

Native American Cultural Identity through Imagery: An Activity Theory Approach to Image-Power

Richard Caneba

Pennsylvania State University
College of Information Sciences and Technology
332 Info Science and Tech
University Park, PA 16802
rjc5728@psu.edu

Carleen Maitland

Pennsylvania State University
College of Information Sciences and Technology
332 Info Science and Tech
University Park, PA 16802
cmaitland@ist.psu.edu

ABSTRACT

The American Indian and Alaska Native (AIAN) community stands poised to take control of their cultural imagery and image-power through image-heavy social media platforms. Extant research demonstrates the high level of use of social media in AIAN communities, creating the opportunity to overcome negative representation by mass media in the past. However, despite evidence of social media use for cultural preservation, little is known about the exact ways in which image-power is managed. This exploratory study seeks to illuminate the ways in which advocates are presenting imagery, using a qualitative image analysis of advocates' Instagram posts. Using an Activity Theory framework, particularly the construct of division of labor, we identify a novel taxonomy of imagery categories and advocate roles. The roles, namely *Informing*, *Rallying*, *Identifying*, and *Interacting*, contribute to our understanding of the relationship between AIAN advocates and imagery, and the mediating effects image-heavy social media platforms and advocate roles have on this relationship. Our findings also contribute to scholarship applying Activity Theory in the study of online communities. In particular, our findings delineate roles among *material sharers* within the construct of Division of Labor.

CCS CONCEPTS

• **Human-centered computing** → **Social media**; *Social networks*;

KEYWORDS

American indian, alaska native, AIAN, Instagram, activity theory, social media, social networks, social media platform, qualitative coding, qualitative methods, qualitative analysis

ACM Reference format:

Richard Caneba and Carleen Maitland. 2017. Native American Cultural Identity through Imagery: An Activity Theory Approach to Image-Power. In *Proceedings of ICTD '17, Lahore, Pakistan, November 16–19, 2017*, 12 pages. <https://doi.org/10.1145/3136560.3136581>

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than the author(s) must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from permissions@acm.org.

ICTD '17, November 16–19, 2017, Lahore, Pakistan

© 2017 Copyright held by the owner/author(s). Publication rights licensed to Association for Computing Machinery.

ACM ISBN 978-1-4503-5277-2/17/11...\$15.00
<https://doi.org/10.1145/3136560.3136581>

1 INTRODUCTION

The American Indian and Alaska Native (AIAN) community in the United States occupy a unique space in the broader cultural context: that of sovereign nations existing within the borders of a larger sovereign nation. The process by which independent sovereign nation-states came to exist within the bounds of separate larger governance structures has shaped the cultural character of the AIAN community. Colonialization as both implicit and explicit U.S. Federal Government (USFG) policy has compromised the integrity of AIAN cultural control.

As the AIAN community attempts to wrestle control of its own narrative destiny from external forces, social media has the potential to play a vital role in shaping visual identity. This exploratory study seeks to examine the way the AIAN community's advocates are utilizing image-heavy social media platforms to contribute towards shaping this identity.

"Advocates" have been defined within this study as individual actors who display lobbying behaviors on behalf of an identified community or social group, from outside the auspices or guidance of an established organization. This independence distinguishes advocates from organizations, who also lobby on behalf of various communities or social groups, but do so with an eye towards professional norms. In contrast, individual advocates are not beholden to these constraints, and it stands to reason that they are more likely to express opinions and critical perspectives openly.

The findings contribute to the broader scholarship on the relationship between social media, culture, and social development. In particular, this work identifies ways in which advocates use imagery in social media ostensibly contributing to their community's own cultural representation. From a broader perspective, our findings also highlight the nature of the affordances that image-heavy social media platforms have in potentially mediating the relationship between advocates and cultural identity via image-power.

The structure of the paper is as follows. We begin with a background section where we discuss AIAN internet and social media use, the concept of 'image-power', and the positioning of advocates vis-a-vis individuals and organizations. Next, in the section on theoretical perspectives, we discuss Activity Theory and present our research questions. We then present our methods and findings. This is followed by a discussion section, which revisits the research questions, presenting theoretical and social implications. We end the paper with conclusions.

2 BACKGROUND

2.1 The AIAN Community and Media

Misrepresentation of AIAN culture throughout the history of the United States ranges from the arguably benign to explicitly harmful. There are many noteworthy examples of media misrepresentation, including in otherwise reputable or well-meaning sources.

An example as reported by Alia [1] highlighted the grotesque caricature in the British news publication *The Telegraph* of the hunting practices of the Uluqsattuq community of Canada, painting them as self-interested savages “gathering food only for himself and his family”. While this generated a harsh response from the community, a rebuttal sent to *The Telegraph* by representatives of the Holman community was never published.

Another example involved the findings from a study of alcohol consumption on Inupiat Natives of Barrows, Alaska. These findings were inadvertently leaked to the mass media, and subsequently sensationalized, ultimately compromising economic development in the city. Thus, misrepresentation of AIAN culture in the mass media can have not only serious ethical consequences, but also economic ones [4, 15, 23, 56].

In addition to the multiple consequences, there are multiple sources through which misrepresentation occurs, including advertising, product logos, and movie roles [38]. Many of these portrayals are based on stereotyped and overgeneralized notions of Native American identity [22, 31]. These are further compounded by the community’s invisibility: the general lack of contemporary native American perspectives in regards to portrayals of their cultural identity [31].

2.2 Colonization and the Origins of AIAN Misrepresentation

To properly contextualize the socio-cultural environment that has supported a history of misrepresentation, due credence must be given to the long-term effects of colonization by western cultures over AIAN tribal groups in North America. The initial policy of assimilation implemented by the U.S. Federal Government (USFG) had significant, long-term effects, irreparably damaging the integrity and continuity of AIAN cultures from its time of inception in the second half of the 1800s [26]. The Indian Reorganization Act (IRA) of 1934 marked an official turning point in USFG-Tribal relations, marking an ostensible pivot in USFG policy in regards to Native American tribes, seeking to undo the previous policy of assimilation by promoting the independent sovereignty of and capability for self-governance lost in the previous centuries [30, 37]. While the goal of the IRA appeared honorable, its exercise was anything but: it behaved as a means of tacit control via enforcing governance structures that homogenized the multiple diverse AIAN cultures [6] as well as the cruel and demeaning process of tribal incorporation through becoming “federally recognized” by the USFG [41]. This has resulted in a relegation of AIAN people to the fringes of society [26], presenting structural obstacles to engagement in their own representation through “mainstream means”.

A partial filling of the void of AIAN representation has been that of cultural outsiders (e.g. journalists and scholars from hegemonic western societies), with varying intentions. However, as

postcolonial scholar Gayatri Chakravorty Spivak [48] pointed out, this second-hand nature is an inherent limitation to the depth of analysis a cultural outsider to a marginalized community can bring, regardless of intention. The translation of cultural portrayals of a group by an external observer cannot capture the entirety of their experiences, and so the risk of misrepresenting those experiences is significant [48]. While the development of “indigenous media” has sought to provide an avenue for indigenous sources to shape their own representation and push back against cultural domination, its influence has largely been relegated to low budget and small-scale efforts [17, 18]. Digital platforms, social media in particular, as an alternative avenue towards engagement with representation stand poised to offer a direct means of media propagation for the AIAN community.

