in New York restaurants, they acted as charge cards and patrons paid their debts off at the end of each month (Swartz, 2015). This card set the stage for the plastic American Express Card of 1959 that quickly proliferated and inspired a range of debit and credit card systems including MasterCard, the first more globally-oriented card ("The History of Amex," 2018). In 1971, the American Bankers Association adopted the magnetic strip on cards to hold data contents belonging to the cardholder and associated card brand (Sterns in Maurer & Swartz, 2017), and later cards with microchips and identity verification capacity in the form of a pin number. These are also instruments of control or what Lyon (2002) refers to as everyday surveillance, as credit cards track every payment one makes.

At around the same time, in 1971, then President Nixon broke the U.S. dollar's relationship to the gold standard, a process started earlier in the 1930s by President Roosevelt. Nixon ended the gold standard to help pay for the Vietnam war, broke promises to U.S. foreigners to exchange gold at a specific fixed rate, and allowed gold to "[escape] the domesticating forces of imperial powers" (Gregory, 1997, p. 2). This is significant because the dollar, thereafter, was based solely on trust in the U.S. and its

oscillating strength in the world's larger economy where discourses of free market prevailed. Credit allowed people to have money that was not really theirs, and the break from the gold standard allowed the government to create money that was not real in the way that it was once known, as tied to the value of land-based resources.

The emergence of credit cards, contrary to what credit card industries create the illusion of, is not correlated with the emergence of credit as a practice. More generally, credit regards exchange of goods in the present with the promise of future repayment. It is what Marx (1894) calls fictitious capital as it speculates a future of communication between contractual bodies, which may materialize the temporal bond between their respective futures and pasts. Similarly, Luhmann (2005) discusses how money is tied to the opening up of future possibilities, and making them attainable. In this regard, money stores possibility more than anything else, but credit is clearly not a new concept. This is evident from the description of credit in potlatch in the fourth chapter and other practices from the colonial era. For example, Murphy and Steward (1956) noted that trading posts in the colonial era were designed to allow Indigenous peoples to buy beyond their means and to pull them out of traditional life. Although this is a very limiting view of trading posts, the idea speaks to the often culturally predatory undertones to lending, as lenders often give credit to those without the capacity to pay back in their own self-interest. This is how the business model exists and makes money. In this vein, credit/debt tends to negotiate power relationships, highlighting who is above/below and inside/outside society's boundaries (Gell, 1992). Capitalist credit/debt also functions to tie individuals to collective financial institutions (Gell, 1992).

Tribal History and Gaming

In shared tribal history, the Tribal Reorganization Act occurred from 1943-1958. During the Termination Era from 1853-1988, tribal nations that had been previously recognized by the Federal Government were dissolved. Many tribes that were unjustly removed, particularly in Oregon, were restored in the 1980s on the heels of the Indian Self Determination and Indian Education Act of 1975. This was made possible by activism, namely the American Indian Movement in the 1960s and 1970s, and the Civil Rights Movement more broadly. Then came the Self-Determination, which takes place from 1975 to the present. During this time, tribal nations asserted, and continue asserting, their sovereignty in various ways. One avenue of this is through strengthening their economies with Indian gaming and other aggressive economic enterprises (Cattelino, 2009).

Gaming or gambling has long been a tradition of Indigenous people in North America (Taxay, 1970; Shell, 2013), and this is evident in traditional knowledge like gambling songs, as well as ethnographic records (Beckham, 1971). In the 1970s the Seminoles "in" Florida opened a casino under state law and won a Supreme Court ruling that supported the right for tribal nations to have casinos, and for reservation occupants to not be taxed by the states (Cattelino, 2009). This is based on traditional practices and inherent rights of tribes. Since then, many tribal nations have opened casinos of varying types: class one casinos (social games for minimal social prizes), class two casinos (with pull-tabs and other non-banked card games), and class three (full-scale Las Vegas-like casinos with roulette, craps, blackjack etc.) (Cattelino, 2009). However, the Indian Gaming Regulatory Act (IGRA) of 1988 ruled that tribes needed to make a pact with the

states, which has presented many challenges and once again undermined the sovereignty of tribes. Casino currency, Indigenous currency, is linked to the state.

Although there is a myth that casinos have made individual Indians rich (Harmon, 2013), this is not true and Indians are still the poorest of all minority groups, and deal with a host of social issues. Further, Mackey (2016) notes that this myth makes Indians seem like,

Money-hungry capitalists, manipulating their special rights for high financial returns. They are often seen as un-American because they go against the creed of "one nation under God." Meanwhile, statewide and national coalitions of organizations and pressure groups mobilize against land rights for Indian tribes, in the name of "equality." (p. 6)

Regardless of perceptions, many tribes are still on undesirable reservation lands far from populous cities, making casinos unfeasible. Casinos are not a one size fits all solution (Miller, 2012), but are designed to promote cultural and social wellbeing of an entire tribe (Klopotek, 2011). As sovereign entities, it is the tribal nation's inherent right to decide if the choice of a casino is best for them. Further, the ways that Indians make, distribute, and use currency from casino profits are political acts and the fungibility of casino revenue is reflective of sovereignty (Cattelino, 2009). Another example of traditions adapting to cultural circumstance regards the use of casino money. For example, I have seen casino chips turned into earrings in the Coquille tribal casino gift shop. In addition, when Mashantucket Pequot's casino had more money, some tribal members had dream catchers in their cars made of dollar bills, and some of their casino motifs were based off excavations on their reservation (M. Tveskov, personal communication, n.d.; J. Younker,

personal communication, March 25, 2019). Just as dentalium or wampum were used artistically and symbolically in the past, it is now used in similar ways to adapt to tradition (Simpson, 2017).

Traditions can be remade to serve contemporary circumstance, but this sentiment is increasingly challenged with the move to digital culture. Opinions that digital and other new technologies will dissolve Indigenous cultures, homogenize tribes, and replace older technological values have been voiced (Bissell, 2004). These opinions are often based off of racist beliefs that Indians should stay traditional and static and not disrupt a pure notion of Nativeness according to White people's expectations (Raibmon, 2005). Other times they may be based on genuine concern for the perceived problems that are coming along with digital. For example, that digital technologies will distract and make Indigenous youth uninterested in their cultural heritage, or that social media will give them anxiety. That said, while reservations are often poor and lack the infrastructure for certain technologies, have unreliable Internet and electricity, many are embracing the potentials for digital to better their lives (Bissell, 2004). This includes creating video games that help kids learn tribal languages, digitizing anthropological records and reclaiming them from libraries that colonized that knowledge (Brewer, 2019), creating apps for tribal communication, and economic endeavors like digital currency. The next section focuses on the history regarding the digitization of currency and digital affordances of payment systems around currency. Digital currencies are just one of the many digital projects some Indigenous people are considering, creating, and using, but it is important to review the cultural conditions that cryptocurrency, specifically the first,

Bitcoin, was born into. This ultimately shapes Indigenous cryptocurrency projects moving forward because the system is based on that code.

Digital Currency and the Evolutionary Narrative Problem

Currently, many forms of land-based and digital currencies are used together, for example, coins, cash, and cryptocurrency. This integration of digital currency with land-based currencies is not simply an evolutionary process of transformation or replacement (Polanyi, 1944). As Maurer (2015) states, this muddles the various forms used in monetary ecologies and creates a false narrative that the newest forms are objectively more efficient than those preceding them. This false, or at least problematic, linear idea that debit cards are more efficient than cash, or that digital currency is better than gold, for example, rests on modernist epistemology (Panofsky, 1927/1991). Progress in this vein is perceived to be a result of technological advancement, thereby reducing problems and increasing efficiency.

The evolutionary narrative of currency is but one narrative complementary to larger social, political, and technological narratives. In the 1990s, the popularization of digital was framed by similar discourses of transformation, replacement, and advancement (van den Boomen et al., 2009). Digital culture came to define the zeitgeist, discursively slighting the generalized print and electronic eras that preceded it. Similarly, media outlets like *Time: The Weekly Magazine* (1967) propelled ideas of "cashlessness" or the "death of cash" that were prominent even earlier in the 1960s when credit cards, of which most people now have in their purses and wallets, rose in popularity. In the 2010s, cryptocurrencies and mobile phone payment are gaining momentum and the market is being described as not cash-friendly, despite there being 41.7 billion cash notes in

circulation, including 12.1 billion one dollar notes and 12.5 million one hundred dollar notes (Federal Reserve, Deutsche Bank Global Research Chart in Langlois, 2019). These discourses—of cashlessness, revolution, obsolescence—are strategically utilized by technology and currency-related industries to sell their newer products and ideas.

The storyline of progress more generally tends to help humans feel good about their movement through time and space, and these narratives have profound social meaning. What is most relevant to this dissertation is that this narrative of progress reflects more racially charged ideologies that become naturalized. As LaRocque (2010) states, "behind the dichotomy of civilization versus savagery is the long-held belief that humankind evolved from the primitive to the most advanced, from the savage to the civilized" (p. 39). Western narratives of progress create a spectrum that tends to place Native technologies in the past, and the super new media and technology as the present, and the future.

The digitization of currency and slow sidelining of cash money is part of an ongoing process and cultural shift. Innovations like credit cards, online banking applications like Venmo, MPesa, Apple Pay and other digital wallets that are run or enabled by software, have made digital currency more appealing and widespread (Maurer, 2015). More importantly, the Internet has enabled a new currency ecosystem in which communicative social processes, such as shopping and banking, are now actualizing online. Moving from a cash to credit economy, users have also become less reliant upon the physical forms of currency. Monetary transactions can be done by using

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¹⁸ Maurer (2015) analyzes the success M-Pesa, a technology that allows people in Kenya to purchase airtime on cheap basic feature mobile phones and trade it for money. This can allow for financial inclusion for some poor people who are often unable to open accounts at banks that are sometimes unstable in developing countries.

identification information that ordinarily would be on a tangible credit card. In this sense, identity is substituting cash (Birch, 2014), and cash money is seen as digital bank data morphed into a paper form. Digital is making society rethink what money is and what its possibilities are, just as digital is making society rethink all communication in our "digital culture" (Jenkins, 2003).

Explicitly digital currencies like DigiCash, however, are nothing new and have been around since the 1990s (Swartz, 2015). They did not initially succeed because of their flawed centralized third party based systems and inability to bootstrap widespread interest. Popular culture is now seemingly more open to the idea of digital currency than they were in the '90s. This openness is likely a result of the social conditions in which we live. For example, as Swartz (2015) attributes this to the backdrop of the current technological zeitgeist, marked by an information age (Terranova, 2004), rapid and widespread adoption of networked communication (Castells, 2004), and a host of political and financial turbulences (Carruthers & Ariovich, 2010). The interplay between these set the stage for the so-called next phase in currency: cryptocurrency, specifically Bitcoin.

Bitcoin Technical

Bitcoin emerged in 2009 and began its momentum after a white paper titled *Bitcoin: A Peer-to-Peer Electronic Cash System* was published by Satoshi Nakamoto (2008). Nakamoto is a pseudonym for the creator or creators of Bitcoin whose identity(ies) have not been definitively revealed. Bitcoin is now an eponym of cryptocurrency, and, like Kleenex and tissue; the terms Bitcoin and cryptocurrency are quite often conflated. Bitcoin refers to the code, protocol and larger overall system

including the cryptocurrency, while bitcoin with a lowercase b refers to just the cryptocurrency itself (bitcoin the token) (Vigna & Casey, 2015). Nakamoto's paper outlined the parameters of a new cryptocurrency, a digital, peer-to-peer currency, which is based on cryptographic algorithms which comprise a blockchain. The blockchain, or comprehensive ledger (record) formed by the solving of algorithms, is a technology that ensures the validity of transactions while the cryptocurrency or coins are traded over the Internet (Tapscott & Tapscott, 2016). These systems have emerged as a way to address privacy concerns of payment systems and to offer an alternative to other private and democratized forms of currency (Owen, 2015).

Double spending solution. Among the biggest contributions that Bitcoin made regards a protocol for a general money related problem: the double spending problem (Nakamoto, 2008). Bitcoin solved the double spending problem associated with digital currency, which occurs when multiple people try to use the same money twice.

Cryptography and the blockchain act as a solution to this problem. The solution came by using a timestamp system which creates a hash-based proof-of work ledger, called the blockchain, which makes the process irreversible. The coin, or portion of the coin cannot be double spent or duplicated by those transacting. Blockchain technology is a way to implement a consensus ledger, or a record which is reliably agreed upon and verified over networks. The blockchain is a digital ledger and is comprised of blocks of information and verification that are added to a longer chain of blocks as each transaction is made using Bitcoin. Using cryptography, a system that makes it difficult to hack or falsify (Stinson, 2005), the blockchain is immutable, or unable to be changed. The blockchain, or comprehensive ledger formed by the solving of algorithms, is considered a

paradigm shifting innovative technology that ensures the validity of transactions while cryptocurrency or coins are traded over the Internet (Vranken, 2017).

Mining. There are comparisons of processes used to produce cryptocurrency and currencies used back in the colonial era, namely gold. Bitcoin is meant to parallel currencies backed by gold or other precious metals. They have a scarcity; a certain and necessarily limited supply (Frisby, 2014). As such, Maurer, Nelms, & Swartz (2013) classify the semiotics of Bitcoin as practical materialism, which redeploys issues of labor, privacy, and value within the context of cryptographic protocols. This means that the semiotics of Bitcoin allow it to signify or stand in for material money, things like gold. Similarly, both gold and bitcoin have to be mined, but for Bitcoin this occurs through a virtual labor process. For Bitcoin, the process started with a supply of zero coins and now it is steadily amassing a limited supply of 21 million bitcoins through its own digital mining process. As of 2018, 80% of those bitcoins had already been mined (Sharma, 2018).

This digital mining process is an interesting and necessary function of the system and is a service originally provided mainly by hobbyists who desire to virtually collect it, assist its use, and/or buy into its coolness capital. In the earlier stages of the cryptocurrency, or before it was more widely bought, cryptocurrency could be mined capably on home computers and laptops by miners. Miners are essentially hosts, individuals, groups, or companies which verify these transactions with their computer systems. The hosts verify bitcoin transactions and are rewarded with bitcoin for their services. It is not unlike a set transaction fee, similar to the way that banks charge a wire transfer fee to senders or receivers. The cryptocurrency transaction fee is now the

amount given to the miners who verify the transaction. The miners have a software program that they run to solve algorithms, or essentially guess numbers. They participate in computing the hashes and show that the block being sent out is correct or legitimate, meaning that the integrity of the block is not tampered with. This system is called proof-of-work and it is explained in greater detail in the next chapter.

Cultural Aspects and Altcoins

Digital currencies are often expressive of particular ideologies. For example, crypto-anarchists, a subculture that uses cryptography to point out and supersede government authoritarianism, adopted the coin early (Owen, 2015). They celebrate the use of these currencies as libertarian pushbacks to state and private financial institutions. For techno-optimists, those that believe in the future of technology to radically alter politics and the world, Bitcoin signifies hype, futurity, and innovation in the payment world (Turner, 2006). Turner (2006) envisions new payment systems as a way to enact social change through his theory of digital utopianism. This principle is based on cyberspace as a new frontier to shift boundaries of a networked society, creating spaces outside the reaches of regulation. These can be seen as spaces of resistance for communities that have been marginalized, and Native Americans are often those communities. The web has brought about a new economic schema in which currencies (like Bitcoin) create virtual communities around them and through their use. In these spaces, the government is viewed as a "bureaucratic behemoth," threatening to destroy ideology of digital marketplaces (Turner, 2006, p. 249). Governmental desire to control the processes of online payment through taxation and policies threatens this libertarian model of untraceable, unregulated peer-to-peer money transfer. For people other than

techno-optimists and hobbyists, Bitcoin may bring confusion, doubt, and general apathy, or sound like an illegal Ponzi scheme. This is partly because in the earlier days of cryptocurrency, coins were often used to purchase illegal goods on Silk Road and in turn, cryptocurrency has a perceived checkered past and connection to the dark web (Martin, 2014). While there are "legitimate" uses of the dark web, some people might consider the amoral or controversial uses of cryptocurrency to be its defining features (Gehl, 2018). Despite the drawbacks of Bitcoin's mining process, and it's checkered past, Bitcoin and other cryptocurrencies are viewed as an important part of the global economic sector (Gajardo et al., 2018).

Cryptocurrency has survived almost a decade of high inflation, scandal, governmental threat, and general public skepticism, and is creating new circuits of culture. However, most of the existing scholarship is devoid of meaningful cultural analysis and ignores the use cases of these technologies for marginalized groups. There is one study by Vasek (2015) that highlights how Bitcoin became a tool for some Afghani women to earn and save money. Since banks in Afghanistan adhere to certain traditions that can limit women's financial sovereignty, digital currencies' use of computers as opposed to a centralized bank affords certain women, who already have access to computers, a certain amount of new power over their own financial spheres. More commonly cryptocurrencies are framed by media as serving a specific type of audience (Cottle, 2018), a stereotype of White, Silicon Valley tech enthusiasts, entrepreneurs, and early adopters who have profited off them. An important point to consider about this is race and nationality. Native American peoples are often overlooked when considering cryptocurrency. For example, a study by Bannier, Meyll, Roder, and Walter (2019)

suggests that there is a considerable gender gap in Bitcoin literacy, with women believed to be less knowledgeable than men. They considered other factors like race, but what is problematic is their metric only allows people to identify as Asian, White, Black, or Other. This statistical erasure of Nativeness limits the degree to which Native American people are seen as groups using cryptocurrency and more generally shows how Native people are limited in their ability to self-identify. On the other hand, cryptocurrencies appeal to a host of other groups or segments of society including, ironically, banks, governments, and financial investors, but also hobbyists, anarchists, niche communities, subcultures, nations, and even mom and pop companies. This has led to the creation of other cryptocurrencies, called altcoins, or alternative coins, meaning cryptocurrency coins other than bitcoin.

