

Cultural Identity Restoration and Purposive Website Design: A Hermeneutic Study of the Chickasaw and Klamath Tribes

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Abstract

In this paper, we employ a hermeneutic approach to examine the question: How do cultural productions of websites enable enactments of power, change, and society in Native American groups? We collected longitudinal data from 15 redesigns of the Chickasaw Nation and Klamath Tribes websites. Text from each website redesign, as well as each redesign of the tribes' "History" pages, was analyzed using linguistic inquiry and word count software. These texts and other design elements were examined from an interpretive perspective. Our analyses depicts the role of website design in the production of culture. Furthermore, we find support for the notion that although technology adoption has traditionally occurred parallel to globalization and aided in assimilation, tribal organizations are now finding ways to use technology for constructive purposes such as cultural preservation, identity restoration and healing.

1. Introduction

Culture is “the publicly available symbolic forms through which people experience and express meaning” [37]. The “function” of culture is societal integration, i.e., unifying “individuals and families of varying circumstances and backgrounds together in a collectivity that people may strongly identify with, take primary meanings from, and find emotionally satisfying [32]. Culture fosters identification among those that share that culture [32], leading to favorable dispositions toward and attributions of behavior by members of that culture [38].

Yet, culture is also a resource used in power contests and the focus of power contests [3]. As toolkits [37], culture provides power-seekers with vocabularies and action repertoires they can employ to shape others' reality. As sources of meaning and motivation [36], cultural manipulations such as socialization and assimilation consolidate power-

holders' dominance [32]. Therefore, *which culture* prevails is of consequence to power-holders: the culture with which collectives identify legitimizes or undermines power-holders' position in a society.

Information technologies (ITs) are cultural artifacts that “function as depots for social memories that ... sustain residues of ways of life that are no longer favored by present systems of power” [23]. As cultural artifacts, ITs embody and reify “social relations, institutional practices, strategies of action, and subjective possibilities” [4].

Throughout Native American history, passive technology adoption has been thought to mirror assimilation and cultural identity loss among native peoples; however, recent efforts to actively appropriate technology with the purpose of preserving cultural knowledge, specifically language, have proven fruitful. Technological language resources come in several forms ranging from Rosetta Stone software to the major motion picture “Star Wars Episode IV: A New Hope” dubbed in Navajo [41]. One particularly promising language preservation technology is crowdsourcing site Phonemica, or *xiangyinyuan*, on which nearly 100 stories, told in nine Chinese dialects, have been preserved since 2009 (phonemica.net). The success of technology products in helping tribes preserve language raises the question: In what ways can technology be appropriated to preserve, rather than undermine, cultural knowledge and thus promote a native – rather than assimilated – cultural identity? Further, how do cultural productions of websites enable enactments of power, change, and society in Native American groups?

In addressing these questions, we contribute to the literature on organizational culture by depicting the role of website design in cultural production and cultural knowledge preservation. We also contribute to current understanding of organizational identity by discussing identity restoration online and highlighting the role of website history pages in identity transmission and purposive website design.

In the following sections, we present the findings

of a hermeneutic study examining website design and cultural production. First, we briefly describe our research methodology and the historical context of this study before laying out five observations and implications for theory and practice.

2. Methodology

To understand the relationship between technology design and use and cultural identity, we employ a hermeneutic approach in reading and interpreting tribal websites [13, 19]. This permits us to gain insight into second- or third-order understanding of website purpose and design [10, 31]. The two tribes that are the focus of this study are the Chickasaw and Klamath. We chose these tribes for similarities in their commitment to restoring Indian culture in the aftermath of termination and their broad digital presence, yet differences in the extent to which their cultural identity was compromised between termination and restoration of independent-government status.

We first consider their overall site designs and then focus on the designs of their history pages. We privilege the tribes' recounting of their history over other website purposes because historical analyses and analyses of the telling of history is a cornerstone of the sociology of culture [22].