2.3 Increasing AIAN Engagement in Digital Communities

While the AIAN community has lagged behind the general U.S. population in terms of internet connectivity [7, 14], strides have been made in recent years to overcome this digital divide. For instance, the Tribal Digital Village project has been expanding broadband connectivity to AIAN tribes in Southern California reservations who have long been ignored by larger telecommunications companies [53–55]. As AIAN communities become more connected, they will continue to engage the online social media ecosystem, and likewise continue to express aspects of their own representation and image. The ways that AIAN culture are represented in the media have been found to have significant effects on AIAN self-conceptualization and self-stereotyping [31], so engagement with the online social media ecosystem represents an avenue by which the community is offsetting uninformed portrayals.

2.4 Image-Power and Social Media

Social media use by marginalized communities has been examined previously [32], and examination of the AIAN community has identified them as significant users of social media [39, 45, 53]. In particular Molyneaux et al. [39] has found that social networking sites are the most common daily communication medium, and that a majority of social media users in the AIAN community used social media as a means of preserving culture. However, their approach utilizing a survey methodology to illustrate social media engagement stands in contrast to the qualitative methodology employed here, which seeks to illustrate in greater detail *how* AIAN culture is expressed through social media.

The possibility for “new” media to play a role in community development and cultural strengthening through information resources and communication has been posited by social network theorists in regards to indigenous communities [49]. Examples of how social media platforms, as a type of new media, can support cultural development have examined Twitter [33, 34] and Instagram [35]. While questions still exist as to the exact nature of the relationship between culture “in-situ” and culture as expressed via new/social media [49], it is being utilized as a means of content production and sharing by the AIAN community [1].

The notion of ‘image-power’ was defined by [13] as an organization’s “self-conscious, self-reflective management of public perception and the concomitant shaping of patron and audience identities” [35]. Imagery, depicted in photographs, graphics, gifs, and video, is the primary means by which image-power is shaped, through the strategic usage of depiction to push forward and promote a visual identity. Thus, image-power speaks to sub-conscious perceptions about an entity, the visual representation of a group or individual imprinted upon one’s impressions.

Image-intensive social media platforms such as Instagram provide a powerful tool by which organizations can shape image-power through the strategic sharing of goal-oriented imagery [35]. We characterize Instagram as ‘image-heavy’ to call out its unique attributes as a social media platform [16, 35]. The concept of ‘platform vernacular’ speaks to unique genres of communication that emerge as a result of the affordances and the practices they elicit [16]. The concept encapsulates the effects a platform’s affordances have on communication practices, and have been explored across various social media, including Instagram [16], Facebook [32], Twitter [33] and in general [42]. Thus, Instagram is seen as an image-focused platform with only rudimentary communication affordances, distinguishing it from other social media platforms (e.g. Facebook, Twitter, LinkedIn) as a result of its interface design and integration with Information and Communication Technology (ICT) devices, possessing its own unique platform vernacular.

Organization based studies have focused on the use of social media for community engagement purposes [24, 33–35], the motivations for adoption [9], and the relation between platform affordances and organization specific tasks [42, 52]. While this body of scholarship has found significant potential and variation among organizational uses and platform preferences based on organizational goals and platform affordances, a parallel body of literature has focused on the individual uses of social media. Roughly, the individual level correlate of image-power is the use of social media for establishing social or personal identity [3, 10, 47], or self-presentation [19, 27, 36, 43, 44, 50, 51]. Generally, imagery on social media has been found to be an important aspect of self-expression and representation [27, 36, 44, 50]. Thus, there are two broad bodies of scholarship within the social media literature, focusing on organizational uses and individual aspects of social media use. The use of imagery as an important aspect of self-expression and representation has also been previously examined within these two bodies of scholarship.

2.5 Advocates on Social Media

In this study, the focus on advocates that are disconnected from each other in terms of direct contact, but nonetheless share similar goals relative to a community firmly situates this analysis of social media use between the scholarship focusing on individual and organizational contexts. The idea of individual advocates’ usage of social media to further collective goals outside the auspices of identifiable organizational contexts has been explored previously in regards to the *democracy advocates* who played an essential role in the Arab Spring of the early 2010s [25]. This study seeks to explore further this notion of individual advocates, focusing on advocates as neither purely independent in action and divorced from social

context, nor focused purely on organizational control and managed behavior. Thus, this study contributes to the broader scholarship on social media by contributing to a study of a group that has largely fallen between these two distinct bodies of scholarship.

Extending the notion of image-power outside that of identifiable organizations to individual advocates who act outside the bounds of a given organization but nonetheless share a broader cultural perspective yields a different view of the relationship between image sharing and image-power. While individual advocates for a particular community do not themselves constitute a single, unified organization, the production and sharing of imagery likewise has a shaping voice, contributing to the socio-cultural milieu that helps define the community’s contemporary and historical cultural identity. The notion of image-power thus takes on a slightly adapted form from this context: one of shared perspective via a cacophony of voices, as distinct from the singular, regulated, filtered, and controlled voice of a unified organization’s interactions with the social media ecosystem.

Additionally, while the relationship between image-power and cultural identity via image-heavy social media platforms has been explored in the literature, this exploratory study seeks to contribute to this body of scholarship by extending the understanding of this relationship to individual advocates of a community, as well as the AIAN community itself. Furthermore, the nature of image-heavy social media platforms was explored by analyzing the shape and form of content shared via the platform itself.

3 THEORETICAL PERSPECTIVE

Activity Theory frames technological artifacts in a way that takes into account the variegated conditions and factors governing its usage, including the nature of the users of the technology as well as the aspects of the world that the technology is interacting with [5]. Activity Theory therefore captures the mediating role that technology plays in the interaction between humans and the world [5, 40]. Tools that serve as mediating this relationship can transmit cultural knowledge [28]. Social media platforms can thus be framed as mediating the relationship between various advocates and the notion of image-power, serving as the tool through which these actors shape a shared cultural identity.

Engeström’s model of Activity Theory captures social aspects of this activity explicitly, in addition to the mediating role instruments and technology play between subjects and the world. (see Figure 1) [11, 12, 29].

Shaping image-power as an activity system (thereby framing the activity within this model) motivates an examination of AIAN advocates and the activity of image-sharing with the intention of influencing image-power. The way that various components of Engeström model of Activity Theory are mapped to by aspects of social media platform based activities such as this are in need of explication.

The focus of this study aims to illuminate this mapping. In particular, while the subject (AIAN advocates), object → outcome (‘image-power’), instrument (image-heavy social media platforms e.g. Instagram), rules (social/cultural norms), and community (social

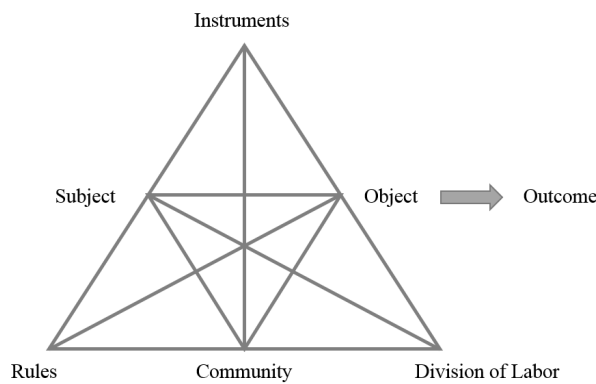


Figure 1: Engeström's model of Activity Theory

media community, AIAN community, individual advocate community) can be examined to varying degrees (and indeed should motivate further scholarship), division of labor as an emergent property of advocates interacting loosely and asynchronously to influence a shared or similar notion of image identity is one that can be examined through a categorization of imagery shared by advocates. In a previous study, Baran and Cagiltay [2] identify division of labor in an online educational community, and note the emergent nature of voluntary participation in that community. This previous study identified three roles: *discussants*, *material sharers*, and *lurkers*. Our study focuses on the *material sharer* role. The resulting analysis of advocates' relative reliance on these types of imagery generates a set of roles roughly analogous to the way division of labor is conceptualized within an organizational context.