Community-based altcoins. Bitcoin's technology has inspired a host of different iterations of cryptocurrency. An important one to this study is community cryptocurrency. These are created to uniquely address social and economic interests for specific communities. Vandervort, Gaucus, and St. Jacques (2015) discuss a cryptocurrency that provides community members with the option to apply for loans from community funds and has safeguards including identity protection and fiduciary care. This requires coding of the cryptocurrency protocols for it to perform a particular way to work in the community. This often includes protocols for the creators of the currency to pre-mine coins and keep them safe for community distribution. The need for someone to keep them safe suggests power because they could theoretically mishandle the pre-mined coins. Community-based cryptocurrencies are also thought of as developments in the money world that are capable of addressing human ethics issues (Gladden, 2015). It is

argued that cryptocurrencies can be programmed using artificial intelligence in order to provide humans with tools for social betterment. Typically, money is perceived as 'value neutral' or a passive instrument in which humans use for good or bad (Gladden, 2015). Cryptocurrencies could hypothetically be earmarked for specific uses by the miner of the coin, and take on a logic informed by human ethical values, a coin the author refers to as cryptocurrency with a conscience.

There are also some cryptocurrencies that are earmarked for not necessarily immoral, but less mainstream usage. For example, Titcoin was used in adult entertainment, and Potcoin, a narcotization of the blockchain, endeavored to be the coin used in the legalized pot industry (Chohan, 2017). There is Corgicoin (CORG) which appeals to the developers' love for the dog breed and Potatocoin (SPUDS), which is designed to help farmers in Africa who sell potatoes and other crops. SPUDS is perhaps relevant to other micro-lending projects but uses a different technological approach. Coins are sprouting up and being created to serve almost every type of community and subculture.

Cryptocurrency has also garnered the attention of other communities, nations. For example, AuroraCoin was developed for use in Iceland, but did not last. Other cryptocurrencies that tried to serve their nations include PesetaCoin and SpainCoin, AphroditeCoin, GaelCoin, IrishCoin, CryptoEscuedo, Deutche eMark, Ekrona, eGulden, MapleCoin, IrsaCoin, and MazaCoin (Kristof, 2015). It is significant that MazaCoin is on that list alongside other nations. Further, national cryptocurrency is interesting because cryptocurrency emerged as a symptom of a lessening of national consciousness with a libertarian ethos (Turner, 2006). With cryptocurrency simultaneously emerging as

a project divorced from the state *and* as a national project, it could assist in understanding the possible slow collapsing of our fixed understanding of currency as necessarily intertwined with the nation-state.

Existing mentions of MazaCoin in scholarly literature are either anecdotal or are limited to a paragraph at most (Vandervort, Gaucus, & St. Jacques, 2015). While my research began before the following two journal articles were published, my work builds significantly on them. Alcantara and Dick (2017) cite MazaCoin as an example of digital decolonization and decentralization of control, but their primary focus is on how Indigenous cryptocurrency might work for Indigenous nations in Canada. Tekobbe and McKnight's (2017) study deems MazaCoin as an "unlikely" story before launching into their discussion of decolonizing technologies as they mix with neoliberal and digital platforms and networks, a conclusion dovetailing with stereotypes that erase Native American peoples as potential technological innovators. The authors suggest that paternalistic narratives of MazaCoin, and its creator, are a result of the intersection of popular discourse with digital and affective capitalism (Tekobbe & McKnight, 2017). They conclude their analysis of alt-finance by asking the question they began with, "Can alt-finance speak meaningfully to and with indigenous economic realities?" (Tekobbe & McKnight, 2017, para. 31). Their answer is that, though often unexplored and marginalized, alt currencies like MazaCoin have potential in global financial sectors. How these technologies can advance social and political goals in Indigenous communities will be explored further in the following case study.

Conclusion

To summarize this last section, cryptocurrencies communicate particular ideologies, reflect digital culture, and may serve other groups beyond Bitcoin's first adopters. Currently, there are thousands of altcoins in the cryptocurrency market, meaning altcoins have proliferated and forked off Bitcoin protocol steadily since 2009. There are meanings associated with Bitcoin, including the aforementioned ideologies associated with and libertarianism, globalization, and increasing digitization of humanity's social processes. These altcoins retain some of the meanings associated with Bitcoin as a result of being derived from it. However, altcoin developers bake in their own sets of unique meanings throughout their processes of design, strategies for adoption, and most significantly through their purpose. This next chapter presents a case study that probes the meanings embedded in an altcoin designed for Indigenous communities.

CHAPTER VII

CASE STUDY TWO: INDIGENOUS CRYPTOCURRENCY AND MAZACOIN

In code we trust

–Davidson, 2015

Man Claims O.S.T. [Oglala Lakota Sioux Tribe] has launched own Currency[.] Council and President taken by Surprise.

-Ecoffey, 2014

This chapter presents and discusses findings regarding the histories, communicative meanings, and possibilities of Indigenous cryptocurrency, specifically MazaCoin. I begin with a description of MazaCoin and its intentions for the Oglala Lakota Nation. I trace its history/background, media coverage surrounding it, and its move from a tribally specific form to a pan-Indigenous coin, to its current state: an altcoin that is packed with meanings, but not with successful practical implementation. This history/background section focuses on the socio-historical and economic contexts into which MazaCoin was born. Important to this context are the ways in which racialized discourses spread through media and contoured the intended meaning of the coin. This section corresponds with research question two, and also incorporates a brief conversation around the theory of network effect with cryptocurrency. Next, this chapter presents findings on how meanings are embedded or encoded into cryptocurrency through actual computer code, as well as through aesthetics, branding and design decisions. I sketch out the different generations of cryptocurrencies, basic aspects of their features, and how choices can be made to serve Native American nations. This chapter

centers on culturally specific communicative meanings that are tied to these practical and technical choices. Throughout this chapter, I use case study methods drawing specifically on qualitative interviews, textual, and discourse analysis to illuminate the design, production, journalistic coverage around, and implementation of one Native American cryptocurrency, one that is culturally complicated. Here again, are the guiding questions:

- What are the cultural meanings that are embedded within specific forms of currency?
- How are practical and technological strategies enacted around currencies to strengthen, constrain, or otherwise shape tribal sovereignty?
- To what degree do racialized discourses circulated through media contour these meanings?
- How do shifts in forms and meanings of currencies play roles in Native American and United States governmental and social relations, as well as our understanding of nationhood within an overarching capitalist system?

Like the first case study, I provide two parts that decode colonial pasts and sovereign presents through a close analysis of currency-related material and immaterial culture.

Part One: Iconographic Aspects of Cryptocurrency and Media Reporting

Part Two: Encoded Meanings and Practical/Technical Consideration

Background on MazaCoin

In 2014, Payu Harris, a Native American cryptocurrency developer, launched MazaCoin with intentions to serve the seven bands of the Great Sioux Nation in the Dakotas: The Oglalas, Hunkpapas, Minnecojous, Sihasapas, San Arch, Two Kettles, and Brulés. Harris has ties to the Oglala Lakota Nation and he lived and worked in a

neighboring city, Rapid City. According to Harris, "MazaCoin is a variation of Bitcoin with a social purpose. We're a Native American variation and we're trying basically to promote economic development and growth for the Indigenous tribal communities" (in Consunji & Engel, 2014). The coin is algorithmically similar to existing cryptocurrencies, uses technology to assist in grassroots economic development, and has carved a space in cryptocurrency history by being the first created with the aim of serving Native American peoples. Overall, the development of MazaCoin was framed by both the creators and journalistic media as a response to the economic state on the reservation, and perhaps as an implicit threat that federal subsidies would diminish after 100 years of imposed poverty (Landry, 2014). In its political positioning, it raises the question of if Indigenous digital technology can effectively challenge state sovereignty, thereby asserting Indigenous sovereignty. The coin, as my analysis will reveal, also is a response to "experienced materiality of colonialism" tied to land dispossession (Harris, 2004, p. 167).

On February 24, 2014, the first (genesis) block of MazaCoin was hashed by Harris and his partner, an anonymous developer going by the Internet pseudonym of Anonymous Pirate. Around block 1000, the public began to mine it. MazaCoin was developed as a fork or offshoot of ZetaCoin, an altcoin which uses Bitcoin's proof of work model and SHA-256 algorithm. Despite this, the coin itself remains relatively unknown in the cryptocurrency market. Initially, about 40 million MazaCoins were premined, to be split and held in reserve for the tribe and for development, as a strategy to prevent market volatility ("What is Maza," n.d.). The reserve allows for future injection of coins into the market, different than most cryptocurrencies, including Bitcoin, which

have a finite amount of coins to be mined. In contrast, there was no cap on how many MazaCoins could be produced.

The Oglala Sioux, a now-dismantled Economic Development body operated under the Office of Economic Development, allegedly approved of more research on MazaCoin according to a memorandum of agreement. This is according to a questionable document that has been taken down online and was linked to Wikipedia. The MazaCoin project was being considered as an economic effort within certain subsects of the tribal system. A central aim of the coin was to address the economic and interrelated social ills that plague the Pine Ridge reservation within the U.S. state boundary of South Dakota. The coin itself purported to build an economic foundation to keep money in the local economy (Jeffries, 2014), and to prevent economic leakage, or the tendency of money made on the reservation predominately being spent outside the reservation. Economic development more generally is needed because the Pine Ridge reservation has a current economic climate characterized by rural poverty, and is the second poorest reservation in the country (Landry, 2014). But creating a new currency, and even increasing spending inside a community, does not necessarily correlate to a better economy.

In an effort to not further victimize the nation, I will not list off the health, social, and economic conditions of the reservation, but I will underscore that the current problems are directly traceable to colonial imposition. Colonization has created various structures of inequality that persist to this day, and have left many reservations in a state of poverty. They are slowly being addressed with a number of social welfare programs coming from inside and outside the nation. With these conditions, reservation economies

are often poor, and technological tools or infrastructures such as the Internet, and electricity more generally, can be unreliable and hard to come by (Bissell, 2004).

Many Native American tribes have historically embraced technology by integrating "tradition," with contemporary tribal life, and plans for future innovation. Regardless of the state that the Lakota economies¹⁹ may be in, tribal members are often encouraged to "develop skills in arts, music, dance, hunting, medicinal plants, oral history, and spiritual enhancement for the good of community regardless of the monetary returns of such activities" (Pickering, 2000, p. 162). These skills are valuable to the holistic health of the nation, and are visibly evident in cultural signifiers around the reservation. For example, during a trip to Pine Ridge, a decorated parked car outside the Pine Ridge Area Chamber of Commerce had a large decal with the words: "Rich in Beauty... Rich in Culture" on it. This emphasis on celebrating and engaging cultural revitalization recognizes other value systems beyond monetary systems.

In order to understand the economic ramifications of colonization, it can be useful to look at how U.S. currency, and the drive for economic gain, is hegemonic and grounded in various U.S. policies and treaties that keep them poor. MazaCoin was, in this vein, presented as a potential paradigm shift in tribal sovereignty wherein currency could be reimagined to better serve its citizens, addressing the structural problems associated with U.S. currency that have historically failed them (Jeffries, 2014). Chase Iron Eyes, legal counsel, is quoted in an article as saying, "what we're trying to do with MazaCoin is just spark something to get us out of this cycle of victimhood" (in Jeffries, 2014), and in

¹⁹ It is worth noting that they do have their own economic philosophies including wancantognaka and generosity. Also, they have systems separate from the U.S. and incorporate dentalium and other shell and animal based money-like forms into daily and traditional practice. The nation also has a well-documented past and present day history with a trading economy (Reinhard, 2007).

turn strengthen self-sufficiency or sovereignty. At the start, it seemed both highly symbolic and practical, as many information, communication, technology, and development (ICT4D) projects often are, and it was grounded in discourses of sovereignty.

The connection between MazaCoin and sovereignty has been made in a few ways. Firstly, MazaCoin has been propped up as a tool that could help achieve an aspect of economic self-determination. The second way that MazaCoin can be conceptualized as a sovereign form and effort is through its existence as a marker or an ingredient of sovereignty; MazaCoin has power as a symbol. As Anderson (1983) states, sovereign nations tend to have a set of practices and artifacts, or print capital, in which they imagine themselves through (Anderson, 1983). These items can include flags, songs, constitutions, government buildings, and among other things, currency. MazaCoin, or any currency stemming from a Native American nation, could be considered an artifact reflective of a sovereign state.

In answering the first dissertation guiding question, "In what ways are meanings encoded into digital currency?," it is clear that communicative meanings are encoded in two main ways. The first is visually and discursively; through content related to branding, trading sites, and public outreach approaches. This is a method of tailoring a product, in this case, a cryptocurrency, to a community or nation. Media reporting then contours these meanings and as I will show, impacts the framing of the coin's history and its overall success. The second way that meanings are encoded into cryptocurrency is developmentally, through the code itself, and the logic surrounding its underlying technology. The coding refers to packets of digital data, afforded by a computer

language, that are disassembled and reassembled as they move across the Internet. It is a method of encryption, and something that Lessig (1999) refers to as code and as necessarily law; it is a tool that enables vast digital architecture. Or, in the case of cryptocurrency, protocols written in coding language allow for cryptocurrencies to be mined, verified, stored, and transacted with. This also involves practical and technological strategies. In the following section, I will describe these two main ways.

Part One: Iconographic Aspects of Cryptocurrency and Media Reporting, Branding, and Logo Design

MazaCoin is encoded with meanings that pay homage to values and folklore of the Oglala Lakota Nation through aspects of its design. The first portion of the coin's name Maza, refers to money in Lakota language, with mázaska being the full word-referent (Buechel & Manhart, 2002). The coin is also said to mean iron (maza) and white (ska) (Landry, 2014). Use of Lakota language in the first half of the name is reflective of identity ownership and ultimately hybridizes it, making it seem to be a product of the nation, while also being based on Bitcoin, an invention that was created outside of the nation. It is an appropriation, or adaptive technological invention, that expressly merges aspects of indigeneity and agorism, which refers to counter-economics and the avoidance of government meddling (Gehl, 2018).

In this section, I focus on the main visual that has come to represent the coin (see CoinMarketCap, n.d). This visual can be found on the official website, on coin trading sites, and social media, and is important because it contains cultural messages that are intended to resonate with adopters and potential adopters of the coin. The shape and colors signify interconnectedness and have a variety of interpretations in relation to other

signs within Lakota cultures. The design of MazaCoin's visual includes a circular medicine wheel, a symbolic sign, divided into four. These four sections highlight four colors: black, white, yellow, and red, and signify directions, north, south, east, and west. A tribal member writes that "the medicine wheel—the traditional symbol for medicine, health, and balance—is essentially a circle with a cross in the middle. To the east is the spiritual realm. To the north is the mental realm, to the west physical, and to the south emotional" (Warne, 2005, p. 123). The colors can also connote specific seasons, or for some, the color of skin for particular racial groups. The holistic composite of the logo means to Harris, "you can be your own unique person but while showing respect for everybody else we all have to work together to make this planet the best that it can be" (Brockwell, 2014). In the center is rounded M, for the first letter in MazaCoin.

In a more richly descriptive circulating version of this visual (see Hacker Noon, n.d.), the emblem is shown in the foreground, and hills in the background. This visual contains implicit and explicit messages of resistance to colonialism, defeat over the U.S. army, Indigenous leaders, sacred land, treaty demands, and a composite message that acknowledges land dispossession. Figures are faded into the visual's background, and these figures are significant icons that elicit particular historical moments of triumph for tribal nations. One of these icons is Red Cloud, who led the tribe from 1868 to 1909. Red Cloud is well known for the Red Cloud War (1866-1868), which regarded Lakota, Arapaho, and Northern Cheyenne's fight with U.S. government over control of the Powder River Valley in Wyoming and Montana. In this war, the U.S. suffered one of its worst defeats against the tribes. The other two icons are Cheyenne chiefs, Little Wolf and Dull Knife. Little Wolf fought in Red Cloud's War and signed the Treaty of Fort Laramie

(1868) at the end of this war. Little Wolf is known for his military prowess and leadership skills in the Northern Cheyenne Exodus, where he helped his people out of the reservation and back to their ancestral lands in 1876 (Powell, 1981). Dull Knife, who is also known as Morning Star, is a revered Cheyenne leader also represented at the signing of the Treaty of Fort Laramie (1868) (Powell, 1981). He was a warrior in the Colorado Cheyenne-Arapaho war, Battle of the Rosebud, and Battle of Little Bighorn, among others.