We used the WayBack Machine to capture all pages for each of the Chickasaw's nine redesigns and the Klamaths' six redesigns. The first archives date to April 12, 1997 for the Chickasaw Nation and to December 5, 1998 for the Klamath Tribes. We then used the Linguistic Inquiry and Word Count (LIWC) software and a word cloud generator (wordle.net) to understand the linguistic content underlying the cultural productions on the websites.

The Chickasaw websites contained an average of 930 pages and documents. Websites contained an average of 84,339 words: 31.51% of the words were big words, containing six or more letters; 67.86% of the words can be found in the English dictionary; the remaining words being tribe-specific words like names, places, and native language words. The Klamath websites contained an average of 64 pages and documents. Websites contained an average of 103,833 words: 29.42% of these were big words and 70.91% English dictionary words. Thus, while the Klamath site pages were more verbose, the Chickasaw content was less dense, but distributed over many more pages. Thus, the two tribes' sites manifest different levels of information hierarchy – the Klamath site being flatter, and therefore less complex [16], than the Chickasaw site.

Social memory, especially as it relates to national

identity, is fluid and subject to present interests [25]. For that reason, we also captured the "History" pages of each tribe over time. The first archives date to October 8, 1997 for the Chickasaw Nation and December 6, 1998 for the Klamath Tribes. The Chickasaw history pages contained an average of 8,241 words, 29.22% big words, and 68.14% dictionary words. The Klamath history pages contained an average of 10,342 words, 28.81% big words, and 75.71% dictionary words.

3. Tribal History

We begin our hermeneutic analyses of the tribes' sites with a brief overview of the tribes' history. Though truth in history is hard to ascertain and history is itself a social construction reflecting and reproducing power structures [8], the overviews situate our interpretation of the identity displays on the Chickasaw Nation's and Klamath tribes' sites within their historical context.

3.1 Chickasaw history

The Chickasaw people lived in what is now Alabama, Kentucky, Mississippi and Tennessee from prehistoric times to the "Great Removal" in the 1800s, when they were forced onto the "Trail of Tears" to relocate to Oklahoma. The Chickasaw was the last of the "Five Civilized Tribes" – so named for their sophisticated ruling system and religious beliefs – to relocate. The Chickasaw pride themselves on being "Unconquered and Unconquerable."

Valuable allies to the English during the French and Indian War, the Chickasaw people became known as a tribe of great warriors who were "quick to go to battle if necessary" [5]. In 1837, the Chickasaw resettled in Choctaw territory under the Treaty of Doaksville before reestablishing their own government in 1856 [5]. When the Civil War broke out, the Chickasaw joined forces with the Confederate Army. Though the Chickasaw faced some hardships following the Confederate defeat, loyalties to the Confederacy remained strong in Oklahoma and the Chickasaw suffered minimal physical losses from the war [35].

The Chickasaw prospered in Oklahoma, placing the tribe in a relatively strong position to negotiate with the Dawes Commission, charged with negotiating termination of tribal governments in Oklahoma, during the state's induction to the Union. Though Chickasaw Nation officially ceased to exist from 1907 to 1983, some level of formal organization and government remained [24]. New Deal policies in

the 1930s and civil rights activism in the 1960s and 1970s helped the Chickasaw secure financial, education and organizational resources and a “renewed sense of Indian identity” [24]. In 1983, the U.S. government ratified a Chickasaw Constitution [24]. Since that time, the Chickasaw have worked to rebuild their tribal identity, government and economy.

3.2 Klamath history

The Klamath Tribes, made up of the Klamath, Modoc and Yahooskin people, lived in the Klamath Basin of Oregon from “time beyond memory” [18]. Though the U.S. government initially recognized the rights of Oregon natives to live on their 20 million acre settlement, European settlers continually pushed the land boundaries, resulting in chronic bloodshed between farmers and natives. In 1864, the Klamath and Modoc tribes and the Yahooskin band of Snake Paiute people joined to sign the Treaty of the Lakes, in which the newly merged Klamath Tribes would retain almost 2 million acres of prime forest [18]. The timber resources provided the Klamaths with a strong economic foundation and a reliable income source for tribe members, enabling the tribe to be self-sufficient. Consequently, “for many years, the Klamath Tribe ranked as the richest self-supporting Indian Tribe in the United States” [18].