Framing social media as an activity system has previously been explored in regards to educational contexts, illuminating the ways roles as a division of labor can be defined in these systems [21]. What is illustrative of these conceptions of roles within social media activity systems is that, while division of labor can be explicitly identified in a top-down manner e.g. lecturers and students [20], roles can also be identified based on "objectives for using the web-based spaces" [21]. Our treatment of roles as an emergent characteristic of loose interactions and asynchronous interactions is an example of this latter form of role definition.

Additionally, illuminating the roles as an emergent division of labor can shed light on the notions of community existing within the Instagram platform, especially when contextualizing the advocate roles based on shared or similar objectives [11, 12, 21].

The research questions for this study are as follows:

RQ1 What "categories" of imagery are AIAN advocates sharing?

RQ2 What types of "roles" do AIAN advocates play in contributing cultural content?

RQ3 How are AIAN advocates shaping image power through the sharing of imagery?

4 METHODS

As Wyche et al. [57] points out, qualitative studies focusing on voices expressing a marginalized community's view require a reflexive examination of the researcher's relationship in regards to

the broader socio-cultural context. In accordance with this principle, the authors will self-disclose their backgrounds. One of the co-authors and the primary coder is a male academic of Filipino descent and was raised in a North American society in an English-speaking household. The other co-author is a Caucasian female academic who was likewise raised in a North American society in an English-speaking household. The primary coder of this study was conditioned by his cultural upbringing in the United States, as well as the awareness of the effects of colonization through his parents as ethnically Filipino and subjected to Spanish colonial control. Additionally, the primary coder is a regular user of social media platforms.

Both co-authors are conducting research with the AIAN community as part of their broad research agendas focusing on social and individual level effects of technological penetration, adoption, and usage, including research engagements on reservations, and as a result have a degree of familiarity with the AIAN community and its perspective. This fact notwithstanding, neither author would claim to be able to speak for the community itself, or understand their perspectives directly. Thus, the authors are well aware of the shortcomings they have in terms of their abilities to translate perfectly the cultural content sourced from the community. Accordingly, the goal of this study is to analyze the presentation of imagery on social media from AIAN focused sources, as opposed to focusing on the cultural interpretation of the content itself. As the content is intended to 'represent' to a wide audience, our analysis reflects an interpretation from our external yet informed perspective.

This exploratory study utilized two phases: first a qualitative coding analysis of images shared through Instagram by selected AIAN advocates was conducted. Once base level categories were identified, broader relationships connecting these categories were created, generating a novel set of supercategories which in turn produced a hierarchical coding scheme. These broader supercategories formed the basis for a taxonomy of "roles" that advocates take on in interacting with image-power through Instagram, which were then examined in regards to how the advocate sample matched with each role profile as defined by the types of images they shared. Thus, an analysis of the contribution to the shaping of image-power is offered via an examination of imagery shared by advocates as well as the roles they espouse.

4.1 Sampling

The sampling frame for AIAN advocate profiles to serve as cases in the study was generated via searches of Instagram content through keywords and phrases that were identified through a brainstorming process. The search terms used to identify advocates were:

- "american indian", "americanindian"
- "native american", "nativeamerican"
- "native american culture"
- "indian country", "indiancountry"
- "indigenous"
- "alaska native", "alaskanative"
- "native alaskan", "nativealaskan"

This initial searching procedure identified 29 advocate profiles, which were then filtered based on a set of criteria defined by the researcher for the purpose of this study:

- (1) Must be an individual advocate (i.e. no organizations). Organizations were identified as having a link in their profile to an external organizational website.
- (2) Must share imagery of cultural content.
- (3) Must have had a publicly viewable account at the time of coding.
- (4) Must have followers (all selected members of the sample had at least 100 followers at the time of the study)
- (5) Must have posts (all selected accounts in the sample had at least 30 posts at the time of the study).

Implementing this criterion identified 7 profiles to serve as cases in this study. Additionally, the content of a single organizational profile was coded for the purpose of comparison, but not included in the overall analysis.

The image sample drawn from each profile consisted of the first 30 images shared on or before February 5th, 2017 when coding began. Temporal features of posting habits (e.g. frequency of posts) varied from advocate to advocate, with some posting many images per day while others would forgo posting for fairly extended periods of time, such as a few months. Frequency of posting was not tracked for this study, as the goal was to capture a broad characterization of each profile as opposed to offer a time-dependent analysis of content.

4.2 Content Analysis

4.2.1 Data Generation. “Process coding” is a coding framework that focuses on using “gerunds (“-ing” words) exclusively to connote action in the data” [8] (as cited in [46]). Interpreting the intention of an image shared through Instagram through process coding was utilized by [35] to analyze the use of image-heavy social media by non-profit organizations. Process coding points strongly to a focus on action in the coding scheme, so process coding is a natural fit for an Activity Theory analysis of actors within the Instagram social media domain. Additionally, process coding can be used in conjunction with standard initial coding and axial coding practices, allowing for conceptual refinement to occur in an iterative manner [46].

Coding of imagery was done through the websta.me interface, as the native Instagram interface is not as conducive towards analysis by comparison. The websta.me interface allowed the researcher to use various gallery views of profiles, as well as save content for offline storage and analysis.

While Instagram content is largely static, a portion of the data set was moving images i.e. videos (8%). In these cases, coding of the video was done holistically, seeking to broadly conceptualize its nature in regards to the coding scheme. Thus, while a video is literally a sequence of many different images, coding of such examples hinged on interpreting the broad goal of the videos content, as displayed through the contained imagery. Additionally, a fair amount of the Instagram images contained significant textual content within the imagery itself (51% of imagery in the sample had this characteristic), in many cases providing context that defined the categorization of that image. For example, paintings of Native American historical figures would be overlaid with text of quotations or claims of ancestry. Moving imagery examples such

as trailers very overtly displayed textual overlays to explicitly contextualize the image content to the intent of the video. In these cases, the textual content of the imagery almost overrides the non-textual content in terms of interpretation, strongly identifying its relationship to particular categories of imagery.

The initial coding scheme was developed through an examination of coding schemes used in similar studies in organization scholarship [33, 35]. This frame was deemed to have greater role alignment with advocates than personal social media use, which has been reported as more interpersonally communicative and tends to focus on Twitter and Facebook [32]. From the organizational scholarship, [35] coded Instagram images using categories of orienting, unifying, placemaking, showcasing, and crowdsourcing, [33, 34] coded Tweets sent by organization uses coding categories more appropriate for text, including information, community, and action. While these coding schemes were a helpful start, they were not completely appropriate, particularly the category of unifying. From these established schemes, the research team iterated over the selected Instagram image sample.