Red Cloud, Little Wolf, and Dull Knife's faces faded into the background also serve as spiritual indexes with an ethereal or ghostly omnipresence. Their faded nature reflects a discursive choice around the representation of their disembodied spirit, in which they remain significant in a liminal space, postmortem. Harris stated of MazaCoin that, "I like to think that you know our leaders that went before us are still watching over us, watching this project and I hope that there's still smiling, I really do" (Brockwell, 2014). It suggests that the leaders are watching over the MazaCoin project in the same way that they are known for protecting various bands of Plains Indians in the latter half of the 19th century.

The choice to depict these men brings attention to their commonalities of being great, and often romanticized, warriors and signers of the Treaty of Fort Laramie (1868). This signing was key to promising their tribes land, and with that the ability to survive on them. The choice to depict leaders may also reflect MazaCoin's creator's identity. Harris traces his ancestry to the Cheyenne tribe, and has worked on Pine Ridge (Landry, 2014). He also has family that lived on the reservation, and in one recorded interview with

Mashable said that his grandmother lives in Porcupine, a specific area on Pine Ridge (Consunji & Engel, 2014).

The iconography of MazaCoin and an inscription within its genesis blockchain, the first hashed block of the coin, are also important on a semiotic level. Developers of MazaCoin were explicit about the symbolic power of cryptocurrency to speak back to and resist federal governmental injustices (Consuji & Engel, 2014). One way this is achieved is by reminding and pushing specific values, and calling out historical governmental injustices. The first part of the genesis block chain reads Mitakuye Oyasin. Mitakuye Oyasin translates to "we are all related" and underscores an ideology of interconnectedness (Lambe, 2003). This signifies, or rhetorically stresses, the importance of responsibility to all members of the society, which is in line with egalitarian or more communal social values. In this regard, MazaCoin's visual marker signifies a moral or spiritual effort to provide economic care or opportunity for all tribal members.

The second part of the genesis blockchain serves as a ledger, which reads, "The Black Hills are not for sale. 1868 is the LAW!" (Hamill, 2014). The Black Hills are also visible in the background of the main visual, and are home to Mount Rushmore. The hills, what the Lakota peoples also refer to as Paha Sapa or He Sapa, are of profound cultural and religious importance. In particular, wind caves located in the Black Hills are the center of tribal spiritual life. They are part of Lakota creationist stories, where the first humans and buffalos emerged from the deep crevices (Ostler, 2011). The Black Hills are involved in The Treaty of Fort Laramie (1868) of 1868, a treaty that is paramount in understanding valid Oglala angst against the federal government. The treaty ended Red Cloud's War and guaranteed the ownership of the Black Hills to tribal nations (The

Treaty of Fort Laramie (1868). However, the government did not honor the treaty and seized the hills in 1877 after the Black Hills War.

The tribal nations have continuously challenged the validity of federal seizure of the Black Hills, sometimes referred to as the badlands ever since. In 1980, the Supreme Court Case United States v. Sioux Nation of Indians awarded the Sioux Nation 100+ million dollars for the land ("United States v Sioux Nation of Indians," 1980). They refused this sum, which has accumulated interest and is now valued at over a billion dollars, to assert their demand for the land back. If they accepted it, they would have to give up ownership. The problem is that the U.S. legal system places primary value on monetary concerns, while the tribal nation prioritizes other types of value systems, not least of which are the values concerned with sovereignty of their ancestral land. It is a religious, sacred, and contested place, and having the Black Hills returned is valuable for the mental, spiritual, and economic health of tribal members.

MazaCoin's visual also hints at how the developers imagine the nation. The political weight encoded into the coin, by means of presenting iconic warriors who fought to protect the Black Hills, as well as the sentiment that the Treaty of Fort Laramie (1868) is a law, presents a struggle across time. That struggle that is deeply rooted in land and territorial issues, seeded by settler colonialism in the 1600s. In this sense, MazaCoin is framed as oppositional work, able to speak with, back, and to a tribal desire for land to be returned. This appeal to the past connects the coin the contemporary issues. For example, the Black Hills are not an issue that is going away. Recently the Dakota Access Pipeline (DAPL), an underground oil pipeline was contested by tribal nations in the area.

believed it was a violation of the Treaty of Fort Laramie (1868) among other legal and moral ideals (Whyte, 2018). MazaCoin came out around the same time that the pipeline issues and contestations were playing out, and this presented a hard time for the nation and allied Indigenous and non-Indigenous people. Harris was seen at pipeline protests on social media and tied the project into these larger issues of a threat to their sovereignty. A lawyer I interviewed questioned this, "Use the Dakota Access, good marketing, here."

Beyond MazaCoin's elicitation of a sense of place, sense of struggle, and sense of triumph signified in its visual markers, MazaCoin engaged audiences through their social media outreach in ways that also appeal to aspects of Oglala Lakota history. For example, a Facebook post on August 28, 2017, shows the Maza team with the text, "The mazatribe is in #WoundedKnee! Learning the history, having some great conversations with tribal elders here. #mazacoin #MAZA." The Wounded Knee Memorial remains a highly visited site on the reservation, and commemorates a massacre in which the U.S. Calvary killed over 150 Lakota peoples. It is known as a heinous murdering of tribal members and was a result of U.S. desire for land, fear of a cultural practice of the Ghost Dance, and international disagreements (Ostler, 2010). This social media post demonstrates how the MazaCoin team couch their efforts in historically relevant events and imagines their projects as tied to, and rooted in, historical injustice.

Cultural relevance and historical grounding gave MazaCoin a strong community focus in the early days of the coin. For example, the branding and visuals, as previously mentioned, display traditional colors, philosophies, and images of the Black Hills. Also, discursive appeals to the culture of the Lakota were attempted. For instance, Harris

compared the coin to buffalo, animals of great cultural significance to the nation. Harris stated,

I think cryptocurrencies could be the new buffalo...Once, it was everything for our survival. We used it for food, for clothes, for everything. It was our economy.

I think MazaCoin could serve the same purpose. (in Consunji & Engel, 2014)

Here, Harris is appealing to the sacredness of the buffalo and its utility of them to the tribe in the past. Buffalo is and was used in trade, necklaces are made from buffalo bone, and the buffalo is tied to Oglala Lakota creation stories (Ostler, 2011). They hold a sacred space and remain consistent symbols of their tribal nation. Harris made further analogies to animals of tribal importance. He continued:

MazaCoin is a unique Internet protocol that allows for seamless peer to peer transactions, completely secure, completely private. MazaCoin is changing finance in the same ways that the horse changed our culture because it's carrying us now into the future, and it can carry you into the future as well. (Consunji & Engel, 2014)

Horses were included in the first wave of MazaCoin publicity. A since-deleted Twitter image included a rudimentary image of horses, and presumably Lakota men or warriors interacting with them. The use of these animals was an attempt to appeal to a sense of futurity, linking tradition and the past to the future.

This comparison of MazaCoin as the new buffalo, or the new Bitcoin, or something that will radically change the status quo, is also something to be wary of.

According to a techno-optimistic and token structure consultant,

It (cryptocurrency) is going to change the world, but that message is being taken by snake oil salesmen and people with legitimate understanding, so it's hard to discern between the two. I suppose a red flag is when people even mention the price. The only people I listen to in crypto period are people that are telling me how the technology works. This is how we're going to do this, this is how this works, this is the problem we're solving right now. We're trying to like work with xyz type of institutions and people. The only people that I listen to are people that are talking about that kind of stuff, when they're saying like, "this is going to be the next Bitcoin," that's a red flag.

In short, analogies or appeals to be the next big anything or in this case, the new buffalo, makes the technology more appealing or promising to certain communities. Analogies are useful in selling concepts but these analogies and their connections to culture, as well as their use in creating lofty promises about future successes, are dangerous. They manufacture hype, and often hype is easier to build than a successful coin with solid code.

A community cryptocurrency outreach specialist also spoke to these aspects of the currency and culture.

If you have a culture that has been displaced historically numerous times and oppressed through displacement and other mechanisms the only reason that that community stays a community is [because of] a strong connection to their traditions. So I'd say that any cryptocurrency, or any way you could design a currency that emulates or mirrors the best parts of what that culture, how that culture perceives value, would be really important. It would be because really

that's what blockchain is, any currency is an exchange of value; it's a technology to facilitate us exchanging value with each other.

A community or tribal based currency needs to be reflective of that community's culture, but if symbols of cultural importance are commodified and/or hijacked for speculative financial gain, that does not serve the community.

This section found that tribal cultural meanings are embedded in cryptocurrencies visually, and discursively, and clarified what contemporary Indigenous currency says about colonial pasts, particular past U.S. and Lakota relations. Discourses and cultural appeals became a core strategy of tailoring the coin to the Pine Ridge context, but despite being encoded with logics of sovereignty, there was not a resulting visible increase in a strengthening of tribal sovereignty. The next section will discuss how these meanings, and the overall success or lack of success of MazaCoin, were more significantly contoured by media reporting.

Media

MazaCoin's media coverage and the network effect. Harris and his MazaCoin project became the focus of a few high impact news outlets and he was inculcated into the cryptocurrency scene. Harris was invited to ring the bell at the Bitcoin Center, based in the financial district of New York City (Consunji & Engel, 2014). During this visit, he was recorded and posted on YouTube saying that MazaCoin was unique because it was an "official cryptocurrency for an independent standing sovereign state" (Brockwell, 2014). It was not. Stories then proliferated in mainstream U.S., Indian Country, and local newspapers about MazaCoin. At the beginning of 2014, particularly in March, a host of news outlets caught wind of the project. *Forbes* (Hamill, 2014), *The Verge* (Jeffries,

2014), *Newsweek* (Browning, 2014), and *The Telegraph* (Sparks, 2014), among other media outlets, for example, portrayed the coin as the official currency of the Oglala Lakota Nation. For instance, in *American Al Jazeera's* stream blog titled, "Native American tribe adopts new cryptocurrency," a bold claim was made:

The digital currency, called MazaCoin, was adopted as the official currency of the Oglala Lakota Nation after an agreement with the Oglala Sioux Tribe Office of Economic Development, establishing a strategic reserve for the tribe. (The Stream Team, 2014, para 2)

The claim that MazaCoin was the official currency was not solely limited to mainstream media but was also seen on the online communities, blogs, and trading sites. One post in an online cryptocurrency community stated,

As a Crypto-Currency, MazaCoin is uniquely qualified to hold and preserve the wealth of a sovereign nation. The forward looking and courageous decision of the Traditional Lakota Nation to adopt a Crypto-Coin as their national currency will pave the way for other countries in the world to abandon out-dated [sic] and dysfunctional forms of fiat currency. (MazaCoin (MZC), 2014, para 2)

Importantly, the opinions expressed in these communities as well data posted are prime sources of information for those who actually buy and sell cryptocurrencies. These sources insinuated that the coin was widely recognized, it was "courageous" and moral and accepted in the nation. They simply took Harris' words at face value.

Thereafter, interest from cryptocurrency investors increased as media coverage both broadcasted and hyped MazaCoin, which helped it to gain a base and initially build momentum. The theory of network effect, tied to diffusion of innovations theory,

provides some insight here. Network effect regards the phenomenon that occurs when increased numbers of adopters of technology, or participants in a social process, correlates to an increase in the overall value and significance of that good and/or service (Rogers, 1962). This is particularly relevant because in order to create a new currency, in this case, a cryptocurrency, masses of potential adopters have to be instilled with confidence about the coin. Currency is based on socially agreed upon value and shared belief or trust in the system, and this trust is cultivated. Historically, media and investment trading rates have had a relationship; often one built on trusting the messages about what is being invested in (Peterson, 2016). Journalistic discourse is particularly important in this process, as it has meaningful impacts and often makes or breaks the success of a coin.

This is bolstered by research on how the media and public comments on social media, like Reddit and online cryptocurrency communities, are not only powerful in contouring discourse about the coin but in leading investors towards, and away from, the cryptocurrency. This is foreshadowed in a study by Kim, Kim, and Kim et al. (2016) who found that user comments and replies in these online communities affect the number of transactions for users. The sizes of the communities around the cryptocurrency also affect the fluctuation rate, indicating that positive and negative comments in these spaces make the fluctuation rate somewhat predictable. Further, Park and Park (2019) find that social network indicators are useful for the prediction of three key features, the volume of cryptocurrency, market capitalization, and overall price.

A token structure consultant suggested that the correlation between media mentions and coin success is very strong:

If a coin is mentioned on the news, like especially a big outlet, it will pump that coin like crazy because there's such a fervor to acquire this digital currency. This is how I look at it, if you look at traditional money like the dollar bill, the U.S. dollar, the average person does not even understand a fraction of how that works and that's okay. It's to be expected with cryptocurrency. Since it's so new, all you have to do is have your coin mentioned on the news and anybody who's anybody will be like "Oh, shit, I need to buy this."

When people trust reporters and what they say about coins, particularly about their potential for success, more often than not you see value and investment pumped into that coin. Further, as the token structure consultant I interviewed touches on, FOMO (Fear of missing out) often drives people to jump on the coin's bandwagon.

Media and community word, speculation, or even nominal mention is often a powerful indicator of a coin's temporary success. The problem is that MazaCoin was actually not the official currency of the nation, but rather simply in its first stages of development. Harris had misspoken, misunderstood, aggrandized, or lied about its official nature. This finding sheds light on a major roadblock in MazaCoin's potential success. If a coin is rolled out before it is sufficiently developed and backed by officials and members of a community, which often takes years and millions of dollars in investment, it is almost always doomed for failure. One of my consultants, cofounder and community director of a cryptocurrency and lending company, is not hyperbolic when he suggests that more than 90% of altcoins pushed out in this way end up failing.

While media has reported heavily on cryptocurrencies like MazaCoin, and of course Bitcoin, it is apparent that most reporters have limited knowledge about the

technological underpinnings of it. Few news outlets at the time (in 2014 when the coin rolled out) had cryptocurrency or blockchain experts reporting. ²⁰

Consider the frustration of the same consultant when he expresses concerns about the competency of generalist reporters covering niche aspects of cryptocurrency:

This is my assessment of the media: I think they have no idea what they're doing whatsoever. So if the media reports on something like presidential scandal, think like CNN, they would have a lot of experience dealing with political style issues. They themselves, like the people that are asking the questions, they would have a core knowledge base that is relevant, no matter how biased you think what they're saying is. They'd at least have some way to discern just total B.S. and nonsense from things that are truthful. With cryptocurrency, the only people that are really out there at all right now that can say anything about them are people that know what's going on. When you talk to a newsperson and you tell them something about cryptocurrency they have to take it at face value. They have no way to fact check.

Although reporters do actually have mechanisms for fact checking, the point he is illustrating is that reporters often trust their cryptocurrency interviewees, and print what they say because they are the "experts" and the reporters are not necessarily. For MazaCoin, hearsay and misreporting played a role in its trading and adoption rates, in both its rise and, as I will show, its fall.

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²⁰ For example, *New York Times* employs Nathaniel Popper, author of the book *Digital Gold: Bitcoin and the Inside Story of the Misfits and Millionaires Trying to Reinvent Money* (2015). He has a background and strong competency in finance and technology. This is, however, the exception as opposed to the norm.

Despite the initial positive effects of the media coverage and attention on trading rates, MazaCoin's relative success was short lived after a pivotal breaking point between public trust and the coin occurred. The key word being trust, because again for a currency to be viable it has to have shared, socially agreed upon value. A local reporter, betterversed in covering issues in tribal nations, caught on to the misinformation. On March 7, *The Native Sun* of South Dakota announced that then President Bryan Brewer had not endorsed MazaCoin, but rather a "treaty council" or committee that was not the head governing apparatus of the nation had and crisis ensued (Ecoffey, 2014). MazaCoin plummeted to \$.0035 per coin just ten days after its peak (Consunji & Engel, 2014). This also reflects the assumption that connectedness between volatility, return, and prices are most frequent in times of crises (Zhang & Broadstock, 2018), which is consistent with other markets.

There was a very direct and observable tanking of the trading rates of the coin in the wake of the article (see Figure 12). People's faith in the coin was predictably shot, leading investors and the community to wonder about the credibility of the creator, intentions of developers in the community, and the degree to which this project was altruistic in respect to the nation.



Figure 12. Maza chart. Image screenshot by author (CoinMarketCap, n.d.).

Consequently, MazaCoin as a project faced ridicule early on, and the seemingly altruistic intentions of the development team were questioned. As a result, optimism about MazaCoin became replaced by pessimism and skepticism. In the process, Harris, the creator, was presented in oppositions. On the one hand, some media outlets, and community, present him as a kind of crook, trying to take advantage and make a few bucks off the system. For example, Robert J. Miller, J.D. asked me rhetorically, "this sounds like selling swampland in Florida, it sounds like something a crook would do, can he just hype it?" These doubts were made more substantial as the Harris stated,

if it doesn't work out, everyone stops mining it, no one wants to deal with it anymore, it's one of those things where I can look back and say we gave it a good shot. Would I like to have cash in my pocket? Absolutely. Would I like to be driving a Lamborghini? Absolutely. Will I drive a Lamborghini someday? Absolutely. Obstacles are what we see when we take our eyes off the prize. It's easy, especially in this environment on the rez, it's easy to give up. It's easy to

say, I ain't doing this anymore, it doesn't work, forget it. You just gotta stay focused. (in Consunji & Engel, 2014)

Here he suggests that the project was given effort, and that this effort was made for the good of the community. However, in his apparent desire to profit and benefit himself, to be able to purchase a fancy car, he comes across as potentially being in the industry for multiple motives. Here it seems to infringe upon an ideal characteristic of community-based cryptocurrency, to not disproportionately advantage the creator. If MazaCoin was truly an egalitarian altruistic endeavor to better the entire society, then designing a coin for disproportionate self-gain is counter to the goals laid out by the team. The other half brings up his presentation as a neo-hero or missionary figure, attuned to the social ills of reservation life and equipped with the ideas, tools, and technologies that could finally work the tribe out of poverty (Tekobbe & McKnight, 2016). As my research continued, I found that intentions were good, the execution was not.