In 1954, the U.S. government voted to “terminate” the Klamath Tribe, without input from tribal members. The government stripped the Tribe of its independent-government status, took control of the reservation, sold the land, and offered the Klamath cash or trust settlements [18]. The sudden loss of federal recognition and land left the Klamath unable to continue their way of life, but unprepared to assimilate into American society [18]. Following federal takeover of the Klamath lands, the land and natural resources were “nearly decimated” [18]. In the following years, 28% died by age 25, 52% died by age 40, infant mortality was 250% the state average; 70% of adults had less than a high school education; 56% of those over 40 had no health insurance [18].

Being stripped of status and resources “did incalculable psychological damage to the Klamath people”, who “were inappropriately viewed as having ‘sold out’ their Indian heritage” [18]. Many Klamath coped by learning English and assimilating into dominant society. Others withdrew or engaged in self-destructive behavior, resulting in deterioration of cultural knowledge related to language, tradition, and mythology. With this loss of cultural knowledge came a loss of cultural identity: “Once the

stewardship of the Land was taken from the Tribes they lost federal recognition as an Indian tribe and many experienced the loss of identity...” [18].

In 1986, the U.S. government recognized that termination policies had failed and passed the Klamath Restoration Act, granting the Klamath Tribes independent-government status. Since implementation of restoration policies, the Klamath fought to regain land, resources and cultural artifacts lost during termination, as well as restore their tribal identity. With help of groups like the Native Americans Rights Fund (NARF) and the Klamath Bucket Brigade, the Klamath have established a small reservation and taken dramatic steps to preserve the natural resources of their ancestral lands.

Along with reclaiming their resources, the Klamath are attempting to reclaim their cultural identity. As part of their restoration efforts, the Klamath Tribes declared their mission to “restore, preserve, and promote the heritage and culture of the Klamath Tribes with a goal to reinstall a sense of identity, pride, self-determination.” The Klamath’s reclaimed cultural identity though is distinct from – and frequently in conflict with – who the Klamath people had become.

4. Purposive Website Design

Websites are cultural artifacts. Cultural artifacts are “cultural statements which can represent themselves as true, efficacious, or morally valid ... as rational solutions to comprehensible problems” [4: 193]. As cultural artifacts, the “human constructs” embodied in websites “have a substantial physical presence” and “can endure” beyond the immediate political contexts in which they are authored [23: 145].

As with production of any cultural artifact, the production of websites is the work of “memory doctors”, i.e., individuals or groups “who reshape collective memory to fit their own ends” [29: 183-184]. Thus, websites have purpose – be it explicit or tacit. This purpose has two primary layers: communicating information relevant to the present (e.g., tribal services available, describing election processes and results) and situating current purposes in time.

As cultural productions, websites implicitly or explicitly partake in identity politics [2]. Shaping identity for the purpose of identity restoration requires the synergy of historic and emergent identities. Thus, effective redesigns should have elements of both.

Identity is “that which is core, distinctive, and enduring” [11]. One view is that “cultural identities

reflect the common historical experiences and shared cultural codes which provide us, as 'one people', with stable, unchanging and continuous frames of reference and meaning," but this conceptualization of cultural identity fails to recognize that "deep and significant" differences shape what tribes really are [12]. Hall (1996) explains that cultural identity "is a matter of 'becoming' as well as of 'being'" (p. 706). That is, though cultural identities are rooted in the past, they are fluid constructions, constantly reconstructed in light of present concerns and power.

A group's history intersects with individuals' emergent circumstances to shape overlapping, yet disparate, identities [12]. These overlapping identities constitute a pluralistic cultural identity for the group. Pluralistic identities can exist within a tribe without causing an identity crisis if identities are synergized [30]. However, when identities conflict, the lack of resolution will motivate tribes to socially construct a coherent identity.