Utilizing these combined sources, a novel hierarchical schema was developed that was tailored to the domain (Instagram social media platform) and the community of examination (AIAN advocates, as opposed to well-defined organizations).

4.2.2 Coding Scheme. The produced coding scheme consists of nine base categories and four supercategories which take the base categories as subtypes (see Figure 3). The Interacting category was unique insofar as it is defined at supercategory level but has no subtypes, and as such could be compared with both base level categories as well other supercategories. Descriptions of base categories and supercategories that compose the coding scheme are offered in Table 1.

The focus on individual advocates whose sharing behavior is not regulated by a governing body or defined set of norms (as would probably be the case in an organizational context) means that occasionally imagery that doesn’t appear directly relevant to cultural content is shared. However, as a qualitative study, content needs to be taken seriously regardless of whether its surface appearance points directly towards a conceptualization of the overall topic at hand. Thus, when context couldn’t disambiguate the image coding, it was categorized as unifying imagery, with the justification that even imagery that appears irrelevant to what is typically considered “cultural” is still an expression of a modern existence, especially when framed within the context of a culturally focused profile. Evaluated within the overall context of the profile situates even irrelevant content into a broader, unifying narrative of a living, breathing, notion of identity that exists today.

4.2.3 Data Analysis. The most frequent categories of imagery were those that were unifying in intention, comprising 35% of the image sample. This was followed by images that were awareness raising at 20%, and showcasing at 15% (see Table 2).

The most frequent supercategory of imagery was identifying, which comprised 68% of the total sample. This was followed by rallying images at 21% (see Table 3).

An anonymized advocate-by-advocate count of image supercategory frequencies is provided in Table 4.

Table 1: Coding Schema for Instagram use by AIAN Advocates

Process Category	Description
Informing	Encompasses image categories geared towards informational purposes.
Rallying	Encompasses image categories geared towards promoting action, either implicit or explicitly.
Identifying	Encompasses image categories that promote socio-cultural identification.

Table 2: Category frequencies for base categories

Process Category	Instances	Percent
Educating	12	6%
Reporting	1	<1%
Announcing	3	1%
Awareness Raising	41	20%
Gathering	4	2%
Showcasing	31	15%
Unifying	73	35%
Gatekeeping	18	9%
Guiding	20	10%
Interacting	7	3%

Table 3: Supercategory frequencies

Process Supercategory	Instances	Percent
Informing	16	8%
Rallying	45	21%
Identifying	142	68%
Interacting	7	3%

Table 4: Category frequencies by advocate profile

Profile	Informing	Rallying	Identifying	Interacting
1	0	2	28	0
2	0	2	28	0
3	10	17	3	0
4	0	14	16	0
5	0	3	24	3
6	5	0	25	0
7	1	7	18	4

5 FINDINGS

Images classified as cultural identification were by and large the most frequent type of imagery shared by advocates. In particular, identifying content was strongly oriented towards unifying imagery, and to a lesser extent showcasing. Rallying imagery was also frequently observed, although content within the category was strongly biased towards awareness raising as opposed to gathering, thus illustrating a preference for implicit/lifestyle adjustment action as opposed to calls for explicit critical social event participation. On

the other hand, there was only limited use of Instagram for non-critical informing purposes. Similarly, there was minimal explicit initiation of two-way communication via interacting imagery.

5.1 Categorizing Image Intentions

An analysis of the types of imagery that individual advocates share has been provided, offering a broad perspective of the imagery being circulated. The coding hierarchy can be leveraged to identify four roles played by advocates, relating to the imagery supercategories: Informing, Rallying, Identifying, and Interacting. Examining each advocate's relative reliance on imagery allows us to categorize these advocates accordingly, and provide a broad level initial analysis of what types of roles appear to be common. In the advocate sample used in this study, the following advocate roles were witnessed:

5.2 Categorizing Advocate Roles

5.2.1 Strict Identifying-Unifier. Advocates who fit this role focused their image sharing efforts on images that unified various aspects of AIAN culture, through a variety of means:

- Depictions and expressions of modern AIAN life
- Depicting AIAN historical perspectives
- Displays of cultural pride

Of the seven identified advocate profiles in the sample, four of them fit into this role. Three of these profiles (profiles 2, 5, and 6) shared imagery that was over 80% unifying content, while the fourth (profile 7) was over 60%. The three advocates whose imagery focused on unifying AIAN cultures did so through a balance of modern and historical depictions, as well as paintings and other artworks that sought to capture various aspects of AIAN identity. Much of the imagery of AIAN culture focused on traditional clothing, regardless of whether the image was temporally historical or modern. The result of this implicit commonality of clothing focus is an implication of personal appearance in regards to AIAN community membership. On the other hand, profile 2 in particular was oriented towards artistic depictions of AIAN culture, with paintings being the primary medium.

Profile 7, while still maintaining a strong overall orientation towards unifying imagery, was balanced across other forms of identifying imagery as well. Additionally, this profile exhibited a somewhat critical perspective, making noteworthy efforts to raise awareness about ongoing social issues in addition to the focus on identification.

Broadly speaking, the means of unifying AIAN culture through imagery takes place along a pair of gradients: from historical to modern, and from realistic to artistic. Despite there being flexibility in how the Unifier role was manifested, the advocates who fit this




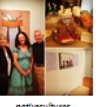
















Process Category	Exemplary Images
Educating (Post that provides content intended to be pedagogical)	  americanindians01 indigenousunit
Reporting (Post that is sharing news and current event information in a non-critical manner)	  nativecultures nativecultures
Announcing (Post that is sharing information about an upcoming event in a non-critical manner)	  nativecultures indigenousunit
Awareness Raising (Post that is seeking to promote awareness about an ongoing social issue or obstacle)	  native_american_pride indigenousunit
Gathering (Post that is calling for explicit action or gathering in response to a current event)	  indigenousunit indigenousempowerment
Showcasing (Post that is displaying works by, for, and of the AIAN community where artistic content takes precedence)	  native_american_pride native_american_pride
Unifying (Post that serves to unify perspectives and viewpoints of AIAN culture via depictions of modern life, histories, or cultural pride)	  americanindians01 indigenousempowerment
Gatekeeping (Post that serves to explicitly identify boundaries and membership of the AIAN community)	  americanindians01 native_american_pride
Guiding (Post that provides advice or wisdom-giving of implied AIAN historical or cultural origin)	  nativeamericanwarriors nativeamerican_news
Interacting (Post that explicitly promote two-way communication with Instagram followers)	  nativeamericanwarriors nativeamerican_indigenous

Figure 2: Image Category Examples (the Instagram handle of the original poster is below the images)

category were nonetheless bound by the desire to capture AIAN identity through depiction across these gradients.