Racialized discourses and the marginalizing work misreporting performs.

Journalistic articles, in addition to misreporting as I mentioned, also disseminated a host of racialized discourses about Native American nations at the confluence of technology. This is particularly apparent in articles that were titled disrespectfully and colonially, for example, "Battle of Little Bitcoin" (Hamill, 2014) or "No Country for Cryptocurrency" (Consunji & Engel, 2014). "Battle of Little Bitcoin" is a play on words, referring to the battle known as Battle of Little Bighorn or Custer's Last Stand in 1876. In this battle, part of the Great Sioux War, the Lakota, Northern Cheyenne, and Arapaho defeated and humiliated the U.S. military. The comparison between a crucial war and a cryptocurrency are non-sequiturs, insensitive, and allude to a common stereotype of Native American

peoples as militant or war-ready. This was a historic war that ultimately led to the U.S. government invading and stealing territory that the tribes contest to this day. The other title, "No Country for Cryptocurrency," refers to the first line of a W.B. Yeats (1928) poem, "Sailing into Byzantium" and is also the title of a 2008 movie, *No Country for Old Men*. The poem discusses how an old man leaves a place meant for youthful, beautiful people that neglect the old, and that this country was unconcerned with spirit, meaning, and intellect. Read in concert with the story, and paired with an image of Harris staring into the empty distance, the title "No Country for Cryptocurrency," suggests that cryptocurrency or perhaps any advanced technology has no place in Pine Ridge. It suggests that any effort to invest in a project like this would be desolate. Titling of stories became a space where catchy puns and plays on words, a journalistic practice used to rouse people into reading stories, ruled over international sensitivity. At the same time, these pieces conjured illusions to the tribe being dire, ready to mount a losing battle, hopeless, and set in the past.

Other types of racial discourses are apparent in specific statements made by cryptocurrency users in online spaces. A comment posted to crypto mining blog contains similar but more explicitly problematic discourses. It reads:

MazaCoin will create an economic foundation upon which the Traditional Lakota Nation can build lasting wealth and prosperity for their people. And MazaCoin will take it's [sic] place in the world of Crypto-Currency as a solid Altcoin backed by the unique legacy of an ancient culture and nation. MazaCoin is another historical first in the grand renaissance of money that is the Crypto-Currency

revolution. The entire world will benefit from MazaCoin, and all are welcome to join our community. ("MazaCoin (MZC)," 2014).

In this excerpt, MazaCoin is deemed a "courageous decision," again one that was never made, and the nation is romanticized and framed as "ancient." This illusion to antiquity serves to make the confluence of cryptographic technology and Indianness seem unexpected and plays into a colonial discourse of technology and Native people as improbable (see Deloria 1998). Further, the hyperbolic phrases of "cryptocurrency revolution" or "grand renaissance" are rhetorical devices to make people buy into the coin.

The problem with media misinformation, specifically in the case of MazaCoin, was that not only did many mainstream media reporters know little about cryptocurrency and its technology, especially in the early days in 2014, but some reporters appeared to know little about reporting in Native American nations. Media outlets including *Al Jazeera* (The Stream Team, 2014) and *Forbes* (Hamill, 2014) made bold claims about the potential for the currency to alleviate poverty, noting societal ills that have plagued the nation for hundreds of years after initial colonization. Much of the journalistic reporting around MazaCoin was full of errors and speculation, which is a result of inadequate knowledge and training for American journalists, as well as Americans in general, struggling to understand Indigenous communities and Native American nations. It is a systemic colonial problem. Miscommunication between the MazaCoin and reporters as well as reliance upon hearsay and anecdotal evidence around the Office of Economic Development played into this problem. Further, mainstream media reporters did not confirm the source's claims with the proper tribal communication gatekeepers or entities.

Efforts were not successfully made in this case to factually report, consult tribal council or the president of the nation on the matter and, revise articles or offer corrections after claims were proven untrue.

These articles also tended to misunderstand tribal political organizational structures. For example, some referred to the tribal president as chief or even worse, claimed Harris was the chief (Down, 2018; Hamill, 2014). Other articles conflated boards or departments with treaty committees or councils (Consunji & Engel, 2014). This is problematic because tribes are their own sovereign nations that have their own ways of governing, often integrating traditional practices, democratic or community-oriented ideologies, and strategically incorporating western and alternative government models. The Oglala Lakota Nation, like many tribal nations in the U.S., have a council, consisting of representatives. Part of this council includes a president. For other tribal nations, there may be chiefs, head(wo)men or no highest recognized leader at all. Then, there are typically committees and boards which often handle more specialized government and community functions. For example, culture and education committees or research and review boards. However, most significant decisions typically must go through tribal council. Often there are democratic voting systems, economic corporate partnerships, and robust social spheres of town halls, Facebook groups, public websites, private portals, among other apparatus and procedures to help facilitate a functioning tribal government and nation. These types of egregious errors that occurred, in this case, could be remedied by reframing reporting on tribal nations as international journalism, as opposed to community or subcultural journalism. This would require reporters to better understand the government, stakeholders, and proper channels of tribal communication.

A New MAZA

People consulted for interviews for this research, in both cryptocurrency and Native American communities (not necessarily mutually exclusive), were eager to see what would happen next for MazaCoin. After the controversy, Harris announced he was prepared to mount MazaCoin as a viable cryptocurrency once again. It was not until October 16, 2016 that an article was posted to MazaCoin's website Mazacoin.org, which discussed a new trajectory for the coin. In the upgrade or overhaul, MazaCoin was now rebranded and referred to as simply: MAZA. The coin was now targeting all "Indigenous nations worldwide" or "all sovereign tribes ("Maza Network Development," n.d.). This change detached the coin from the Oglala Lakota Nation, and signified a pan-Indian or pan-Indigenous turn, meaning that the coin could be used by some or all Indigenous tribes, and outside users, as opposed to the one specific tribe.

With this change, came a need for existing users to move their blockchain data and wallet to the new directory. A social media post on September 16, 2017 reads, "Reminder, ALL MINERS need to make sure they are on current 10.2 Maza code https://mazacoin.org/docs/2016/10/16/downloading-maza-via-ipfs/... only Ver 3 blocks accepted by main chain" (MazaCoin, 2017). There was also a link with information on how to download MAZA via IPFS. Many users did not, however, migrate their data or jump on board for the next phase. The coin was accepted by a handful of crypto wallets, and fewer online vendors, most of which are now no longer supporting MAZA. Getting the cryptocurrency into the hands of the community members is one challenge of cryptocurrency adoption, but even when that is accomplished a shared agreeance on its viability within the network needs to be constructed.

According to a a token structure consultant,

MazaCoin is one example of the early era like the first generation which failed and MazaCoin failed I think in that they never actually succeeded at delivering any MazaCoins to the intended recipients even though they said that they would. Other coins actually did succeed at delivering a whole bunch of their tokens to random people but nobody cared, it didn't bootstrap interest.

There needs to be both a successful method of delivering coins to the intended recipients as well as sparking of interest in investment and usage of the coin for it to actually work.

As he continued he said:

The challenges technically would be about P.R. (Public Relations), education, awareness, equipping people with the ability to control money in any way and identifying people because there's a procedure for a vast amount of fraud or accidents where you're intending to give out a million dollars' worth of newly generated tokens to different people but then you accidentally give out like 900,000 dollars of it to specific subgroup, or you give it to someone who never sees it so it's all wasted or disappeared. There's a big organizational and technical challenge on that side.

Overall, there was not an adequately robust public relations plan or ongoing publically available evidence of consultation between the tribes and developers to result in a usable token that could benefit the community.

At this point in MAZA history, it cannot be deemed a financial success, nor did it do exactly what it set out to do, but it did perform some critical experimentation and development work that has many implications, and lessons learned for future altcoins of

this kind. According to a blockchain outreach specialist, "the projects that have had the most success, in cryptocurrency at least, are the ones that got buy-in from their community and had governance models that included their community." The central goal or challenge is to generate sustainable demand for the coin to create a collective network of agreement on its value and viability. MAZA did not achieve that cultural and community buy-in necessary for success, however, it remains an interesting case as well as a starting point in a larger discussion of how of if cryptocurrencies could have any use value for tribes and how they can be encoded with certain meanings, indicative of nationhood and potentially signals decolonization.

Part Two: Encoded Meanings and Practical/Technical Considerations

Meanings are encoded into digital currency through the code itself and practical and technological considerations around its underlying technology. A community outreach officer for a cryptocurrency company in Colorado spoke about the tailoring aspects calling it, "really programmable money [that] enables us to conceive of and cheaply execute on creating currencies that are tailored to a specific need or a specific culture." He then compared it to the Internet in the 1990s where it once cost tens of thousands of dollars to build an online shop to now when it costs around ten dollars. He predicted that "spinning up" cryptocurrencies would follow a similar path of ease of implementation. For creating national cryptocurrencies, in particular, the recipe has been to customize an existing cryptocurrency, most commonly LiteCoin, with "a dash of nationalism" (Kristof, 2015, p. 68). This ease of development and customizability afforded the conditions for MazaCoin to happen so quickly.

MazaCoin was developed and pushed out in an environment saturated with other altcoins. MazaCoin had many reasons for its relatively low long-term adoption rate, not least of which was due to the development of the coin itself. In order to understand why the cryptocurrency did not work or live up to the goals outlined by the creator, outside of the aforementioned analysis of media impact, it is helpful to understand some basic technical features of cryptocurrency. These features are often dependent upon the time the cryptocurrency came out, and the generation it belonged to. Thus far, cryptocurrency can be loosely described in three general generations of development. These phases relate to their method of proofs, conditional or unconditional uses, and ability to allow for governance to be implemented through the blockchain. The following section shows how meanings are encoded via the actual code and technological decisions. This is achieved by first walking through the three amorphous eras of cryptocurrency, the first of which MazaCoin's belongs to (see Table 3).

Table 3

Cryptocurrency Generations

Generation	Example	Mining	Features
One	Bitcoin	Proof of work	BIPS (Bitcoin Improvement
Two	Ethereum	Started as proof of work, changed to proof of stake	Protocols) Smart contracts, distributed applications
Three	EOS, ADA Cardano	Proof of stake	All of the previous generations and smart contracts, voting, governance capacities

Bitcoin is the foremost, and the stand-in for, the first generation of cryptocurrency. Each generation has defining qualities and development protocol. Cryptocurrency in general works particularly well because it is built on a system that rewards behaviors or actions that keep the system running. A key way that this works is through its distributed consensus system, which does not need third party trust or approval. For Bitcoin, this is based on a proof of work model called mining, explained in the last chapter. The idea behind proof-of-work mining was proposed by Dwork Naor (1993) and adapted by Bitcoin's development team (Nakamoto, 2008). This process means that people set up computers to solve a mathematical equation, or essentially guess numbers to verify and process Bitcoin transactions. Solving the right hashes comes with the reward of bitcoins and is profitable to the extent that what the miner earns is worth the costs of computing systems and power it needs to run. The work of mining is rewarded in bitcoin, but also gives miners power or say in the system.

A downside of this method is that mining in proof-of-work systems takes a large amount of electricity, making it a very expensive process. In December of 2017, just one bitcoin transaction used as much energy as the average American house uses in an entire week (Malmo, 2017). In earlier years of Bitcoin, coins could be mined using graphics cards and people could set up mining systems in their house or in other creative ways. For example, someone rigged their Telsa car to run off free energy from public electric car charging stations in their city (Sensiba, 2017). Now mining requires application-specific integrated circuit (ASIC) highly specialized chips after they proved to increase the efficiency of the overall process. As each coin is mined, akin to minting, the process becomes more difficult and more expensive.

The other option, shown in the next generation of cryptocurrencies, is to implement a proof-of-stake system, which rewards people who simply own the cryptocurrency. This is economically deterministic. Bitcoin developers did not use this system because of fear that the rich would come in and take over the system (Nakamoto, 2008). If someone could come in and buy even a small majority of the coin, hypothetically that person could approve of transactions that benefitted themselves and implode the system. Developers, rather, wanted to embrace the decentralized aspect of the currency, making it accessible. However, it is still mainly people who are rich that can participate in mining since miners now have to be able to afford large scale computing or data centers, A.S.I.C. chips, and the electricity bills. Many centers, for example, are in China or Russia (Lai, 2018; Scott, 2018), which is significant in a globalization sense as the same structures of labor and production are re-inscribed onto technologies that were designed to be counter to the economic status quo. With this proof-of-work model, users are limited to sending money or transactions and if they buy something with the coins, there is not a guarantee that the product with be sent.

Generation two cryptocurrencies were built differently after developers learned some lessons from the previous generation. In particular, generation two integrated smart contracts. These contracts allow users to send money with conditions, making transactions easier to control or manage. For example, after someone were to buy a product using the cryptocurrency, they could be set up to receive the product and then release the money. It adds an ability to make the transaction conditional.

Generation two cryptocurrencies also switched from the model of proof-of-work to proof-of-stake. Proof-of-stake means that simply owning the cryptocurrency gives you

a stake in that coin. For example, if you own a certain amount of coins, you have a percent of those coins and a proportional say in making decisions about that cryptocurrency. It is a system that rewards whoever has most of the cryptocurrency, with the most say in it. Essentially owning the currency is the service provided, and the reward comes in the form of a percent of your overall ownership of the cryptocurrency. The benefits of the proof-of-stake model also include environmental responsibility, as well as increased security. The main coin name in generation two cryptocurrencies is Etherium created by Vitalik Buterin. Six consultants referred to him in terms such as "genius" or "exceptionally smart" for improving and providing alternatives to Bitcoin's system.

Generation three cryptocurrencies again build upon the lessons learned from the previous generations. Developers integrated elements of generation two, including smart contracts and proof-of-stake systems. The generation is also better equipped to handle a host of issues including scaling and security. However, the key change is generation three's ability to incorporate governance into the blockchain. With a decentralized system, it is a challenge to change aspects of the cryptocurrency and make decisions because no one is in a centralized position of power. This generation of coin includes the ability to let people with a stake in the coin, via proof-of-stake, to potentially vote and agree on particular ordinances that impact the coin. Bitcoin, as a generation one cryptocurrency, may need to eventually change to adopt some of the qualities of the later generations to stay viable, otherwise, Bitcoin could risk being funneled and traded into the other models.

Maza's Place

Though MazaCoin was created with a proof-of-work system. It fits squarely within the first generation of cryptocurrency, but it was developed with it its own set of logics. For example, the mathematical problems that mining was to solve were less involved, taking less electricity and processing power. In the case of MazaCoin, mining could be done on older computing systems, making it more accessible to a larger population rather than just those who can afford large scale computing centers. This also honors principles of environmentalism and equity, fitting within cultural values that were thought to be important to the nation (Weaver, 1996). MazaCoin also did not use smart contracts and did not have many vendors willing to accept the coin. This meant all MazaCoin could ever be was money or assets, instead of a richer blockchain that could have features like community member identification verification built into them, as well as methods of governance. This section will rely more heavily on expert opinions on MazaCoin's technical aspects.

One of the issues with MazaCoin was that it did not succeed at delivering the coin to the intended recipients. There needs to be both a successful method of delivering coins to the intended recipients, as well as the sparking of interest in the investment in, and usage of, the coin for it to actually work and build a network. According to numerous experts on cryptocurrency, MazaCoin was arguably predestined for failure. For an I.T. company owner and large-scale miner of cryptocurrency, it was essentially a mess of code, without ample developers able to make it viable. He stated his opinion:

What was wrong with them is they were just too early, and they didn't have the passionate change the world developers that just love the technology so much that

they want to work on it, so, they cared about Native Americans instead of caring about the cryptocurrency.

A token structure consultant added,

MazaCoin was briefly talked about in 2014 and it didn't go anywhere. There was never real volume. I think the highest I saw their volume at in a 24-hour time span was like 30,000 so it would have been interesting if they got it off the ground but I'm not exactly sure what it would have done for them with the current level of technology at the time. And now it's kind of just a zombie out there.

The cryptocurrency miner makes the point that for a Native American cryptocurrency to work, developers need to care about the communities that they are creating them for. And more importantly, developers need to be of the highest caliber in terms of software coding skill. Beyond this, they need to have the foresight to integrate code that would adapt them to future generations of cryptocurrency. MazaCoin was based on generation one cryptocurrency, it had a proof-of-work system, it did not integrate conditional transactions, and it did not include aspects of governance. Further, it did not have enough developers to make a sustainable coin, particularly in the beginning stages when the development team only consisted of Harris and Anonymous Pirate. MazaCoin was also a fork of an unknown cryptocurrency, Zetacoin. This is not a choice that garners trust among those who know other cryptocurrencies' codes are more efficient.