As cultural productions, websites are intrinsically related to power, serving as a "political resource" [2]. Bourdieu (1993: 30) characterizes cultural production as a "field of forces" of competing powers and a "field of struggles tending to transform or conserve this field of forces." The resulting artifacts "provide a site in which the substance of status differences is elaborated and given objective status" [4]. Status and power orderings are thus contested or reproduced through the production of cultural artifacts. Our website analyses therefore focus on tribes' use of the rhetoric of power, change, and society to reconstruct tribes' identity. Such social constructions are especially visible in language use [26].

The Klamath Tribes used their website as a platform to accomplish its mission of restoring, preserving, and promoting its cultural heritage, and reclaim its cultural identity. Reiterated identity statements such as, "We are the Klamath Tribes, the Klamaths, the Modocs and the Yahooskin," and "naanok ?ans naat sat'waYa naat ciwapak diceewa", which translates "We help each other; We will live good," reinforce the collectivist aspect of Klamath culture. Articles about ways the Klamath are preserving nature resources and outsiders are destroying nature resources serve to distinguish Klamath from dominant society.

Though changes in Chickasaw identity have occurred subtly, over a longer period of time, they too are vulnerable to the pressures of assimilation that lead to pluralistic identity. To define their identity, the Chickasaw published a webpage listing Chickasaw characteristics, the characteristics of dominant society and critical differences in the two. See Table 1 for an overview of these differences.

By making claims about what is core and distinctive about Indian society, tribes define their identities [11]; by making claims about dominant society, tribes define what they are not, which bounds their identity. Though the tribes identify some clear differences between "themselves" and "others," they recognize that dominant society has shaped the identity of tribal members in undeniable ways. Many modern Native Americans do not wear traditional clothing, live off the land or speak their native language. Their individual identities reflect the society in which they live.

While not all pluralistic identities conflict [30], conflicting identities pose a threat to identity, self-concept and self-evaluation [40]. To aid members in synergizing, individual and cultural identities, tribes use websites to preserve and diffuse culture-specific knowledge, preserve culture-specific thoughts [1] and cultural toolkits [37]. Both tribes provide native language education resources on their websites, echoing the belief that "...words are tools for organizing experiences, interpreting sensory perceptions, and giving meaning to life events" [1]. Words shape, mediate and enhance thought [21]; without the ability to speak one's native language, it would be impossible to have the precise thoughts of one's ancestors.

Table 1: Cultural Characteristics and Values

Native American Society	Dominant Society
Present oriented	Linear perspective
Extended family	Nuclear family
Giving/sharing, interdependence	Savings and independence
Elders and children valued	Youth hold the future
Cooperation	Self-reliance
Mystical beliefs	Practical empiricism
Intelligence is intuitive	Intelligence is intellectual
Patience and modesty	Competition and aggression
Noninterference in relationships	Interference in relationships
Compact living	Separate living spaces for family members
Eye-contact avoidance is respectful	Eye-contact is respectful
Community oriented	Individual oriented

In addition to language resources, the Chickasaw website provides genealogical resources, reasoning: "Like language, the preservation of family information is fundamentally important in

understanding our culture, and, like oral tradition, it must be passed on to future generations of Chickasaws.” By providing resources that facilitate understanding of culture and cultural identity, tribal websites help bridge the chasm between members’ cultural identities and their dominant-society identities and promotes identity synergy.

Research has identified four identity management strategies that can be employed to deal with conflicting identities: compartmentalization, deletion, aggregation and integration [29]. Compartmentalization and deletion are common when identity synergy is low; Aggregation and integration are common when synergy is high. By promoting identity synergy, tribal websites decrease the likelihood of identity deletion or compartmentalization [29] and promoting cultural identity. Despite government interventions that attempted to terminate Native American culture, tribes have succeeded in status restoration and are succeeding in the restoration of natural resources. So too can tribes succeed in identity restoration, by using tribal websites to define and synergize cultural identities rooted in the past and dominant-society identities grounded in the present.

Observation 1: Tribes use websites to define and synergize past and present identities, facilitating identity “restoration.”