5.2.2 *Strict Identifying-Showcaser.* Advocates who fit this role focused their image sharing efforts on imagery presenting art and

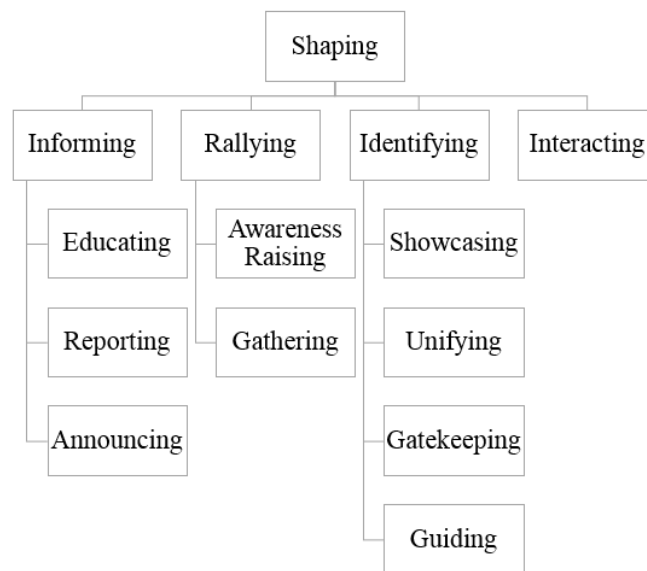


Figure 3: Process Category Hierarchy

artwork by the AIAN community, providing a modern depiction of AIAN culture through artifact displays. Advocate 1 presented a lot of beadwork that referred to a number of different themes, including nature as well as local professional sports teams. While non-critical in orientation, this advocate nonetheless captures the ongoing contribution to artistic works as part of a living, breathing, cultural identity.

5.2.3 *Hybrid of Rallying-Awareness Raiser / Informing-Educator.* Advocates who fit this role focused their imagery on raising awareness of ongoing social issues, supported by a fair amount of educating informational imagery. Advocate 3 had a strong critical-historical orientation to imagery, framing ongoing social issue related content in a critical manner interspersed with historical imagery that was likewise critical in orientation or educating in such a way that it provides content pertaining to the AIAN histories. This profile shares imagery that appears to bridge the gap between ongoing social challenges facing the AIAN community and the historical-cultural backgrounds of the AIAN community itself.

5.2.4 *Hybrid of Identifying-Unifier / Rallying-Awareness Raiser.* Advocates who fit this role focused their imagery on unifying content, supported by rallying around ongoing social issues. Advocate 4 took a strongly critical stance in regards to imagery, whereby even unifying content took on a rallying air in the broader context of the image sharing tendencies exhibited by this particular advocate. It is worth noting that at the time of this study, the protests led by the Standing Rock Sioux Tribe against the Dakota Access Pipeline were in full swing, and imagery relating to these events comprised a large portion of the content shared by this advocate. This advocate has a very strongly critical-social orientation, simultaneously seeking to bring awareness to the community while presenting within the broader context of AIAN cultural identification.

6 DISCUSSION

Three research questions were initially developed that were framed with attention to the research topic as well the activity theory notion of “Division of Labor” as manifested in the identification of advocate roles on Instagram. These research questions will be revisited in light of the findings presented.

6.1 Research Questions Revisited

6.1.1 What “categories” of imagery are AIAN advocates sharing?

The hierarchical coding scheme generated through a synthesis of related studies [34, 35] and coding iterations over the data set identified four predominant supercategories of imagery with 9 subcategories within those. Advocate content was largely geared towards imagery that focused on unifying AIAN culture through depictions of modern life, historical perspectives, or cultural pride. The use of imagery for the purpose of raising awareness was also frequently observed, illuminating ongoing social issues that face the AIAN community, a large portion of which was driven by the ongoing Dakota Access Pipeline protests on the Standing Rock Reservation. Showcasing imagery was also frequently observed, although a large portion of these observations were driven by a single advocate whose contribution was focused on native artwork.

The use of imagery is powerful in terms of its capability for cultural depictions, and depictions of various aspects of AIAN culture, whether it's taking a stance of unification, artistic showcasing, or critical examination. In some sense, comparing this type of imagery to the relatively lower prevalence of more “explicit” action oriented imagery (as captured by interacting and gathering types of imagery) motivates the idea that, while Instagram (and other image-heavy social media platforms) are less suited towards organizing and communication, they are more suited towards socio-cultural identification that does not hinge upon explicit personal or geographical identification.

While rallying imagery was comprised of two subcategories, imagery within this larger category was largely oriented towards raising awareness as opposed to explicit calls to gather for action. A possible explanation for this disparity is the pseudo-anonymous nature of Instagram, whereby users are not pushed by the platform to provide identifying information e.g. their name. This is distinct from other social media platforms that explicitly seek to link online activity to real life identities, e.g. Facebook or LinkedIn. A side effect of this anonymity is an agnosticism to geographical location, potentially making such organizational attempts such as explicit calls to action ineffective or inefficient. Similarly, the limited affordances of the Instagram interface play a role in hindering organizing, as the minimal communicative potential of Instagram makes well-structured organizing of events challenging. This theorizing about the effects of geographical agnosticism and limited organizing affordances is supported by the lack of announcing imagery observations, of which only three examples were observed (1% of the sample).

Use of Instagram for the purpose of two-way communication via interacting imagery was likewise almost non-existent. The use of Instagram for non-critical “Informing” purposes was also limited. This limited use of Instagram for communication is likely a consequence of the way the platform was designed as well as

the aforementioned nature of individual advocates acting in an anonymized manner. The Instagram interface does not provide sophisticated communication support, especially as compared to more “textual” social media platforms e.g. Facebook.

Strictly informing types of imagery likewise did not fit into the overall critical-cultural orientation of the advocates in the sample. It's possible that the non-textual nature of Instagram limits the platform's use as an information source, as the bulk of information content must be conveyed through the image itself as opposed to textual descriptions presented alongside the images. However, a single organizational profile's imagery was coded alongside the advocate sample used in this study, and “Informing” imagery was the primary intent of image sharing for that organization's profile. This suggests that image-heavy social media platforms may be used for informational purposes by organizations, but this style of image-sharing may not fit the non-organizational advocate's goals for image sharing behaviors. Instead, this may be indicative of potential for anonymized individual advocates to express themselves and their opinions more freely, whereas organizations are more beholden to social acceptability within the broader context, i.e. tribal as well as western American socio-cultural norms.

6.1.2 What types of “roles” do AIAN advocates play in contributing cultural content?

The generation of four supercategories provided a novel taxonomy which can be used to categorize advocate “roles” based on their relative reliance on particular categories of imagery to contribute to shaping AIAN community image-power. These roles can be conceptualized as being indicative of the styles of sharing behavior each of these advocates takes on, which can be a product of any number of different factors, including individual psychologies and histories, the varying social and cultural conditions in which these individuals are situated, and the affordances of image-heavy social media platforms.

While the advocate profiles in the sample were categorized according to a comparison of the types of imagery each shared across the four dimensions of Informing, Rallying, Identifying, and Interacting, the roles that were observed via this method are not intended to be interpreted as representing an exhaustive list of the types of roles to be seen in individual advocates on Instagram, but rather as a starting point for broader categorization of advocate behaviors across these same four dimensions.

6.1.3 How are AIAN advocates shaping image-power through image sharing?

What has been offered by this study is a unique and novel set of codes for image sharing tendencies by AIAN advocates, which captures notions of technological affordances in addition to culture and opinion as expressed through technology. Through these codes a set of role types has been introduced whose use as a means of categorizing advocates reflects their image sharing behaviors across the four supercategories of imagery.