The consultant's statement that MazaCoin is a "zombie" refers to that fact that the coin is essentially dead, but it still lingers on trading sites. However, it is notable that altcoins benefit from increased interest, and the trending of other cryptocurrencies like Bitcoin. People bought bitcoin, a limited resource, and that pushed its value up, but it also

raised interest in MAZA. A very visible rise in the MazaCoin market cap can be seen around December 2017 and January of 2018, a time when Bitcoin reached the cost of around \$20,000 per bitcoin ("Bitcoin," n.d.) (see Figure 13). This is again a reflection of consumers' belief in the potential of the cryptocurrency industry and in part due to the network effect.

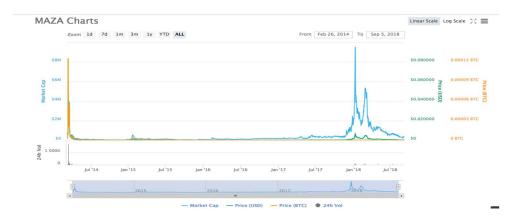


Figure 13. Additional Maza chart. Image screenshot by author (CoinMarketCap, n.d.).

Considering that cryptocurrencies are deemed the Wild Wild West (Miedema, 2014), where the coins have uncertain success criteria, risk, and speculative futures, an I.T. company owner hypothesizes that the failure of MazaCoin can also be seen positively:

It's good that it failed because second generation coins do so much better than first and now you have the benefit of these pre-stable infrastructures because now you can integrate both the voting and the conditional transactions.

Further, a token structure consultant shared:

Anything you would deem a failure is I think a required step to get to the next point and the process of fail, succeed, fail, succeed, fail, succeed, or fail pivots or

adjust fail, adjust fail, adjust xyz. That process has been stifled over history but now with cryptocurrency, it's a lot harder to stifle.

Failure is a normal part of the process and is tied to larger processes of technological innovation.

Optimisms

In a techno-optimistic perspective, projects like MazaCoin are framed as facing colonial issues head-on, and as part of imagining how to create decolonized futures in an increasingly globalized and digital world. Confronting colonial pasts and present, and engaging with "material conflicts that dispossess Indigenous peoples" (Mackey, 2016), is a path to more culturally conscious Indigenous technological futures. From a skeptical or pragmatic perspective, this optimism might be tempered by considering how tribal nations are often the targets of "financial empowerment" plans gone wrong and predatory lending (see "First Nations Development Institute," 2008). While a cryptocurrency could be purposed as a sovereign action for tribal economic autonomy and might extrapolate to other potential Indigenous use cases, it could also be a risky economic endeavor that takes advantage of tribal economic privileges and positioning among tribes as domestic-dependent sovereign nations.

Initially, the cryptocurrency world became interested in the idea because it could show off a new use case. A founder of a computer-based training company and cryptocurrency miner stated, "the reason that I'm excited about it for Native Americans is that it is like a perfect proving ground because it's a nation without a currency." He speaks about the potentiality of Native American cryptocurrency to be among the first successful national cryptocurrencies. People outside of Indigenous communities were

looking at MazaCoin not just as a project that could help communities, but more as a test that could corroborate the material potentials of cryptocurrency as a technology of a nation. Reputation was not just at stake for the creator but for techno-optimists eager to test its potentials.

Others in Native American communities were optimistic about what MazaCoin means in a political and symbolic sense, including a Native woman and consultant (who wishes her tribal affiliation to be excluded). She conceptualizes the coin as a potential act of resistance and a chance to actively decolonize:

Projects like this, it's claiming who we are you know? Recognizing that we have wounds and healing those wounds, it's decolonizing and don't take no for an answer... Choosing our currency from Turtle Island, is again, it's that finger again [middle finger]. We don't want that energy, we don't want the baggage that goes along with the racism and domination and the genocide that is associated with that dollar.

Here she speaks to the fact that spending money is both a symbolic and rather concrete communicative act of exchange that can assert sovereignty. There is something potentially liberating about using a currency of a Native nation rather than of the paternalistic settler colonial U.S. These technologies become tied to civil rights discourses of supporting from within, that buying these Indigenous currencies will benefit and bolster the larger project of resistance. MazaCoin creators intended the currency to be an alternative to the U.S. dollar. For some users, there is a different semiotic potential to communicate power in choosing it over other colonial forms of currency.

A main way that cryptocurrencies are changing finance is it through the movement of monetary control and power from government to people, and its promise of a new political future. Harris' previous words about cryptocurrencies' ability to "carry us into the future" is couched in a larger rhetoric of techno-optimism, the belief that technology will radically change social and political processes. An I.T. company owner explains the palpability of his belief and techno-optimism:

Cryptocurrency brings freedom because it moves the control of money from the government and it puts it with the people. And the control of money is the control of life. It's the control of everything because as soon as we went from barter to a centralized currency system, then all that really mattered for power and control became money. And as soon as the government started controlling it, then the government could start dictating what happens in people's lives. And in a way, cryptocurrency is going to forcibly remove that government control. The governments don't want to lose control, but they have to because it's kind of this groundswell of this idea.

This idea speaks to a potential promise of cryptocurrency to not only change the money and payment world itself, but to radically alter the systems of governance which take power away from or marginalize individuals and groups. This is the type of rhetoric and action that speaks to decolonizing as well as asserting Native futurity.

Further, with regards to the community specificity aspects or ethos of the coin, it became clear that it was grounded in a grassroots effort for economic self-development. Harris shared in an interview with *Mashable* (Consunji & Engel, 2014), that outside corporations come into tribal communities acting as saviors, claiming they can fix the

poverty problem, and that MazaCoin is a symbolic effort as much as an economic effort to bring hope back. Rather than have outside economic developers, often not altruistically coming in to help a tribe, there is a strong aspect of self-determinism and sovereignty involved with community insiders proposing solutions.

MazaCoin optimists viewed the coin as an opportunity to radically alter the state of economic affairs on the reservation, while others doubted its viability and, tellingly, my interview data suggests that most tribal members had not even heard of it. It was not a project that all tribal members could claim authority over, or that the tribal council that represented all members claimed authority over.

Pessimisms

Consultants shared pessimisms about MazaCoin and its ability to produce an implementation protocol that results in usable tokens for the community. Although efforts were reportedly made to foster a smooth adoption of the cryptocurrency on the Pine Ridge reservation, MazaCoin fell short. For example, with a high poverty rate, owning the precursory technology needed to actually mine the coins is a challenge. This digital divide has created conditions in which Internet access and phone service is dicey (Cullen, 2001) and not conducive to mining the coin. Some were excited about the idea, others were resistant to the idea because of their distrust in the system, and some were on the fence.

According to a token structure consultant and non-Native person who grew up in South Dakota:

None of my friends that were Native American cared about it. They were curious about it. But I don't think they thought it was going to do anything for them.

Having programs for substance abuse and things like that are things that a community should care about more.... It was 2014 or 2015 so it was less about being doubtful about it and more along the lines of people still pretty much asking why? How can I use this? Where can I use this? Those were like the primary questions when you're in a niche community like that.

He raises some important points about priorities in a community as well as skepticism. In 2014, when the coin came out, most people, not specifically Native American peoples, were just being introduced to cryptocurrency. There was an air of curiosity, speculation, and doubt surrounding the technology and its promises.

When ideas of currency float around, the primary questions tend to center on its practical application. The questions become where, how, and why do I spend it? People seem to care less about the coding, features, and hype than how they can use it and if it will realistically serve the community. Robert J. Miller, J.D. raised the same types of questions in our interview such as, "What is it nothing more than an investment scam? You can't buy anything with it can you?"

Another shortcoming of MazaCoin regards the actual transaction of the coin for services or commodities. Harris wanted citizens of the nation to able to use it to buy desserts from bakeries or pay for college (Consunji & Engel, 2014). It was not designed to work alongside existing currencies but to be the defining currency on the reservation (Consunji & Engel, 2014). However, retrofitting economic systems to accept new tender is a logistically involved and expensive process. With MazaCoin, there was not a strong enough strategic implementation system in place to get many vendors to accept the currency in the community. A citizen of the nation could not go into a gas station and pay

for fuel with their MazaCoin nor could they go into one of the very few restaurants or stores on their reservation to pay with MazaCoin. When I brought up MazaCoin to an Indigenous woman living off-reservation, she laughed and said that what the reservation really needed was even just one big store, a Walmart (S. Kite, personal communication, March 29, 2019).

Hypothetically, with more development and partnership in the community it is possible that vendors could have accepted the coin. However, this speaks to a roadblock. A current problem with cryptocurrencies is that they are not universal tender, often lack liquidity, and sometimes are not considered money at all, but rather assets. When people do not have places to spend the currency, the currency seems either useless, like an investment with a highly unpredictable future, or like a scam.

Implementing MazaCoin was difficult due to a general air of doubt around legality, the viability of cryptocurrencies, and what governments might do to control it in the future. Further, unpredictability and lack of rules, guidance, and reliable government regulation dissuade a large segment of the population from using it. There is also the looming threat that the U.S. government could shut projects like this down. An instructor of a financial course for Native American economic development states that this can be characterized as an,

Issue of controlling the purse strings and only the Federal Government controlling the purse strings. As you well know, the relationship between the so-called sovereign Indian nations and the federal government is a unique one. There's sovereignty and then there isn't and with the Indian tribes... It's really that the government holds the strings and we hope that the federal government is a

benevolent fiduciary with the best interest of the tribes in mind. We know that in theory that's the ideal and it certainly has fallen way, way short to be very understated about it.

This is the historically determined and enduring paternalism that speaks to how tribal nations are often restricted from pursuing economic avenues that would benefit their people. These realities serve to undermine tribal fiscal autonomy and limit sovereignty.

It is also not just the federal and state government that tribal nations are wary of.

Consider the following statement from a token structure consultant:

I've talked to people that have pitched different kinds of concepts. There was this big thing where some businessman in South Dakota was trying to get the tribes to grow weed (marijuana) and then the feds rolled in and a bunch of people got in trouble and he got sued by the feds for doing this. I think a lot of people pitching this cryptocurrency concept to the Native Americans, I don't think there's much organic thought about it. I think that they have a lot of other things that they're far more concerned about than creating a cryptocurrency.

The consultants are describing the various predatory or controlling forces that become involved with these proposed economic projects. Businessmen toting ideas like cryptocurrencies or marijuana cultivation can be viewed as trying to take advantage of tribal nations. They interpret tribal nations as having special privileges and self-governing rights, and rightfully so, but they often push boundaries in a predatory manner and propose ideas on the fringes of legality. While the projects themselves can be framed as possibly decolonizing by way of asserting tribal privileges and rights to implement them, the legal and economic ramifications are as important to consider. If a project can invite

federal intervention, lawsuits, and other problems that tribal nations certainly do not need, are they then really enacted to serve a community? When health, economic, and social issues (all interrelated) plague a tribal community, those issues and the immediate solutions to them supersede the importance of introducing experimental technologies that may or may not help in the long run.

Discussion: Practical Strategies for Tribal/National Purposes

Lessons from this cryptocurrency can be applied to future generations of coins aimed at serving Native American nations. This project is part of a process of technological innovation and especially in the juvenile phases of cryptocurrency, these roadblocks are to be expected. Most altcoins, of which there are thousands, will also not succeed. It is certainly not unusual that MazaCoin did not succeed (as of the time of publication).

A strategy that may uniquely serve Native American nations might be to cultivate the features of the newer generation of cryptocurrency and to indigenize them. For example, newer generations are able to hardcode certain financial philosophies into them. A community cryptocurrency outreach specialist shared one possibility that is able to enact a fiscal choice to honor elders, a value of many tribal nations:

Let's say a culture says we want to value our old, our elders, we want to support them financially so we're going to create a coin that every time we do a transaction it takes one percent of that transaction and gives it to the elders of our community. Then it creates some governance model, now every member of that tribe could use that currency or they could not use that currency. If you're running a business in that community, you could choose to accept that or you could

choose to not or you could choose to only accept that because of your support for that ideology of supporting elders.

Framed in this manner, cryptocurrencies are tailorable to the unique qualities of tribal nations, how they value their members, and how they enact their fiscal autonomies. This reflects aspects of sovereignty and economic self-determination. Further, there are methods to airdrop (distribute tokens to existing coin holders), or to distribute an equal amount of the currency to each member of society. This could communicate an egalitarian or communal economic philosophy if that was valued by a specific tribal nation. For example, Cattelino (2009) argues that the ways Indians make, distribute, and use money are political acts of sovereignty in and of themselves. For example, the Seminole Tribe disperses casino profits in the form of individual dividend checks, which different from U.S. fiscal policies and highlights their prerogative in making their own decisions. Seminole myth has always honored equitability, that everyone has an equal right to tribal resources in the same way that everyone had an equal right to hunted meat. In generation three cryptocurrencies, governance models are programmed into coins and with these coding parameters, you could theoretically allow each member to have equal say in decision making of the coin.

If a tribal nation did wish to reduce economic leakage on the reservation, one choice could be to limit the coin's scope or to contain usage within a specific tribal nation by geofencing. Geofencing is the process by which the coin's code contains its usability to a limited geographical space. A virtual perimeter could be made, which has some advantages and more disadvantages. An advantage could include the prevention of

economic leakage because the coins would have to be used for goods and services in a particular community.

According to a community coin creator, geofencing is something rarely tried and he offered a more feasible alternative to overcome the flaws of geofencing, namely that it is quite easy to fake or misrepresent Global Positioning System (GPS) coordinates:

This is science fiction and no one's ever done it yet but what I think what you could do is make a coin which is not geofenced, like to a GPS coordinate. That I don't know how to do reliably. People could cheat or lie about their GPS coordinate. You just can't know someone's real GPS coordinate basically, they could always cheat it, but what they can't trick is the timing of sending a message and getting a reply back. And you could implement a system on the Internet which says everybody who can send me a message and get a message back in 100 milliseconds.

Here coins could be contained to an area, not by users' self-identification of location, but by the more reliable method of timing how long that it takes to get from point a to point b. This could limit usage to a particular area. The disadvantages of geofencing and other methods of containment are that they limit reach and usability. This strongly discourages investment and limits the ability of coins to have their values increased.

Another suggestion brought up by consultants is to utilize casinos on reservations, link them up with other tribal casinos, and retrofit them to accept an Indigenous cryptocurrency. The idea here is that the casinos create the demand and serve as a place for people to use the cryptocurrencies, and then exchange them back into U.S. dollars. This is not viable for a handful of reasons. All tribes are different and would likely not

agree to have the same currency. Also, if cryptocurrency was accepted at casinos, of which not all tribes have, it would likely quickly become a destination for money laundering.

Conclusion

My hope is that the findings of this chapter may be useful, as well as cautionary, to other Indigenous groups musing the option of creating a cryptocurrency for economic development or to communicate sovereignty. While I offered potentials, possibilities, and conditions under which cryptocurrency for Indigenous communities could be useful (e.g. coding in financial philosophies), ultimately MazaCoin is a case that clarifies why the project is challenging. First, the digital divide has created conditions in which a lack of technical infrastructure limits the inclusion of Indigenous people on poor reservations to participate in cryptocurrency projects. There are other problems such as lack of stores for food, drugs, and disenfranchisement, that are more pressing for a lot of Indigenous people than buying into a project like this. This is a structural problem and conditions of poverty are a glaring example of colonialism in America. The second reason is that the technology is relatively new and the market is volatile, which presents risks for any economy, especially a poor one. Thirdly, it is challenging to juggle the complicated relationships between the creators of the coins, their intentions, their skills, and their vision with that of tribal governance and the people of the nation. Media, as an external variable, has profound abilities to help draw investors and attention toward or away from a project. According to Harris, "[MazaCoin] a seed, you know all I'm doing is planting it, giving it some nurturing, nutrigrow, and some water and letting it go and seeing where it goes" (in Brockwell, 2014). MazaCoin is both experimental and contested.

This chapter traced the fraught and still unfolding history of MazaCoin. Further, it contributed to a gap in the literature regarding how Native American nations can *potentially* modify or adapt cryptocurrency to meet local needs. I explained how the coin is also unique in its ability to morph from a coin that was intended to be tribally specific to a pan-Indigenous form. This demonstrates the adaptability of cryptocurrency to address different Native American collectives. Given that this coin originally tailored itself to local conditions, the Pine Ridge reservation, and then to larger pan-Indigenous conditions, it uniquely showed adaptation at two community scales. The case of MazaCoin, in this sense, hints at and muddies the degree to which the digitization and virtualization of currency can be considered a local, national, or global project. Cryptocurrencies exist only as a possibility for Native American communities at this juncture and few are currently listed on coin trading sites. A successful coin, in general, would take a mix of technological exceptionalism, activism, community buy-in, robust implementation and public relations protocols, media outreach, and luck.