Identity restoration involves different stages depending on which aspects of identity are most threatened and other present concerns. Present concerns dictate the purposiveness of tribal websites. When present concerns change, the purposes of tribal websites change too. These changes in purpose are often accompanied by a complete redesign.

The Klamath have used their website to organize art buybacks, protest the destruction of natural resources, and promote forest restoration strategies. The Chickasaw have used their site to organize tornado relief efforts, advertise cultural events and promote youth sports. In addition to these minor purposes, each site had an overarching purpose, which is reflected in the quantity of words dedicated to that purpose. See Table 3 for a list of the most common words on each site.

Each tribe started their website purposively: the Chickasaw sought to make services more accessible to members, whereas the Klamath attempted to raise money to buy tribal artifacts. Variations in site purpose over time reflect the changes in tribes’ focal concerns. Whether site redesign presented tribes a chance to change focus or whether a shift of focus sparked redesign is unclear in some cases; in others,

redesign and repurposing were sparked by a current event. For instance, the Chickasaw held an important election in 2009 around the time design four was published; this site version consequently emphasized government and election processes. The publication of the Klamath’s design four during 2006, which emphasized natural resource preservation, coincided with the commercial salmon season being closed due to fish dying off in the area. This design remained until 2009 when an agreement between the dams’ owner, PacifiCorp, and the Klamath was reached to remove dams from the Klamath River in order to protect salmon, a traditional Klamath food [17].

Observation 2: Website redesigns can signal a shift in site purpose.

Website design research has examined use of color [6], graphics, layout and navigation [7] across cultures. This research demonstrates culture-specific design preferences and trends. Emotional tenor of a website can be gauged by color scheme when the implicit cultural significance of color is understood. On their website, the Klamath discuss the importance and symbolism of colors, especially red and yellow, to Native Americans. The Chickasaw website explains that the “Medicine Wheel colors is symbolic to all Native Americans.” See Table 2 for examples of the symbolism of each medicine wheel color.

Black	autumn, reflections, heritage, tradition, culture, festival
White	winter, wisdom, elders, history, sovereignty
Red	summer, strength, leadership, education, services, jobs
Yellow	spring, youth, nutrition, health, family preservation, princesses

The Chickasaw frequently use the word red in titles such as the Red Earth Festival and the Red Feather Award in tribute to the red clay of Oklahoma and the tint of the Red River. The Chickasaw website also explains that the colors in the Chickasaw seal have meaning; Gold represents “the purity of the Chickasaw people” and light purple represents “the people’s honor.”

In describing the official Klamath poster, the website reads, “The color yellow dominates the image. Yellow represents health. It also is the color of summer and evokes a timelessness to the observer. The yellow wocas flower ties all the other elements together. It is a key part of the life of our wetlands and of our cultures. Our collective memory always comes back to wocus as the one thing that ties us