Advocate shaping of image-power as the target object in the activity theoretical sense thus can be conceptualized across the ten categories of imagery as well as the four roles. The focus of advocate shared imagery on unifying various culturally relevant aspects of the AIAN community and raising awareness of ongoing social issues shapes the image-power narrative by presenting depictions of AIAN culture that are potentially closer to the community's desired representation (as opposed to the ones propagated through

mass media) as well as presenting a community that is sensitive and aware of the social and cultural challenges that face them today. Thus, image-power as shaped by advocates of the AIAN community plays into the hands of the Identifiers and the Rallyers, leveraging image-heavy social media to present depictions of the community and its ongoing struggles as a powerful part of their overall identity in the modern information age.

6.2 Theoretical Implications

An Activity Theory perspective was used to frame this study, focusing on the way that image-heavy social media platforms mediate the relationship between advocates and influence of image-power. Additionally, the generation of a taxonomy of advocate roles provides a mapping to a division-of-labor like construct, whereby advocates contribute in different ways toward a shared objective. This produced taxonomy demonstrates how advocates can use social media to achieve goals situated within an activity system, as suggested by the division of labor. Roles as a manifestation of objectives within a web-space are therefore provided through this analysis. As these roles identify objectives within a community situated on the Instagram social media platform, Activity Theory provides a useful framework for extending the research into effects for not only the object \rightarrow outcome dimension, but also the community dimension as well.

More broadly, this study situates social media platform use within an Activity Theory framework. Our focus on advocates extends the context of Activity Theory beyond organizations in which it is commonly used. Here we consider a less structured context where individual subjects are not beholden to an explicitly shared set of rules and norms via organizational culture and top-down management practices (e.g. explicit definition of labor division by leadership). Despite this less structured context, we are able to identify roles that can be likened to a division of labor as an emergent property that comes about at least in part as a result of the shared motivations to influence the same or similar notions of cultural image. Social media platforms and the often seemingly disconnected yet undeniably related actors within the communities they support, are in need of examination. This study contributes to that understanding through an Activity Theory framing of the relationship between actors and outcomes.

Building on the findings of Baran and Cagiltay [2], we show that material sharers perform their tasks by fulfilling the various roles: Informing, Rallying, Identifying, and Interacting. Given the previous study's context, their conception of material sharers was limited to the Informing role. Here because of the different context, the material sharer role extends beyond just Informing. Thus, we have further unpacked the material sharer role, offering a higher granularity of role taxonomy.

As the role of advocates is positioned between social media use of organizations and individuals, it is instructive to compare findings. The supercategories of informing, rallying, identifying and interacting proposed here for advocates are similar to those used by organizational communication scholars (orienting, humanizing, placemaking, showcasing, and crowdsourcing [35]), but differ in important ways related to the human nature of the advocates' goals. These image analyses can also be contrasted with organizational

analysis of Twitter which use information, community, and action codes [33, 34]. Despite the differences in the media, the two groups are able to achieve similar goals.

Framing this study within more critical theoretical approaches could have focused more on the relationship that exists between AIAN tribal communities and the broader, western culture. Existing scholarship from post-colonialism and subalternity have provided a theoretical basis for exploration of the historical aspects of misrepresentation of subaltern populations and their long-term effects, but this scholarship was not used to guide the overall design of this study. Rather, the goal of this study was to focus more on the social media platform as a mediating force, thus strongly motivating an activity theory approach.

6.3 Social Implications

What has been captured in the coding of imagery as shared through Instagram and the subsequent roles is the means and methods through which AIAN advocates are working in a loosely but nonetheless related manner to influence and shape cultural narrative through image sharing. The power of unifying imagery to depict what it means to be Native American, and the histories and backgrounds that such a designation implies, is strongly conveyed through image-heavy social media. While there is no guarantee that the sources of AIAN content being shared on Instagram are AIAN or indigenous in origin, the sourcing of visual representation shared to the broader community that is from individual advocates represents an opportunity for social and cultural development that is widely propagated while being distinct from traditional mass media sources and the histories in regards to colonialism and power structures they carry with them. Likewise, awareness of ongoing social challenges and issues facing the AIAN community is conveyed through the platform, adding to the milieu of factors influencing AIAN image-power. Image-heavy social media seems tailored toward this type of usage by advocates, given the power and limitations of the affordances provided by a platform such as Instagram. As individual advocates continue to expand their use of social media to fulfill their goals, the shape and form of imagery in regards to their intentions will evolve in response to this influence. This study therefore sought to capture the way one such community of advocates are using imagery, and theorize about the influences on usage and its effects on image-power.

6.4 Limitations

A relatively limited number of advocate profiles relevant to the AIAN community was found using the aforementioned search terms. As this set of search terms was derived via a brainstorming process, is almost certainly non-exhaustive. As such, the advocate roles could be further fleshed out with more cases to illustrate the way the various categories in the role taxonomy can manifest in practice.

Since it is impossible to verify the exact personal identities of the advocates included in this study through the Instagram interface (short of the account owners explicitly identifying themselves within their profile or their images), there is no guarantee that the advocates are themselves actually members of the AIAN community. Hence, the term "advocate" was used purposefully, as opposed

to “representative”, which would imply membership. Advocates, need not be explicitly members of the community, but rather express a viewpoint that seeks to promote that community in various ways. Thus, there is the potential that an advocate is, like the author, an external party to the AIAN community, and subject to the cultural barriers that exist whenever individuals or groups seek to construe social issues and individual mindsets from across that divide.

As previously noted, neither of the authors are AIAN or indigenous in origin, so as an interpretivistic qualitative study, the interpretation of imagery on Instagram is a reflection of the author’s backgrounds and socio-cultural contexts. It is therefore essential to frame the findings of this study relative to the interpretive process undertaken by the primary coder, and the aforementioned upbringing and contexts that have conditioned this interpretation. As the primary coder is an academic of United States origin with second-hand exposure to colonialism and its effects on the psyches of those who have been raised in the context of colonial rule through family members, this study is presented with an awareness of this interpretive lens. While the authors are aware of the shortcomings this may present to the overall analysis, we have purposefully avoided making specific cultural claims about particular AIAN tribal groups within the scope of this study, seeking to focus instead on broader social intent of imagery from AIAN advocate sources. It is the author’s hope that, in addition to being forthcoming, a broader analysis of Instagram content from these sources will mitigate this lack of direct cultural relatability.

Additionally, this study made no attempt to measure the impact of this content to the AIAN community. While this line of inquiry could potentially provide real development evidence for (or against) the role of social media in image portrayal, as well as strongly involving the AIAN community directly in the analysis, this is outside the scope of this study.

6.5 Future Directions

This study has provided evidence for the existence of various behavioral tendencies in regards to image sharing by AIAN advocates, in particular the tendency towards cultural unification and raising awareness through imagery, as well as an overall lack of focus on promoting explicit action or direct communication via the Instagram interface. Interpreting these findings requires understanding the role interface affordances in Instagram (and more broadly image-heavy social media platforms) play in affecting the type of content that is shared, a topic that is discussed here but not explored in depth. An affordance analysis will need to be framed not only in regards to the content shared, but also the pseudo-anonymous nature of individual advocates, where geolocation and name are hidden from the social community, and how that anonymity likewise affects content sharing tendencies.