CHAPTER VIII

BOTH SIDES OF THE COIN: LOOKING BACK AND LOOKING FORWARD

The past and the present are distorted reflections that while not fully separate, can be metaphorically held up to one another. By looking at Native and settler currencies of the colonial past and currencies of the present, this discussion and conclusion chapter expands and clarifies the key findings and discussions foregrounded in both case studies. In both cases, the concept of trust in value is central. Communications can help to build or undermine that trust, regardless of the currency form. I employed theories related to currency as communication, currency as entwined with nations, and colonialism, and addressed different semiotic meanings embedded in those currencies through an interpretive and critical lens. In doing so, I contribute to the literature in several ways. First, I bring a new understanding by explicitly recognizing currencies as belongings that help accomplish social action by means of a correction to the artifact-ness and ethnocentrism that pervades literature on currency. This is also the first substantive study on the potentials and meanings of community-based cryptocurrency for Native American peoples, and among the first to study cryptocurrency in minority groups more generally. Moreover, no prior study has looked at the episodic shifts and integrations from landbased to digital currency in specific tribal contexts. While colonialism has regularly been understood as tied to land dispossession, it is rarely discussed as tied to digital communication technologies. Cherokee, Hawaiian, and Samoan scholar Jason Lewis states.

If we consider cyberspace to be another frontier undergoing colonization, and if we're concerned with how that colonization plays out, might we not do well to reflect on the historical course of colonization on this continent?... The resources in cyberspace are not timber, game and gold; they are processing power, bandwidth, networks and data. (Lewis, n.d., para. 3)

The ways that digital communication technologies, including cryptocurrencies, are being thought about in relationship to colonialism is an important step in considering what the future may look like for Native communities. My second case study thickens the breadth of literature on the complex relationship between Native American peoples and digital technology and challenges to colonial systems. Thus far, this dissertation has treated each case study as a fairly discrete entity. However, this chapter puts both into conversation. What follows is an elaboration of the findings with regards to the dissertation's guiding questions and with some consideration of Lewis' words.

What are the cultural meanings that are embedded/encoded within specific forms of currency? How are strategies (practice and technical) enacted around currencies to strengthen, constrain, or otherwise shape tribal sovereignty?

There are a myriad of meanings embedded within and expressed through each form of currency in both case studies. In this section, I will focus on meanings that can be loosely grouped into following three topographies with some overlap: (1) representational/iconographic, (2) land and spaced based, and (3) language oriented. Representational and iconographic meanings are rooted in forms of currency and can be teased out by explaining how they depict, reflect, or project various non-discrete elements pertaining to social, racial, political, economic, national, colonial, and decolonial thought through imagery. For the second, currency is deeply rooted in cultural aspects of place and space in a similar manner as language. As this chapter will discuss, this is true for the

land-based currencies circulating in the 1850s as well as the digital forms circulating present day. They largely exist in a different type of space—one that is virtual. The last subsection in this larger section regards language-oriented meaning. I will utilize this space to discuss how computer language is a particularly profound and undertheorized form of meaning-making for cryptocurrency. Throughout, I will discuss notable moments where strategies around currency, both practical and technical, play into a larger discussion of sovereignty.

Representational/Iconographic Oriented meaning

Case study one. Semiotics is useful in drawing out meanings, adding the additional method of findings, and explaining settler grammars assisted in answering the first question from a critical perspective. In chapter three, the first case study, I showed how coin currency is highly performative from a semiotic stance. The stamping and distribution of this type of iconographic currency is ultimately a reflection or an artistic performance of settler colonialism. The coin-as-spur example, in its altered form, suggests the necessities of frontier life, as well as its utility for settlers as they ecologically changed and colonized the landscape and livestock. The coin-as-spur belonging also demonstrates the malleability of metals of different perceived value as they morphed into tools that colonists needed. The next coin analyzed, the full dollar coin, is more iconographical. Lady Liberty, eagles, olive branches, stars of colonies, and all the other elements co-constitute a metaphoric mixed bag of American identity. Dumping out this metaphorical bag and analyzing the elements demonstrates how Nativeness and Americanness are envisioned through the eyes of White America. My findings in this section are consistent with Ganteaume (2017) who suggests that

representations of Native people shed light on America's identity crisis, in their navigation of the experiment of democracy. I contribute to this literature by describing the identity crises associated with westward expansion and those that settlers presented when utilizing the image of Native American peoples to reflect upon their own cultural experiences.

Coins, like those from the Gold Rush, are among the first media images of cultural appropriation and of imperialist nostalgia. These coins are part of commodity racism because of their long history of appropriation of Native American peoples and selling that image as the U.S.' own. Beyond coins serving as a technology decorated with symbols and images of colonialism, the larger system was reflective of colonialism. Overall, these coins are filled with signifiers of a nation imagining itself in a particular way, as having authority over Native people and the ways they would continue to be represented and treated. When people view these coins now, the meanings are again taken for granted, in part because images of Nativeness like these are so pervasive (eg. Nativeness imagery on Land of Lake butter, on cigarette boxes, and imaginary Indians as mascots, or in films). The meanings can also be fetishized, beheld, stored behind glass in a side section of an antique shop, or perhaps the tokens are instead handed down from generation to generation for posterity. Coins like the ones found in Oregon archeological contexts perhaps belonged to an individual or a settler family like the Geisels, or perhaps a Native person who acquired it in any other number of ways. From a higher level, coins also belong to a larger American nation-building project and they well-documented traces of the colonial process on their currencies.

Case study two. In case study two, I looked at the iconographic and other representational meanings associated with MazaCoin. Importantly, when currency is digitized and moves from obviously tangible to markedly virtual, some of the more visible cultural markers of the currency are lost. Iconography is only visible on digital representations and branding of the currency. However, as chapter eight discussed, MazaCoin's visual marker still takes on visual aspects of currency forms that preceded it, specifically with regards to the visuals that imagine nationhood. Coin money, as the first case study demonstrated, have nationally oriented icons, and even some checks have faded designs of an American flag behind where you write the amount, what the amount is earmarked for, and the date. Similarly, one of the visual markers of MazaCoin contains national icons. As was described, these were icons of great leaders, the Black Hills, the medicine wheel, traditional colors, as well as politically-worded messages of land sovereignty. This reflects what Bolter and Grusin (1999) offer as hypermediation, which serves to visually remind or draw attention to the medium and particularly those of the past. The word coin in the name MazaCoin itself, too, draws attention to it being a currency medium, as it could just as easily draw attention to itself as an asset like stocks.

The icons included in the second visual marker of MazaCoin that I analyzed (in the previous chapter) are faded images of Red Cloud, Little Wolf, and Dull Knife's faces—great and often romanticized Native leaders and signers of the Treaty of Fort Laramie (1868). These icons are intended to portray to coin users that the treaty promised the Lakota peoples the Black Hills—a place of great cultural importance. The coin was to face colonial structures of the past in the present. To extend this discussion, the visual of the leaders is also an illusion to U.S. coins and bills. The icons faded into the background

of the MazaCoin visual are reminiscent of satire regarding Mount Rushmore–a major U.S. monument carved with U.S. presidential faces (see Figure 14). A commonly printed Indian meme spins this by depicting Indian leaders' faces carved into the background of Mount Rushmore which replaces the U.S. presidents, including some that sanctioned violence against Native peoples ("Native Americans," n.d.; Boime, 1991). The monument itself is disliked by many Indigenous people because it serves as a rhetorical traumatizer as it overlooks the Pine Ridge reservation; it is colonial history memorialized and carved in stone (Boime, 1991). Coincidently, or not, all the U.S. presidents that are carved into Mt. Rushmore are also artistically rendered on American money, money which tribes are required to use, and which reflect the colonial ideologies of the U.S. In the MazaCoin images, the currency includes iconography that honors the cultural specificity of the tribal nation, rather than the presidents who sought to destroy them. Since it is clear that meanings encoded into visual content are expressive of nationhood, the replacement of colonial figures on monuments and artifacts like currency could potentially be a tool or tactic to reassert sovereignty and actively decolonize.



Figure 14. Mt. Rushmore. Image by author.

Meanings of political power, racial formation, nationhood, and sovereignty are embedded into currency through icons and other art and images, stamped or inscribed on

coins, or displayed in their marketing. In both the first and second case studies, the ways in which groups imagine themselves on and through those currencies and the colonial and decolonial work they perform is significant.

Land and Space-Based Meaning

Basso's (1996) foundational work discusses how land formations and other places inhere memories and help people recall those memories. The land that resources derive from is important to currency and, as was previously argued, are reminders of colonialism, sovereignty, and cultural survivance. This is clearest in the first case study where the place was colonial Oregon. For the second case study, the place was indicated as Pine Ridge, South Dakota, but cryptocurrency truly actualizes in digital places and spaces. These are new terrains that are encoded with memories and become an extension of, if not new, social worlds (Rheingold, 1993).

In the second part of chapter three, gold and metals, the coins that are made of them, and beads were analyzed within the backdrop of the Rogue River War. All of these forms were land-based, as the digital revolution was not realized until 100 years later. During this time, a variety of currencies were able to exist at once in a currency ecology—one that was shaped by conflict—but the most mythologized of them was gold. Gold became a primary impetus for settlers to move westward and provided a material fetish to provoke the completion of Manifest Destiny. As the case study highlighted, gold derives value from the notion that it is a limited resource. Although it may be sourced from a specific place like Oregon, it has an almost universally recognized value that exports globally. This is because its social value rests on its shininess above its use value, but it

has more complicated meanings when foregrounded with Indigenous perspectives and respect for land.

Gold is physically mined by miners—people with technologies that extract it from the earth. This process radically transformed the land and brought an influx of invaders, who then built homes on land that was not theirs and colonized not just the people, but the environment for capitalist gain. There were systems of claiming emboldened by principles of the Doctrine of Discovery. This laid the foundations for settlers to rearticulate the land as their own and created the belief that they were among the superior race, doing the work of God in their conquest. Moreover, in the 1800s as America's project of Manifest Destiny was being actualized, currency was used as a technology of power to hegemonically control and marginalize tribes in various ways. Tribes were often forced or coerced into entering into treaties and decisions to sell their sovereign lands in order to survive and to make currency that was usable in new markets. Native alternative forms of currencies were decreasingly accepted in those marketplaces as time passed and institutions like mints emerged.

Chapter three provided historical background about Indigenous currencies or cultural belongings like shells, beads, blankets, and baskets that were expressive of inherent sovereignty and cultural specificity as identity markers. Shells (e.g. dentalium) that eventually moved through trade routes up and down the coast, for example, communicate tribal reliance on, and connection to, the Pacific Ocean and its resources. They also became a stronger economic network as they began to rely upon other tribes that traded and potlatched with the shell, among a host of other belongings. The first case study also spotlighted beads. Beads are unique belongings that can be categorized as

decorative, ceremonial, and transactional. In some ways, beads tended to support tribal sovereignty, underscoring competent bartering skills and agency in discerning specific items. This fell within bartering conventions that were prevalent in pre-colonial eras and still remain a traditional practice. On the other hand, accommodation of trade beads, in particular, was a prelude to colonial introduction of coins and what colonists would consider modern currencies.

Beads were introduced and grounded in their locality but through trade became a globalized commodity form and intermediator in social, intertribal, and intercultural relationships. Beads were products of a specific place and often signifiers of their origin, like Bohemia. Their use also signals preferred colors, shapes, and determinants of wealth, like in the case of Blue Russian beads that became coveted by Northwest Coast tribes. They are light and more portable than other objects, and were easily transportable (Innis, 1951). While they were relatively easy to ship across seas and carry around because of their extrinsic qualities and widespread acceptance, beads do not have the speed, ease of portability, or technological efficacy that other globalized forms of currency have today.

Case study two. As is the case with cryptocurrency, discussed in the historical background and the second case study, currency afforded by the newest wave of electronic and digital technology is "disembodied and virtual, and can now move around the globe in large amounts and at the speed of light" (Carruthers & Ariovich, 2010, p.7). This ease portrayed by the authors does not emphasize the hard work performed behind the curtains that affect places and spaces, especially when considering the process of cryptocurrency mining. As foregrounded in the introduction chapter, mining for code has parallels to the environmentally destructive nature of mining for gold. Mining for

cryptocurrency, as was mentioned, is expensive and environmentally damaging because of its need for electricity. This is best described in a study that estimates that if cryptocurrency is adopted globally, even at a slow rate, the carbon emissions of mining will increase the planet's temperatures by two degrees Celsius in fewer than three decades (Mora et al., 2018). This is already having global impacts, and mining farms have sprouted up in Siberia and other cold regions in order to avoid the need for cooling equipment required for the excess heat the mining process produces (Scott, 2018). This shift in production affects international economies and the environmental changes could have other ramifications in the long term. As the planet gets hotter through cumulative human and natural impact, climate refugees will need to find habitable land. When people encroach on what other people believe is their land, particularly people of different racial and religious backgrounds, there will undoubtedly be political and actual war. While this consideration seems overstated, and I hope that it is, it nonetheless suggests that when new technologies and resources are created, introduced, and adopted, the process draws out power dynamics. In capitalist systems, groups predictably vie over access to, and control over, these resources.

Language Oriented Meaning

Further, computers and technologies that fork off of them have played a significant role in globalization, spreading information and cultural products at a rapid rate. Computing infrastructure itself consists of networks, programming language, hardware, and software. Together, and in and of themselves, they become the mediums for cryptocurrency and have begun to prove the potential for the implementation of a disintermediated global currency—one that is still deciding what its place and space will

be, and the degree to which users will relate to it. This section will considerably expand upon findings regarding meanings encoded in cryptocurrency from a computer language vantage point, and beyond just MazaCoin.

Across the globe, nations and smaller communities within them are accustomed to speaking and code-switching a certain set of languages, some of which are privileged. When it comes to computer languages, typically a certain set of better-known programming languages are used worldwide. Computer languages, created by humans, are tools that allow humans to communicate with computers and for computers to communicate with themselves to perform functions and tasks. Some computer languages are C, C++, Java, Python, HTML, Machine Language, and Assembly Language. These languages are fairly global in their accessibility to a large percentage of countries. However, the keywords/commands in these languages are typically in English, which is significant in an imperialist linguistic sense. Non-English speaking countries often develop programming languages in English to increase usability, accessibility, and uptake. However, at its core, it is shaped by English and the worldviews that permeate it. This is not considering nations where access to computers and the Internet is an issue by itself, including many tribal nations that can have poor economies.

While more global forms of currency, like cryptocurrency, can be tailored toward a tribal nation, the infrastructure again exists because it relies on the base coding parameters which typically speak in C++, which is one language that has a correspondence with aspects of globalization by design and reach. Language of any kind is a key aspect of identifying with a particular nation, collective construct, or space. As Anderson (1983) states, "through that language, encountered at mother's knee and parted

with only at the grave, pasts are restored, fellowships are imagined, and futures dreamed" (Anderson, 1983, p. 154). What is the future that coding language dreams of? Galloway (2004) argues that code is essentially a set of instructions and it is the first language that "actually does what it says" (p. 165–166). It talks in genie, responding to commands that are not necessarily just subserviently fulfilled, but also impacted by culture (Harrell, 2003). So, to that end, is the dream purely prediction and execution, or is it more profound? I would imagine that since cryptocurrency has a formal affinity with specific computing infrastructure, its increasing mass adoption suggests that this globalized peerto-peer system will continue to try to restructure our monetary and social worlds. The project of cryptocurrency is not timid as it has a market capitalization of hundreds of billions of dollars. Further, cryptocurrencies may play a role or transform the ways we view digital territoriality in relationship to currency. Cryptocurrencies' nightmares have already happened. For example, there have been many failed alt coins, cryptocurrency regulation has increased, a massive amount of bitcoins has been seized by the U.S. government in the shutdown of Silk Road, some figureheads have been jailed, its bubble has been on the edge of bursting, but could get far worse in a techno-dystopian perspective.

In this sense, this discussion is related to some media studies work on code.

Manovitch (2013) states that at the end of the 20th century and beyond, "humans have added a fundamentally new dimension to everything that counts as culture – that of software" and with this is a need to probe into how software changes human affairs (p. 80). He makes a claim that "the software is the message," which builds upon McLuhan's (1964) tagline of "the medium is the message." The flaw in this point is that, besides

software being the message, there is of course hardware, social conditions, and protocols that are also messages. Even if a computer utilizes software (computer language) that, for example, is utilized for social good or decolonial purposes, the infrastructure it is built on is still imperial and must be negotiated.

Digital Technical Strategies and Sovereignty

Native individuals or communities strategizing digital technology and offering their own dreams of cryptocurrency for decolonial purposes, as was the case with MazaCoin, is highly relevant to tribal sovereignty. The Internet as land or territory is a useful metaphor to start this discussion with here, and ties back to the section on meanings based on place and space. First, in colonial terms, the Internet and digital spaces are deemed the new frontier (Healy, 1997; Mathiason, 2008). This problematically draws from Turner's (1893) thesis on the American frontier, imperialism, and genocide of Native peoples. Within this frontier metaphor, Internet and digital spaces are often spoken about in terms of war (e.g. cyberwar, doxxing), conquest (e.g. owning networks), and colonial rule (e.g. punishable laws and paternalism over what country gets to sell the next generation in terms of wireless telecommunications technology). Just as other nations, the strident examples being U.S., China, and Russia, are colored by their subjective ownership over the Internet as inventors, cyber-cops, and "trouble-makers" (e.g. hackers, political influencers), tribal nations have their own set of best practices and understandings of the Internet and the tools afforded by digital code. Those practices are emblematic of self-rule and self-determination, and that is a strand of sovereignty.