Table 3: Site Purposes				
Year	Website Design	History Design	Most Common Content Words	Interpretation of Purpose
CHICKASAW TRIBE				
1997	1	1	Services, department, Indian, CDIB (certified degree of Indian blood), affairs, cultural	This site contains many forms and articles about services provided by the tribe.
1998	2	2	Indian, Oklahoma, American, people, Governor Anoatubby, Colbert (a common Chickasaw name)	This site provides information about political leaders like the tribe's governor. The focus of this site is on government and leadership.
	3		Indian, Choctaw, Oklahoma, River, Tishamingo (former Chief and Chickasaw Capitol), Mississippi	This site has multiple narratives about the tribe's history and heritage.
1999	4		Legislature, Oklahoma, Governor, Indian, whereas, resolution	This site shows election results online and details about the tribal government .
2000	5	3	Indian, Oklahoma, American, information, contact, program	This site focuses on providing information about the tribe and tribal services .
2001	6		American, Indian, Oklahoma, information, Native, Ada (location of the Chickasaw Nation Headquarters)	This site focuses on providing information about the tribe and tribal services .
2002				
2003	7	4	Order, number, bank, price, stock, item	This site promotes Native businesses and e-commerce of Native goods.
2004	8	5	File, open, pages, OK (Oklahoma), Ada (the location of the Chickasaw Nation Headquarters), phone	The main purpose is to provide information about tribal workers' daily activities and aid these workers in daily tasks .
2005				
2006	9	6	Program, Oklahoma, students, services, center, FY (an abbreviation for fiscal year)	This site emphasizes government transparency and provides financial documents to the public.
2007				
2008		7		
2009				
2010				
2011				
2012				
KLAMATH TRIBE				
1998	1	1	Collections, people, auction, artwork, value, donation	This site serves to raise awareness and money for a tribal art buy-back .
1999				
2000	2	2	Termination, members, people, federal government, reservation, Indian	This site explains Klamath history in detail and features the first appearance of the word "Indian" rather than "Klamath" or "Natives."
2001	3	3	Members, people, economic, land, services, federal government	This site focuses on providing information about the tribe and tribal services to members.
2002				
2003				
2004				
2005				
2006				
2007	4	4	Forest, reservation, water, members, tree, land	There are multiple pages and documents provide information about land and forest preservation and water rights.
2008				
2009				
2010	5	5	Court, water, agreement, section, plan, child	This site provides information about government issues such as custody laws and water rights.
2011				
2012				
2013	6	6	Forest, reservation, pine (a tree species native to Oregon), plan, water, members	There are multiple pages and documents provide information about land and forest preservation and water rights.

together. Its parts have, after all, helped us persevere through the millenia.” Thus, the Klamath’s use of yellow in their publications to accomplish purposes such as evoking social memory and bringing to mind a reverence for nature.

The Klamath’s first two designs, the purpose of which was two-fold – to raise money to buy back tribal artifacts and to make identity claims and define the tribes’ history, had black backgrounds and the highest LIWC affect scores. The third design, which served the additional purpose of providing information about services to members, had a white background, black letters. This site continued to make claims about the past and identity, though as a lesser percent of the words. Red letters and larger font were used for emphasis on phrases such as “They want their way of life back.” The fourth design had earth-toned color schemes in keeping with the tribe’s emphasis on nature. The Chickasaw sites extensively featured the colors purple and gold, but were generally less colorful than the Klamath sites.

Like color, website graphics carry symbolic meaning. Groups have historically used images to establish power, or lack of power, in representing their identity and history [25]. The sixth and final Klamath design exhibits computer generated graphics of nature scenes with water, mountains, the sun and ancient faces appearing above the clouds. Combining these symbolic elements into one image serves to evoke social memories and reinforce cultural identity. The Chickasaw site features many images of strong Chickasaw warriors in traditional dress, holding weapons and standing proudly. These images reinforce the “unconquerable warrior” identity of the Chickasaw. Alternatively, the Klamath site features many images of an elderly Klamath chief in traditional garb sitting on a rock overhanging the water and looking out across the land. This image portrays a reflective and peaceful man, at one with nature, which aligns with the Klamath identity. The use of nature words on the Klamath site serves to promote preservation not only of natural resources, but also of tradition. The Klamath site states, “It was the land which defined the Tribes and its people and which provided not only sustenance, but also the spiritual and cultural identity and practices, which define all nations and cultures.”

Similarly, the Chickasaw use words like “unconquered,” “unconquerable,” and “warrior” to display power and pride. They refer to themselves as the Chickasaw Nation, rather than Chickasaw Tribe, in order to underscore their political status as equal to that of the U.S., each independent Nations. These symbolic words serve the implicit purpose of identity projection. Other times words are used to explicitly

describe purposes (i.e., “The purpose of this form is to provide the Chickasaw Nation Department of Environmental Services with information regarding environmental or health concerns in your area.” – Chickasaw website).

By selecting colors, images and words that have symbolic meaning and evoke emotion and social memory, tribes are able to communicate purposively with members through website design choices.

Observation 3: Design elements such as colors, images, and word choice further sites’ explicit and implicit purposes.