This line of research framed within the broader postcolonial social context that many indigenous populations are currently culturally situated likewise opens up the possibility of critical analysis of the images advocates are sharing, and more generally, the way marginalized groups can push back on postcolonial representation of their culture. Although the author’s do not necessarily take a critical perspective for this study, it can nonetheless be seen as

paving the way for such approaches, especially as further explored by scholars who are not cultural outsiders to the AIAN community.

7 CONCLUSIONS

This study sought to shed light on the way that individual advocates of the AIAN community are utilizing image-heavy social media platforms to influence the imagery and image-power of AIAN culture. An activity theoretical perspective structured the study, providing an analysis of social media activity as an activity system.

A qualitative image analysis was used to generate a coding scheme which sought to capture the types of imagery that advocates are sharing through Instagram. The hierarchical nature of the scheme produced a novel role taxonomy, roughly analogous to labor divisions are utilized in organizational or social work in the activity theoretical sense.

The findings indicate that individual advocates focus on providing unification through depictions of AIAN culture, and taking a critical social perspective by presenting imagery that seeks to raise awareness about ongoing social issues and challenges facing the community. As a result, the sample of advocates had strong representation of profiles that take on cultural identification role behavior.

These levels of relative reliance were theorized to be largely influenced by the capabilities and limitations of Instagram’s interface affordances, identifying the relative anonymity of the Instagram platform and its restricted communication and organizing potential as having an effect on the imagery shared by advocates.

These findings contribute to an overall understanding of individual advocate behaviors as manifested within image-heavy social media platforms, as well as extending the activity theory framework from well-defined organizations to a community that is minimally managed but nonetheless have a similar intention to influence a shared social object. In this case, the shared object is AIAN image-power.

As advocates of various groups continue to increase their leveraging of image-heavy social media platforms, an understanding of the way that socio-cultural issues intermingled with technological interface affordances influences image sharing will become a more necessary section of scholarship with implications for advocates, designers, and the broader socio-cultural context within which those relationships are situated.

ACKNOWLEDGMENTS

The authors would like to thank Dr. Eileen Trauth for providing essential feedback on the progress and development of this study, Daniel Hellman for his helpful suggestions on the coding procedures, as well as the anonymous reviewers whose comments proved to be illuminating for the topic at hand.

REFERENCES

- [1] Valerie Alia. 2010. *The New Media Nation: Indigenous People and Global Communication*. Berghahn Books.
- [2] Bahar Baran and Kursat Cagiltay. 2010. The Dynamics of Online Communities in the Activity Theory Framework. *Educational Technology & Society* 13, 4 (2010), 155–166.
- [3] Valerie Barker. 2009. Older Adolescents’ Motivations for Social Network Site Use: The Influence of Gender, Group Identity, and Collective Self-Esteem. *CyberPsychology and Behavior* 12, 2 (2009), 209–213. <https://doi.org/10.1089/cpb.2008.0228>