In non-colonial terms, digital spaces and meta-digital things like artificial intelligence are living, breathing, sentient beings that must be cared for in the same way

that land under our feet and non-human beings must be (Lewis et al., 2018). This stands in contrast to capitalist logic that dismisses things as profitable, destroyable resources, and servile tools. Instead, Native people extend themselves into a "landless" digital urban space, creating new opportunities to see the world wherein "real" communities extend themselves as virtual communities (Rheingold, 1993). The Internet, however, can be more productively thought of as new land that Native people can assert stewardship and sovereignty within, and earmark spaces for sustaining and creating cultural practices. This can be a tribal nation deciding to implement a cryptocurrency online against the wishes of the U.S. government, and what one of my consultants (Native woman and former cultural director of her tribe) referred to as, "giving them the finger." It could be creating their own copyright laws that disallows the U.S. to digitally publish their stolen materials and codes online (Brewer, 2019), or it can be choosing to advocate for environmentally-friendly energy consumption practices online. When a tribal community creates laws, economies, or promotes epistemologies about digital culture that differs from colonizers, or other sovereign tribal nations for that matter (Deloria & Lytle, 1984), it is a true expression and shaper of sovereignty. Strategies that use digital are but one means with the potential to shape tribal sovereignty.

The second case study delineated more concrete findings regarding practical and technical strategies, such as hardcoding tribal financial philosophies, geo-fencing, and public relations and media coordination. This research finds that, while not objectively successful yet, cryptocurrencies are one way marginalized groups like Native American communities can demonstrate resistance to the U.S. capitalist system, localize digital currency technology to meet their national needs, and be a part of the international

playing field that is grappling with the changes of widespread adoption of a globalized cryptographic monetary system. At the same time, the findings of the cryptocurrency case study are conditional. While Native American cryptocurrency, in a more utopian sense, can help create a more "ideal" society in which problems of colonialism are addressed, the reality is that it did not in this case.

While these should be considered, crypto-optimisms, the beliefs that cryptographic technology has a transformative, deterministic, utopian-strain should be tempered as "utopias are places that are by their very essence fundamentally unreal" (Foucault, 1986, p. 24). Putting *full* faith in a highly unstable technology to create a more powerful, sovereign, Native American nation or a crypto-utopia would be questionable at this juncture. This type of experiment has happened before in 2018, when hucksters tried to sell the idea of Puerto Rico being a "crypto-paradise" post-Hurricane Maria (Bowles, 2018). In this sense, some of my findings are bifurcated; I am not a "true believer" in cryptocurrency for tribal nations, but there are some persuasive, if not noteworthy, benefits to its affordances and oppositional use cases. It was worth documenting and questioning any endeavor to try to better reservation conditions and Native economies.

Under certain conditions, a cryptocurrency is a viable option for Native American nations. However, in the particular case of MazaCoin it was not successful and many problems ended up being re-inscribed onto the technology, which was entirely counter to the purpose of the coin. Despite being encoded with the logic and signifiers of sovereignty, and of the nation, it did not ultimately correspond to tribal economic betterment. With that stated, cryptocurrency, as a cultural phenomenon, does allow for experimentation and inclusion of minority groups, and can be proposed as a push back to

hegemony; in this case, the hegemony of the U.S. government and its currency system. It is important that these cases be analyzed in order to ascertain the possibilities, limitations, and problems of these economic projects, particularly since cryptocurrencies are very new in a larger few thousand-years history of currencies. This is the strength of case studies—they well document projects like these.

Time will assist in telling if digital alternative currencies, or currencies other than the U.S. dollar, will be a viable or substantial part of future Native American economies, and what exactly they will evolve to mean. The reality for all tribal nations considering their own currency is that cryptocurrencies, for all nations, are risky endeavors because of their volatile fluctuations rates, speculative futures, expenses, and challenges of mass adoption. A community cryptocurrency outreach specialist, with traces of colonial thought peppered in, suggests they would only succeed if the coin's strategy was,

True to the community of users and resonates with them, then that change can be adopted. There's something anti-fragile about the culture[s] of Native American nations. Because no matter what, whatever they've been thrown through, what trial and tribulation and challenge, they've retained that identity somehow... I think the first step is identifying what are the salient features of the Native American nation, which makes the Native American nation a Native American nation. What can you not take away and it'd still be a Native American nation? What are those essential elements, identify those, and try to reduce it more, simplify it more, really boil it down to those not particulars but universals, right, and then, most importantly, I think if you're going to build something, build a currency that stays true to the ideals of cryptocurrency, you enable it to evolve,

right, you create the path for it the structure and governance models for it for ways to evolve that you can't even predict.

For the "Indigenous Cryptocurrency and MazaCoin" case study, I raised the additional question: To what degree do racialized discourses, circulated through media and historical accounts, contour these meanings?

This dissertation is not a positivist media effects study. However, it would be a glaring erasure to ignore the synergy between journalistic media coverage and cryptocurrency. This relationship is clarified in the case of MazaCoin. I presented the various meanings embedded in the coin by analyzing textual evidence, interviews, and journalistic sources. As was demonstrated, journalistic discourses contour meanings of specific cryptocurrencies to a large degree, impacting their overall chances for success. Media play a role in cultivating interest and are semi-symbiotic participants in shaping the overall story or history of a coin as well as trading patterns. The findings of this case study reveal the immense power that media has in these cases, particularly at the start of cryptocurrency projects. Stereotypical discourses created by colonists, and naturalized in a variety of communication/media channels and texts. Specific attention is called to those that reify Native American peoples as technologically backward or misrepresent tribal political structures, perform some negative cultural work and undermine sovereignty. While other academic articles began to think about MazaCoin (Alcantara & Dick, 2017; Tekobbe & McKnight, 2016), my work adds an extensive analysis on the colonial media framing of the coin, the coin's visuals, technological possibilities, as well as the long and complicated history of the coin. Further, I found it somewhat problematic that Tekobbe and McKnight (2016) stated that MazaCoin seemed to be an "unlikely story in North American media" (para. 5). While they may be referring specifically to North American media, this word "unlikely" is problematic, despite the author's intention.

Reporting on MazaCoin by referring to it as "battle of Little Bitcoin," "no country or cryptocurrency," or "unlikely," contours the intended meaning of the coin, culturally reproduces colonial expectations, and propagates misinformation. As Deloria (2004) states, it is a mark of colonialism to claim that something Indigenous is anomalous because it crystallizes a set of expectations of how the colonized can or cannot act. Indigenous presence in cryptocurrency development should not be seen as unexpected or unlikely. While mainstream and Indian country media outlets inserted tribal nations into a timely conversation about new globalized peer-to-peer communication systems, media also spread false discourses about Native American technological primitiveness. Journalistic discourses were not only powerful in contouring meanings of the cryptocurrency, but also in critically leading investors towards and away from it. The problem with media reporting about this coin also leads to my strong suggestion that journalists reporting on stories, such as this one, be trained to more capably report both on cryptocurrency and on Native American communities. There should be a larger reframing in newsrooms to consider reporting on tribal nations as international reporting. This is not subcultural reporting, and it should be taken far more seriously than it is.

Native American tribal nations testing or implementing cryptocurrency, as well as other digital communication technologies, are acts full of meaning that speak back to those stereotypes. On the other hand, if tribal nations do not want to adopt these technologies, or experience infrastructural challenges and colonially imposed poverty, they should still not be stereotyped as technologically backward. This is an opportunity to

critique and demand changes of the colonizer, instead of those marginalized by the system.

In reflecting on both case studies together, I posed a final question:

How do shifts in forms and meanings of currencies play roles in Native American and United States governmental and social relations, as well as our understanding of nationhood within an overarching capitalist system?

No media will stay entirely static or constant, as media are susceptible to change and remediation that is not necessarily progressively evolving (Bolter & Grusin, 1999). While this sentiment holds true, currency is a "both/and." Currency *both* remains fairly constant in form *and* experiences periodic shifts, typically in concurrence with larger technological innovations and socio-political circumstances. For example, coins and bills have existed for thousands of years, but new versions of them pop up frequently. Further new digital payment systems that use social media-like software are currently sprouting on a semi-annual basis.

This section will discuss the currency shifts highlighted in the case studies and what they clarify with regards to Native American and U.S. governmental relationships. Some of this has been covered in the answering of previous questions, and this answer will fill in the remaining gaps. The colonial period that I spoke about in the first case study was a time during which everything changed for Native people. The chapter spoke about how those changes and losses were based on the value that settlers and U.S. governments placed on the land as property, belongings, and people, in further support of Cronon's (1983) findings. His argument regarding the vast ecological change associated with capitalism and the movement of the lines of the frontier coincides with a vast

changing of human cultural practices. By the time of the Rogue River War, there were two forceful messages coming from the U.S. government—one of forced removal, and one of assimilation. Native people were moved to reservations in Oregon, often before treaties were even ratified to free up land to White people—men in particular particular—to help build the infrastructure that would assist in building capital and strengthening the country economically and nationalistically. The shift to a standardized currency was also dramatic because for several hundreds of years after White people came the economy in the area was highly intercultural and marked by Native people having considerable power in the changing markets. The shift in currency was representative of a dictatorial government that sought to control those markets, brand itself, shut out certain types of transactions and practices such as potlatch, and to make Indians (as they were often thought of as commodities or problems) a thing of the past.

One important point is that older forms of currency in Native American communities actually tend to stick around and are often reimagined into necklaces, and other forms, in the same ways that they were "pre-contact." They still have meaning and utility, but also are handled in colonial ways. Native currencies²¹, for example, often become material artifacts placed in museums and are often framed as exotic and divorced from their practicality, context, and belongingness. Museums are one of the few institutions that deal in materials such as this, especially in the rapid move toward institutions of all kinds dealing predominately in digital. As such, colonial museums are largely a reflection of imperialist nostalgia because they tend to make a spectacle of Native belongings by putting them beneath glass for spectators to awe at, mourn the loss

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²¹ Older U.S. currencies are often handled similarly in museums.

of in a self-serving manner, or compare to the status quo. They become objects for the eye, "colonized by the gaze" (Classen & Howes, 2006, p. 200), and transformed into artifacts despite their being alive in various ways to Native people. As Classen and Howes (2006) state, "the ethnographic museum was a model of an ideal colonial empire in which perfect law and order was imposed upon the natives" (p. 210). Colonial museums go to great lengths to preserve a basket or dentalium that does not belong to them. It is blatant they, as an institution, are afraid of damaging or losing something that not only does not belong to them but that the U.S. tried so hard to eradicate in the first place. It is obvious that these belongings should be given back, especially when tribal nations repeatedly ask for them back. Nevertheless, the point I am making is that question is that self-granted ownership over Native belongings, even present-day, is quite telling; especially considering how the U.S. poses itself as postcolonial. The U.S. continuously claims to value morals such as freedom, liberty, and equality, yet there is a blind spot with regards to Native American issues as well as issues regarding marginalized groups in a broader sense.

Also, as the meanings of Native forms have shifted in an increasingly capitalist U.S. economy, some traditions have also shifted. This has required Native people to find ways to continue their traditions, despite their illegality during that time. Further, there are ways that materials used in the building of culturally significant belongings can be negotiated and rearticulated from commodity items to adapt to tradition. As was detailed at the end of the first case study in the story of survivance, today's dentalium necklaces are often made from mass-produced items out of necessity, choice, and convenience. In doing so they are meaningfully transformed through traditional practice. This is often

guided by intergenerational memories regarding the best ways to do things. This is also in line with Appadurai's (1986) suggestion that social contexts around objects are most important, and commodities and estranged, alienated things can become more connotatively gift-like through a process of social or cultural transformation. For example, much, if not most of, dentalium used today in Native jewelry is not cultivated from beaches, or with sophisticated comb technologies used to brush the bottom of the ocean off of Vancouver Island (Nuytten, 1993). Today dentalium can be bought in large quantities off of Amazon.com online marketplace- a flagrant capitalist institution in the U.S.—or at certain craft supplies stores with shells coming out of Thailand or the Philippines. Today's shells are often painted with a clear acrylic coating to give them a shiny appearance, are filed down with a sandpaper material to smooth the edges of the openings at either end of the shell, and are strung alongside a wide variety of other beads. Necklaces and singular bead types still hold meaning to the point of performing/signaling survival in the face of continued colonialism. They can serve as physical reminders of trading and gifting practices of the past. Traditions shift, adapt, and can be contemporaneously invented; they are not static (Champagne, 2007). They exist on a continuum

The second case study detailed how a potential shift in currency, specifically moves to altcoin cryptocurrency from land-based, can be intimately involved in attempts at asserting national status for some Native American people. The second case study also illuminated several important points regarding how digitization and virtualization of currency force us to reconsider the degree to which currency is a product or domain belonging to nation states. If a number of cryptocurrencies take hold and significantly

deter the use of standardized national currencies in the U.S., the monetary ecosystem might look more like it did in the Free Banking Era of 1837-1862 when different types of privately-issued notes and alternative currencies, including Native American currencies, were the norm. People tended to identify differently, as Virginians or as confederates, for example, rather than as American people. At this time, the project of America was still being solidified and was not codified as rigidly on currency and other standardized materials of the country. People now are looking outside of the dollar, and to cryptocurrency, based on a number of reasons including a lack of trust in the government, disenchantment with regulation, political instability, investment opportunity, development, security concerns, and because of larger digital trends.

The answer to this fourth question was partly answered when I discussed the second guiding question and described how computer language, like gold, is tied to globalization. As previously stated, by digitizing perceived value, creating more value through investment, and making new protocols based on computer code, a new architecture has been created. Rather than cash, card, or even the bank being regulated by an instrument of the government, it is regulated by peers through the peer-to-peer network that can span the globe. Because of this design, no one country can hold the power to control the price of it like they could with fiat currency. However, this does not mean that specific countries do not yield control. Countries such as China have imposed intensive regulations and led a shift in coin trading to other countries, including Japan and South Korea (Lai, 2018). The system supersedes the nation-state, while also garnering the attention of some nation-states eager to regulate, appropriate, or adopt the technology for its benefits.

This potential shift in currency for tribal nations would still be marked by a colonial paternalism regarding the threat the U.S. government would intervene. Robert J. Miller, J.D. sums up this sentiment when he speaks to what could happen to a tribe attempting to use cryptocurrencies:

If you can get enough congress people to agree with you, then they're gonna pass a law that's just gonna stop the tribes tomorrow. Just like gaming could end tomorrow, tribes' involvement in the cigarette industry ended pretty quickly...but soon as the tribe's cryptocurrency started to infringe on someone else's profits, or made the United States nervous that it could somehow hurt the dollar or something, you know I'm afraid a tribe could be stopped.

Despite the supposed sovereign-to-sovereign relationship between the Federal Government and tribal nations, rights can be revoked and limited. While cryptocurrency helps to collapse the fixed understanding of tribal sovereignty and nationhood status as necessarily entwined with the U.S. and its currency, it seems almost certain that the U.S. would limit this power. If currencies help to make countries real (Risse, 2003), to make them legitimate, alternative forms are always a threat. Eco (1996) discusses how a country belongs to those who have power over communication. When the U.S. government has power over currency and limits what tribal nations can and cannot do, it undermines tribal sovereignty and further damages the relationship between Native nations and itself. Further, the paternalism undermines the ability for tribal nations to assert themselves as nations trying to contest the system.

In this case, I noted the many challenges that faced the MazaCoin project, including digital divides, media misunderstanding, unreliable markets, and threats. While these seem

largely negative it is not productive to entirely dismiss the possibility that cryptocurrency presents if framed as an anti-colonial struggle. The reality is, as mentioned in the case study, that less successful coins such as MazaCoin are a part of the process of technological innovation and are valuable in their own right. Upon considering the project, a token structure specialist stated, "I don't know if I would call it a failure to be honest with you... I just don't think these experiments have ever been done as fast." If you are not open to failure, then innovation is difficult. Reframing the project as a step or experiment that contributes to the larger project of cryptocurrencies, or part of a project that is on track to potentially restructure tribal financial order, does some service to MazaCoin. Again, the project was designed and prepared Indigenously in 2014, far before most American entrepreneurs caught on to the idea. The team experimented and rolled out the coin too early, but they were in the cryptocurrency market far before other nations.

Shifts in currency and inventions, like cryptocurrencies, can theoretically seem somewhat boring; one thing comes to supplement the thing that existed in some other variation before it. For example, coins with shells. What makes newer technology or media more interesting, meaningful, and worthy of conversation is when these technological innovations are adapted by communities that have been consciously marginalized by the system. Governance becomes the technology in question. The innovations themselves are not necessarily paradigm shifts, but are ways in which the systems created are commandeered to try to change up the system in some small ways. This is bolstered by the theoretical suggestions of Foucault, a critical theorist drawn heavily upon in the postcolonial tradition, when he discusses power as an omnipresent feature of life (Foucault, 1991). When Foucault contemplates power, the reader may imagine opposing forces. One or many sides

of a power equation push others in a certain direction. However, every slight push is a shift. It is not to make it sounds as if these acts of resistance are useless, or that all of them should be studied, but there is agency exerted in working with technology for Native futurity.