5. History Webpages

At one layer, all websites have the ostensive purpose of communicating information relevant to the present. At another, websites reference the past. Current information gives the site pragmatic relevance; historic information gives the site cultural relevance. Website templates include standard pages such as “Home,” “About,” and “History” [39]. Both the Chickasaw and Klamath websites feature “History” webpages. These webpages contain narratives describing the tribes’ memory of history. “Identities are the names we give to the different ways we are positioned by, and position ourselves in, the narratives of the past” [12], thus “History” webpages can provide valuable insight into cultural identity.

Cultural identity is shaped, if not defined, by social memory. Olick and Robbins (1995) quote memory scholars describing social memory as the “dammed up force of our mysterious ancestors within us”; “piled up layers of accumulated collective memory” ; the “tradition of the dead generations” that “weighs like a nightmare on the minds of the living” [25: 106-107].

Despite the importance of considering history in hermeneutic inquiry, it is important to remember that “History is written by people in the present for particular purposes, and the selection and interpretation of ‘sources’ is always arbitrary” [25: 110]. Multiculturalists have warned of the potential for history to be used as a tool for cultural domination [33]. The Chickasaw site states: “The history of an oppressed people is hidden in the lies and the agreed upon myth of its conquerers [sic].” Because Native American history is painful and contested in many details, it is only natural that tribes feel compelled to express their understanding of history and find meaning in unresolved events [26].

Tribal websites provide a repository for tribal

history and a way of sharing that history. Reality is too complex for individuals to process completely; therefore, attempts to synthesize multi-faceted beliefs about an event can cause cognitive conflict, requiring cognitive resolution. According to Pennebaker (1990), the healthiest way to process traumatic events is to find resolution by organizing messy reality into a clean narrative of the details and emotions surrounding the event [26]. “The act of constructing stories is a natural human process that helps individuals to understand their experiences and themselves” [28: 1243]. Putting thoughts into words constrains them to a sequential pattern and over time, peripheral details are eliminated. Simplified, written narratives are easier for victims to process, which leads to cognitive resolution and emotional healing [26].

Narration promotes mental and physical wellbeing in the narrator [26] and decreases internal and social conflict in the audience [34]. Social healing occurs when history is scrutinized, residual pain is recognized, responsibility is assigned and “reframing of the history of interactions” leads to resolution, reconstruction and reparation [42: 34]. By reframing history through digestible narratives, tribes promote cognitive resolution and enable social healing.

Observation 4: Historic identity claims promote cognitive resolution and social healing.

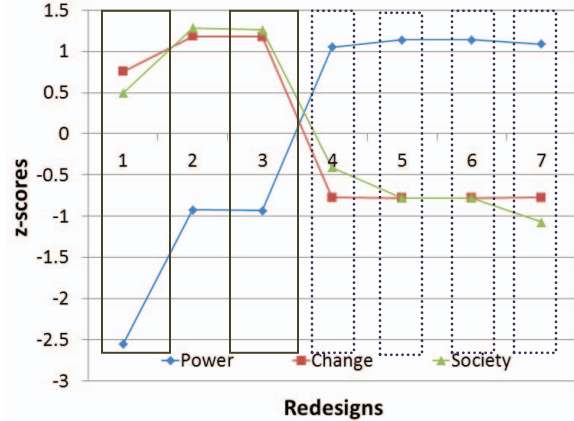
Tribes, like most organizations, revise their history over time. Revisionist history is a common identity management tool [11]. Revisionist history does not imply lying; rather, it entails clarifying meaning because even when facts are not in question, “their meaning always is” [11]. Revisionist history strategies can be used on website history pages to promote the website’s overall purpose. History narratives can be used to display power across cultures, spark change and build societies [34]. Purposive use of language on the tribes’ history webpages is demonstrated in Figures 1 and 2.