Foucault (2002) discusses how power is not only everywhere, but is enacted and embodied through discourses and knowledge. The discourse that centers on Native Americans as technologically backward is one deployed by colonial forces to delegitimize Indigenous ways of knowing and ways of acting. The digital or Internet age has also brought about false ideas of race. For example, with the increase in digital communication comes a post-racial state, where people are turned into numbers, code, or digital identities that somehow become more important than the identity politics of users behind screens (Nakamura & Chow, 2013). In reality, race is a salient feature of digital life and continues to be a way people are marginalized. By making a cryptocurrency and owning it as an Indigenous project, efforts like MazaCoin symbolically chip away at a problem. They break down the stereotypical discourses and exemplify the fact that Native American peoples are not just surviving in the digital age but are working to envision their futurity in an increasingly digital and globalized world. More specifically, Native software coders are in a position to imagine and set the parameters of a future economy. In the U.S., capitalism is highly entrenched. While tribal nations can try to modify conditions to allow them more economic sovereignty, it is hard to survive unless you play by the capitalist game or are versed in it and can resist it. It seems tribal nations are more beholden to the capitalist system than ever. For example, in the recent cases of the U.S. allowing for gas pipelines to be built in tribal nations' backyards to create jobs and money for the government and building dams to block Indigenous waterways,

experiments in technologies for decolonial purposes (by and for Indigenous communities) seem to be an empowering tool to support the loosening of those grips.

Consultant Words

Before I move into the limitations of this dissertation and suggestions for future work, I would like to give one of my consultants the last word. Her statement did not fit within the scope of the case studies, but is important to the topic more broadly. It is a message that is not shared by some of the other consultants, but one that is powerful in its invocation of currency, tradition, sovereignty, struggle, survival, and survivance. The perceived shift to markedly colonial forms of currencies creates a heuristic for some Native people to view the embodied and everyday struggles associated with continued colonialism. In reflecting upon the meaning and status of imposed currency today, one consultant (Native woman and cultural director of her tribe) made a remark that is reminiscent of Schwartz' (1991) book title, *Blood Money: The Rogue River Indian War and Its Aftermath, 1850-1986*, and still holds true over a century and a half later. She shared,

Money is blood. You know what I mean? The dollar bill, it's blood, it's stress, it's not being able to feed your children. It's having to the beg the government so I can have food stamps to feed my babies, it's trying to come up with bail money to get my spouse out. It's buying a car that is then repossessed. It's getting my 18 money²² and going out and buying a car and killing myself. It's buying alcohol off the reservation and getting drunk and dying out in the cold. Money can be an evil, evil, evil thing, more often than not.

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²² Money that some tribal nations give to members once they turn 18 years old.

This quote retains its same meaning when read a second time, while replacing the word "money" and "dollar bill" in the first line with "U.S. government." The consultant suggests that we should consider rethinking colonial currency in our communities and how the structures and meanings around them have caused harm.

Moreover, just because the U.S. introduced a system that seems inevitable, does not mean it will always have to be this way. "For Indigenous people, white possession is not unmarked, un-named, or invisible; it is hypervisible" (Moreton-Robinson, 2015, xiii), it is apparent in all things. The same consultant continues,

So why not use more traditional forms that reinforce the positive things in our lives which is, you do this for me, I'm gonna give you something in return and we're both gonna walk away happy, instead of this piece, this dollar, this green piece of paper that is so damaging to our communities... It can be bartering and exchange, and payment can be more than me paying you and walking away with goods, meaning that we are not just exchanging goods, we're exchanging culture, we're exchanging a traditional practice. We're perpetuating a traditional practice, which makes us who we are: a sovereign people as the original inhabitants of this land. We are claiming and reclaiming over and over every time we negotiate a price for something and then settle for what I can and cannot get... we still are negotiating in a traditional way.

At least reconsidering the traditions of potlatch, bartering, and other exchange more common before the colonial period would be constructive.

Limitations and Suggestions for Future Scholarly and Community Conversations

This dissertation has limitations, many of which regard the perspectives included. While it can be alternatively viewed as a strength that this project included interviews from people of only a few tribes, this also limits the broad spectrum of thoughts that Native American peoples have on the content of this dissertation. To this end, future research could increase the number of episodes or case studies as well as the number of tribes consulted, should they be interested in sharing their opinions. I partially remedied this limitation in the historical background sections by incorporating examples of currency from many tribes in discussions of potlatch, wampum, and policies. In this regard, while findings and discussions may be relevant to larger conversations about currency surrounding Native American communities, generalizations should not be made over the case studies included in this dissertation.

While I triangulated data/information with various texts and analysis, this dissertation has some limitations with regards to consultant interview sampling. For the Rogue River War case study, I interviewed a mix of Native people, archaeologists, historians, and community members. Tribal member interviews were limited to the Coquille, and a few other members of Oregon and California tribes who preferred their tribal affiliation not be disclosed. One reason for limiting the total number of interviews is to make this research more valuable to my tribe (the Coquille) and to give voice to their often-ignored perspectives. Another reason for limiting the total number of interviews is due to the fact that obtaining Institutional Review Board (IRB) approval for interviewing Native American peoples outside of one's own is very time consuming, emotional, and difficult in a variety of other ways. However, IRB approval is a move to

protect tribal self-interest in other ways, and to honor the inherent sovereignty of tribal decision-making processes. Tribes have notoriously been the subject of problematic studies. This is only recently being remedied by respecting tribes, as opposed to extracting information.

Regarding the MazaCoin case study, the focus of the guiding questions centered on how meanings are encoded into the digital currencies, aspects of community-based cryptocurrencies, and journalistic discourses that surround them. The consultants able to contribute most to these topics were cryptocurrency experts, tribal lawyers, financial and entrepreneurial insiders in Native American communities, and computer scientists. Future research could more explicitly ask specific tribal members their views on cryptocurrencies in order to ascertain community interest. Most non-cryptocurrency-industry-associated Native people I consulted were intrigued, but were not aware of such cryptocurrency projects. This research is also limited by the fact that it was completed after the project of MazaCoin was nearing a state of obsolescence, and at a point where the coin's team was not happy with media reporting. This limited the degree to which developers and key figures were open to interviews and being explicitly identified. I still contend that studying "zombie" media, or more appropriately stated, media no longer in prominent circulation, is valuable.

Furthermore, at the time of this research, only one Indigenous currency was circulating and was discussed widely in media. Another more predatory coin called Indigen Coin is also on the market ("Indigen," n.d.), but journalistic media did not pick up the story. This specific coin is ethically problematic for various reasons, including its marketing campaign that includes problematic photos of poor children holding a coin as

an emotional appeal to investors. In a few years more will likely enter the market, some tribally specific, some more pan-Indigenous in design, some altruistic, and likely others that are predatory. Future research could more comparatively address aspects of these cryptocurrencies, including their design, benefits, harms, media reporting on them, and their potentials. Future research in computer science could also attempt to thoroughly design a more sustainable Indigenous coin or point out more succinctly the risks and benefits of pursuing a project in tribal national cryptocurrency. This dissertation serves as a starting point.

Additional Suggestions for Future Work and Conversations

Limitations in the scope of this dissertation also suggest there is potential for other types of projects. Future works could elaborate on aspects that this study was unable to delve into in depth. For example, research could address more closely the U.S. claims to currency invention. U.S. currencies, as the first part of the two-part history suggested, have either appropriated directly or had a peculiar relationship to Native American currencies. Colonists adopted shell forms of currency in the 1700s to interact with tribes, and even went as far as counterfeiting them with porcelain to build their own liquidity. The first waves of American bills had depictions of Native American peoples on them and were called paper wampum. We now call the dollar bill a buck because the worth of a dollar was once based on the worth of a buck deer hide between Native people and traders in the Colonial Era. U.S. currency is consistently described in relation to the forms of currency that existed before it.

This is clear with land-based currency, but it leads me to question cryptocurrencies' connection to previous Native American technology. Many aspects of

cryptocurrency, including digital, coding, cryptography and blockchain, are rooted in Native American technologies. For example, Haas (2007) points out that hypertext and multimedia are too often claimed as Western. Hypertextuality refers to the accessibility of texts through other texts, layered with meaning. As an example, she discusses how Wampum shells were made by many tribes, particularly the Iroquois, into intricate "belts" to tell stories, to mark occasions, to make contracts; there are layers of meaning that make them hypertextual. They are also arguably digital in that the beads are strung they are code—and can be read; they are retrievable and decodable memories of Indigenous epistemology. Cryptography likely has strong roots in Native communities as well. One example is how code talkers speak in different Native languages and practices of fragmented storytelling. There are also compelling links to blockchain—the record keeping system of cryptocurrencies—with various monetary and ledger systems that Indigenous people across the world have used, and still use today. For example, Yap, a small island in the Pacific Ocean, is known for its history with a particular form of money stones called Rai. Yapese transported by boat huge limestone discs of an opaque white color from caves hundreds of miles away, and back to Yap. These colossal stones, cumbersome and valued based on size, aesthetic, and social variables are heavy, durable, and very difficult to move. They are not readily intended to be frequently relocated. As such, they encourage a value system that extends culture, or at least the cultural, transactional, and relational information of the stone's transaction over time (Innis, 1951). This connection between blockchain and the storing of information via stone money has also been made in scholarly and journalistic circles by Fitzpatrick in Bower (2018). Fitzpatrick studies political economy and maritime transport of Rai (Hazell &

Fitzpatrick, 2006). The stones relate to blockchain in that both, in their own ways, are a decentralized ledger that distribute, through memory, knowledge of ownership and circumstances around it. That memory is local and intergenerational in the case of Rai, and digital code in the case of blockchain technology. Both are advanced forms.

Some questions for this future work could more explicitly be, "How do qualities of "traditional" Indigenous media set the stage for contemporary cryptocurrencies and currency emerging within the current payment revolution?" and, "How are false and racist discourses of Native American technological primitiveness used to limit their place in historical narratives of technological innovation?" Along the same trajectory, future research should continue to look at how Native American peoples produce new media and technologies, and how this may differ from other types of cultural productions that are privileged in mainstream U.S. society.

Additionally, Indigenous cryptocurrency and other potentially community-based cryptocurrencies need far more research and frameworks for evaluation. Literature does not yet clearly define the properties of a community cryptocurrency. Thus, I needed a metric to help ascertain the degree to which MazaCoin fit into any specific category of cryptocurrency. From an analysis of the community cryptocurrencies on the market as well as the strategies they take to serve the community they claim to, I created a metric regarding the general characteristics and/or values of cryptocurrencies as follows: (1) tailoring of ethos and branding to the specific community, (2) mining and coding parameters that are accessible to said community and that do not disproportionately advantage the creators, (3) an achievable implementation protocol which results in a usable token that benefits communities, (4) ideally, legitimacy as expressed through

value transfer outside of the community. Future research could take on the project of fleshing out a more substantial framework like this.

Lastly, in reviewing literature for this dissertation, many of the books and articles I picked up were very markedly outdated, which serves as a time capsule to pick up those works. For example, some discuss the first credit card and how it excluded people of color. Others questioned if electronic currency would ever take hold and predicted that cash would have already died. Some even suggested Native people would have completely died out/vanished decades ago. This obviously did not happen, and Native futurity theories suggest that Indigenous people will be here much longer than other peoples. Future work could revisit the topic of currency in relation to Native communities as new technologies and institutions emerge, and as relationships between colonizers and Native people take new shapes. Dissertations like mine are just "snapshots of the present which are presented by contemporaries with an awareness of and respect for the past. These snapshots often reflect what has been most important over time and what continues to form the foundations of their identities and culture" (Younker, 2003, p. 327). This leads me to recommend that more studies related to currency should be periodically produced by Native scholars to account for the fact that these snapshots are different as time passes. These differences should be readily available, as they may be valuable to future generations of Native people and allies.

Final Thoughts

Often, Indigenous people become erased from newer histories of currency, are mentioned to *contrast* systems as primitive versus modern, or are used as rhetorical devices to make newer systems seem romantic, efficient and enduring. This dissertation

speaks to how these are problems, and considers the ways currencies are small parts of much larger stories, specifically of settler colonialism and resistance. Colonialism should not be treated as if it was an event of the past when it pervades and structures so much of everyone's lives, and is contained in our everyday technologies/belongings. As Tuhiwai Smith (1999) asserts, "colonialism still hurts" (p. 125) in Native communities and is directly related to capitalism's evolutionary encroachment and the institutionalization of currency in the U.S. This has created conditions where opportunities for Native people to create or use alternative or competing currencies are slim. Despite this reality, this dissertation has shown how tribal nations and Native individuals have found ways to continue limited usage of their traditional currencies via forms like shells and beads that have survived and have endured processes of symbolic re-articulation. In a similar manner, Native people have found ways to use or consider digital technologies to try to challenge the U.S. dollar, as was the case with cryptocurrency. Scholarly works should pay attention to the power U.S. currency has accumulated throughout histories, and also meanings that inhere in Native currencies that often reify sovereignty and culture when it is created, used, worn, rejected, or negotiated. Moreover, Native communities with meaningful connections to their culture, including that of currency, may be able to more clearly delineate the boundaries between their culture, economy and that of this stillcolonial world.

APPENDIX A

LIST OF CONSULTANTS

Land-based Currency and Colonial Oregon

(During Archeological Excavations for Historical Background)

Consultants	Date (month, year)
Park ranger	July, 2016
Archaeology participant 1 (Berkeley)	July, 2016
Archaeology participant 2 (Tribally	July, 2016
enrolled Native woman)	
Archaeology participant 3 (Minnesota	July, 2016
tribally enrolled Native man)	
Mark Tveskov and State of Jefferson	July, 2016
historical archeologists (Two people)	
Coquille elder	July, 2016
Archaeology participant 4	July, 2016
SOULA archeology employee	July, 2016
Interview with archeological site land	July, 2016
owners' family	
Archaeology participant 5	July, 2016
Archaeology participant 6	July, 2016
War historical expert	July, 2016
Chelsea Rose, SOULA archaeologist	July, 2016

Gold Beach locals (Two people)	July, 2016
Coquille visitors (Three people)	July, 2016
Coquille Tribal Historical Preservation	July, 2016
Officer	

Expert Consultants Cited

Consultants	Date (month, year)
Chelsea Rose, SOULA archaeologist	January, 2018
(second interview)	
Native woman, former cultural director of	October, 2017
her nation	
Oregon linguist	January, 2018
Coquille elder with two Coquille parents	November, 2017
Robert J. Miller, J.D.	September, 2018
Marsha Frost, Coquille jewelry maker,	February, 2019
teacher, mother	March, 2019
Assistant V.P. and Advisor to the	
President at University of Oregon Jason	
Younker	

Indigenous Cryptocurrency and MazaCoin

Expert Consultants

Consultants	Date (month, year)
IT Company owner (Eugene)	February, 2018
IT Company employee (Eugene)	February, 2018
Community cryptocurrency outreach	March, 2018
Specialist (Denver, Colorado)	
Community coin creator (Boulder,	March 12, 2018
Colorado)	
Santiago Vazquez, instructor of a financial	October, 2017
course for Native American economic	
development	
Robert J. Miller, J.D.	September, 2018
Token structure consultant (Sioux Falls,	April, 2018
South Dakota)	
Native consultant (not tribally enrolled)	January, 2018
Cryptocurrency user	February, 2018
Computer scientist	February, 2018
Native woman (Coquille)	November, 2017
Native woman, former cultural director of	October, 2017
her nation	

APPENDIX B

SAMPLE SEMI-STRUCTURED INTERVIEW GUIDE

- Can you please give me a little information about yourself?
- Can you share your personal and professional history with the Native law or work in Native American communities?
- What are the currencies you currently use? (You do not have to give specifics about income or dollar amount that you use.)
- Which, if any, of the currencies that you use have meanings in Native
 American nations?
- How was currency used in the past? Is it the same as how currency is used or thought about now?
- Do you notice any specific meanings that are embedded within specific money forms?
- What does it mean to choose one form of currency over another?
- Could you please share any personal philosophies you have about money?
- Are there any Indigenous philosophies that you've heard of about currency, if so can you please share?
- How might that impact the community?
- Do you think that U.S. currency is appropriate to be used on sovereign tribal lands?
- If not, what do you think could serve as an alternative?

- How might currency better serve Native American nations?
- Is barter or trade still occurring within Native American nations?
- If so, how does that work? What are typical items or services that are traded, and how do these exchanges work?
- Currency is one aspect associated with nationhood. Flags, cultural symbols, governments, and values are often other aspects associated with currency. Does your nation have these?
- Are there any Indigenous words you may know that relate to currency?
- Have you heard any cultural stories about money or currency that you might like to share?
- Have you noticed recent changes in currency?
- What is your knowledge of Bitcoin or other cryptocurrencies?
- What is your knowledge of MazaCoin?
- Can you describe the background of MazaCoin as it emerged in 2014 through present day?
- Have you heard of anyone using or accepting MazaCoin? Which businesses accept or have accepted MazaCoin, if any?
- What are the challenges or benefits of community use of cryptocurrency?
- Are there any barriers to the success or implementation in the community?
- What legal statutes prevent a tribal nation from implementing their own cryptocurrency?
- Did you follow any journalistic coverage of MazaCoin? If so, what did you notice?

- What was the consensus about the coin in the community?
- Why might this currency be used over another?
- Why might this currency not be used?
- What implications do cryptocurrency and other Native currencies have towards shaping tribal sovereignty?
- Do you think there is a potential for Indigenous cryptocurrencies to inspire other types of currency in Native American communities?
- Do you have anything else you would like to add?
- Do you have anything you might like to ask me?
- Thank you for your participation.

APPENDIX C ADDITIONAL IMAGES OF BELONGINGS BY AUTHOR



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