In using LIWC to analyze the history webpages, we developed z-scores of the tribes’ language use for each linguistic category across the set of history webpage redesigns. To better understand the disparate language use across the tribes’ history pages over time, we then created three metrics. First, based on the linguistic correlates of status identified by Pennebaker (2011), our *power* metric averaged the z-scores for “we” and “you” words, articles, and prepositions, less the z-score for “I” words. Second, based on work by Fiol et al. (1999), the *change* metric averaged the z-scores for negation words, auxiliary verbs (e.g., become, could) that signify

transition, and inhibition words (e.g., stop, ban that call for change). Third, the *society* metric comprised of the z-scores for Pennebaker’s “social” words, i.e., those dealing with family, friends, and people.

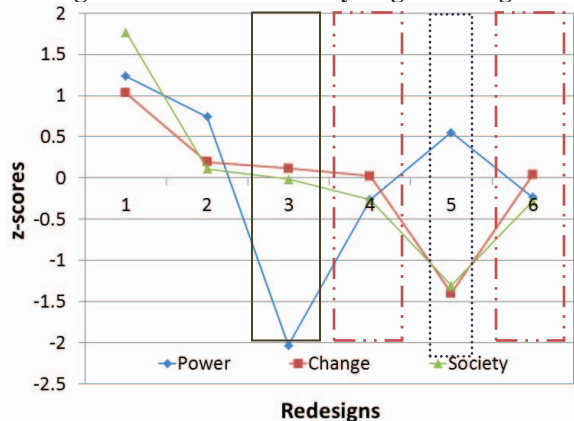
In interpreting these graphs, it is important to note that site redesigns and changes to the history pages did not necessarily coincide. See Table 3 for a timeline; redesigns are represented as occurring in a year if that design was active on January 1st.

Figure 1: Chickasaw History Page Redesigns



It is apparent from Figures 1 and 2 that the tribes use power, change, and society words to different extents in different versions of history on sites with different purposes. For example, when the Klamath repurposed their site to emphasize restoration of natural resources (designs 4 and 6), they revised their history using almost exactly the same combination of power, change and society words.

Figure 2: Klamath History Page Redesigns



The use of purposive language is witnessed not only within same-purpose sites designed by one tribe, but also across tribes. When the Chickasaw website focused on services (designs 1 and 3), their history pages were revised to feature relatively low instances

of power words and relatively high instances of change and society words, which aligns with the language pattern the Klamath used when the purpose of their site was to provide information on tribal services (design 3). The two tribes also revised their history pages to feature similar language patterns when their purpose was to promote Native businesses and e-commerce (Chickasaw design 4), government transparency about finances (Chickasaw designs 6 and 7), daily activities of tribal workers (Chickasaw design 5) and government and the legal system (Klamath design 5). When the overarching purpose related to business or government matters, the tribes use more power words than change and society words in describing their history.

Notably, when the Klamath website's overarching purpose was to raise money to buy back art and cultural artifacts (design 1), they used a high percentage of social words to depict their history, which supported their purpose of bringing people together to support their cause. By redesigning their history pages in light of current concerns and purposes, tribes can design history narratives in such a way that they support the overarching purpose of the website.

Observation 5: History webpages reflect the changing purpose of a website.

5. Contributions

Our findings have implications for those seeking to enhance website effectiveness through design. First, using websites to define identity and provide cultural resources necessary for identity synergy can promote restoration of cultural identity among users. Second, understanding cultural symbolism of colors, images and words can help designers make choices that support their purposes by evoking specific emotions and social memories. Third, using websites to diffuse clear, cohesive narratives surrounding traumatic events or social conflict can aid users in processing the trauma, finding resolution and ultimately healing. Finally, revisionist history and purposeful language use within "History" webpages can support the overarching purpose of a website.

This research contributes to the literature in three important ways. First, our analysis of the Chickasaw and Klamath websites depicts the role of website design in the production of culture. Second, we explain that while the ostensive purpose of the websites is pragmatic, they have cultural meaning; while the ostensive purpose of the history pages is cultural restoration, they address the pragmatic.

Thus, both layers of website purpose are present in history pages as well as the websites as a whole. Finally, we show that although technology adoption has traditionally occurred parallel to globalization and aided in assimilation, tribal organizations are now finding ways to use technology for constructive purposes such as cultural preservation, identity restoration and healing.

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