- [4] Fred Beauvais. 1989. Limited Notions of Culture Ensure Research Failure. *American Indian and Alaska Native Mental Health Research* 2, 3 (1989), 25–28.
- [5] Olav W. Bertelsen and Susanne Bodker. 2003. Activity Theory. In *HCI Models, Theories, and Frameworks: Toward a Multidisciplinary Science*, John M. Carroll (Ed.), Morgan Kaufmann Publishers, San Francisco, CA, Chapter 11, 291–324.
- [6] Thomas Biolsi. 1991. "Indian Self-Government" as a Technique of Domination. *American Indian Quarterly* 15, 1 (1991), 23–28. <http://www.jstor.org.ezaccess.libraries.psu.edu/stable/pdf/1185207.pdf?refreqid=excelsior>
- [7] Therese Bissell. 2004. Digital Divide Dilemma: Preserving Native American Culture While Increasing Access to Information Technology on Reservations. *Journal of Law, Technology, and Policy* 2004, 1 (2004), 129–150. <http://heinonlinebackup.com/hol-cgi-bin/get>
- [8] K Charmaz. 2002. Qualitative Interviewing and Grounded Theory Analysis. In *Handbook of Interview Research*, Jaber F. Gubrium and James A. Holstein (Eds.), SAGE Publications, Inc., Chapter 32, 675–694.
- [9] Lindley Curtis, Carrie Edwards, Kristen L. Fraser, Sheryl Gudelsky, Jenny Holmquist, Kristin Thornton, and Kaye D. Sweetser. 2010. Adoption of social media for public relations by nonprofit organizations. *Public Relations Review* 36, 1 (2010), 90–92. <https://doi.org/10.1016/j.pubrev.2009.10.003> arXiv:1106.1852
- [10] Homero Gil de Zúñiga, Nakwon Jung, and Sebastian Valenzuela. 2012. Social Media Use for News and Individuals' Social Capital, Civic Engagement and Political Participation. *Journal of Computer-Mediated Communication* 17, 3 (2012), 319–336. <https://doi.org/10.1111/j.1083-6101.2012.01574.x>
- [11] Yrjö Engeström. 1987. *Learning by Expanding: An Activity-Theoretical Approach to Developmental Research*. Orienta-Konsultit Oy, Helsinki.
- [12] Yrjö Engeström, Reijo Miettinen, and Raija-Leena Punamäki (Eds.). 1999. *Perspectives on Activity Theory*. Cambridge University Press, Cambridge.
- [13] B. Faber. 2002. *Community Action and Organizational Change: Image, Narrative, Identity*. SIU Press, Carbondale, IL.
- [14] Federal Communications Commission. 2015. *FCC Find U.S. Broadband Deployment Not Keeping Pace*. Technical Report. 1–2 pages. <https://transition.fcc.gov/Daily>
- [15] E. F. Foulks. 1989. Misalliances in the Barrow Alcohol Study. *American Indian and Alaska Native Mental Health Research* 2, 3 (1989), 7–17.
- [16] Martin Gibbs, James Meese, Michael Arnold, and Bjorn Nansen. 2015. #Funeral and Instagram: death, social media, and platform vernacular. *Information, Communication & Society* 18, 3 (2015), 255–268. <https://doi.org/10.1080/1369118X.2014.987152>
- [17] Faye Ginsburg. 1991. Indigenous Media: Faustian Contract or Global Village? *Cultural Anthropology* 6, 1 (1991), 92–112.
- [18] Faye Ginsburg. 1995. Mediating Culture, Indigenous Media, Ethnographic Film and the Production of Identity. In *Fields of Vision. Essays in Film studies, Visual Anthropology and Photography*, 256–291.
- [19] Ralph Gross and Alessandro Acquisti. 2005. Information revelation and privacy in online social networks. In *ACM Workshop on Privacy in the Electronic Society (WPES) 2005*, 11. <https://doi.org/10.1145/1102199.1102214>
- [20] Suraya Hamid, Jenny Waycott, Sherah Kurnia, and Shanton Chang. 2010. The Use of Online Social Networking for Higher Education from An Activity Theory Perspective. In *14th Pacific Asia Conference on Information Systems (PACIS 2010)*.
- [21] Gyeong Mi Heo and Romee Lee. 2013. Blogs and Social Network Sites as Activity Systems: Exploring Adult Informal Learning Process Through Activity Theory Framework. *Educational Technology and Society* 16, 4 (2013), 133–145. <https://doi.org/10.1111/j.1365-2923.2008.03175.x>
- [22] Beth B. Hess, Elizabeth W. Markson, and Peter J. Stein. 1995. Racial and Ethnic Minorities: An Overview. In *Race, Class, and Gender in the United States* (3rd ed.), P. S. Rothberg (Ed.), St. Martin's Press, New York, 258–269.
- [23] Felicia Hodge. 2012. No Meaningful Apology for American Indian Unethical Research. *Ethics & Behavior* 22, 6 (2012), 121023125706002. <https://doi.org/10.1080/10508422.2012.730788>
- [24] Mouwafa Househ. 2013. The Use Of Social Media In Healthcare: Organizational, Clinical, And Patient Perspectives. In *Enabling Health And Healthcare Through ICT: Available, Tailored, And Closer*, Karen L. Courtney, Omid Shabestari, and Alex Mu-Hsing Kuo (Eds.), IOS Press.
- [25] Philip N Howard, Aiden Duffy, Deen Freelon, Muzammil Hussain, Will Mari, and Mrawa Mazaid. 2011. Opening Closed Regimes: What Was the Role of Social Media During the Arab Spring? *Project on Information Technology and Political Islam* (2011), 1–30. <https://doi.org/10.1007/s13398-014-0173-7> arXiv:arXiv:gr-qc/9809069v1
- [26] Frederick E. Hoxie. 1984. *A Final Promise: The Campaign to Assimilate the Indians, 1880–1920*. University of Nebraska Press. <http://web.b.ebscohost.com.ezaccess.libraries.psu.edu/ehost/ebookviewer/ebook/bmxlYmtfXzcxOTQyX19BTg2?sid=89f82a6f-c938-4aa1-b73d-04cd75f5addc@sessionmgr102>
- [27] S. Kapidzic and S. C. Herring. 2015. Race, Gender, and Self-Presentation in Teen Profile Photographs. *New Media & Society* 17, 6 (2015). <https://doi.org/10.1177/1461444813520301>
- [28] Victor Kaptelinin. 1996. Computer-mediated activity: Functional organs in social and developmental contexts. *Context and consciousness: Activity theory and human computer interaction* (1996), 45–68.
- [29] Victor Kaptelinin and Bonnie Nardi. 2012. *Activity Theory in HCI: Fundamentals and Reflections*. Vol. 5. 1–105 pages. <https://doi.org/10.2200/S00413ED1V01Y201203HCI013>
- [30] Lawrence C Kelly. 1975. The Indian Reorganization Act: The Dream and the Reality. *Pacific Historical Review* 44, 3 (1975), 291–312. <https://doi.org/10.2307/3638029>
- [31] Peter A. Leavitt, Rebecca Covarrubias, Yvonne A. Perez, and Stephanie A. Fryberg. 2015. "Frozen in time": The impact of native American media representations on identity and self-understanding. *Journal of Social Issues* 71, 1 (2015), 39–53. <https://doi.org/10.1111/josi.12095>
- [32] Jessa Lingel and Adam Golub. 2015. In Face on Facebook: Brooklyn's Drag Community and Sociotechnical Practices of Online Communication. *Journal of Computer-Mediated Communication* 20, 5 (2015), 536–553. <https://doi.org/10.1111/jcc4.12125>
- [33] Kristen Lovejoy and Gregory D. Saxton. 2012. Information, Community, and Action: How Nonprofit Organizations Use Social Media. *Journal of Computer-Mediated Communication* 17 (2012), 337–353. <https://doi.org/10.1111/j.1083-6101.2012.01576.x> arXiv:1106.1852
- [34] Kristen Lovejoy, Richard D. Waters, and Gregory D. Saxton. 2012. Engaging stakeholders through Twitter: How nonprofit organizations are getting more out of 140 characters or less. *Public Relations Review* 38, 2 (2012), 313–318. <https://doi.org/10.1016/j.pubrev.2012.01.005> arXiv:1106.1852
- [35] Brian J. McNely. 2012. Shaping organizational image-power through images: Case histories of Instagram. *IEEE International Professional Communication Conference* (2012). <https://doi.org/10.1109/IPCC.2012.6408624>
- [36] Soraya Mehdizadeh. 2010. Self-presentation 2.0: narcissism and self-esteem on Facebook. *Cyberpsychology, Behavior, and Social Networking* 13, 4 (2010), 357–64. <https://doi.org/10.1089/cyber.2009.0257> arXiv:arXiv:1011.1669v3
- [37] Scudder Mekeel. 1944. Appraisal of the Indian Reorganization Act. *American Anthropologist, New Series* 46, 2 (1944), 209–217.
- [38] Debra Merskin. 1998. Sending up Signals: A Survey of Native American Media Use and Representation in the Mass Media. *Howard Journal of Communications* 9, 4 (1998), 333–345. <https://doi.org/10.1080/106461798246943>
- [39] Heather Molyneux, Susan O'Donnell, Crystal Kakekaspan, Brian Walmark, Philipp Budka, and Kerri Gibson. 2014. Social Media in Remote First Nation communities. *Canadian Journal of Communication* 39, 2 (2014), 275–288.
- [40] Bonnie A. Nardi. 1996. Activity Theory and Human-Computer Interaction. In *Context and Consciousness: Activity Theory and Human-Computer Interaction*, 7–16. https://doi.org/10.1207/s15327884mca0501_7
- [41] John Norwood. 2012. Rev. John Norwood Testimony. (2012), 12 pages.
- [42] Gustavo Henrique Maultasch Oliveira and Eric W. Welch. 2013. Social Media Use in Local Government: Linkage of Technology, Task, and Organizational Context. *Government Information Quarterly* 30, 4 (2013), 397–405. <https://doi.org/10.1016/j.giq.2013.05.019>
- [43] Eileen Y L Ong, Rebecca P. Ang, Jim C M Ho, Joylynn C Y Lim, Dion H. Goh, Chei Sian Lee, and Alton Y K Chua. 2011. Narcissism, extraversion and adolescents' self-presentation on Facebook. *Personality and Individual Differences* 50, 2 (2011), 180–185. <https://doi.org/10.1016/j.paid.2010.09.022>
- [44] Tiffany A. Pempek, Yevdokiya A. Yermolayeva, and Sandra L. Calvert. 2009. College students' social networking experiences on Facebook. *Journal of Applied Developmental Psychology* 30, 3 (2009), 227–238. <https://doi.org/10.1016/j.appdev.2008.12.010>
- [45] Stephanie Craig Rushing and David Stephens. 2011. Use of Media Technologies by Native American Teens and Young Adults in the Pacific Northwest: Exploring Their Utility for Designing Culturally Appropriate Technology-Based Health Interventions. *Journal of Primary Prevention* 32, 3–4 (2011), 135–145. <https://doi.org/10.1007/s10935-011-0242-z>
- [46] Johnny Saldaña. 2009. *The Coding Manual for Qualitative Researchers*. Sage, London.
- [47] Michael D. Slater. 2007. Reinforcing spirals: The mutual influence of media selectivity and media effects and their impact on individual behavior and social identity. *Communication Theory* 17, 3 (2007), 281–303. <https://doi.org/10.1111/j.1468-2885.2007.00296.x> arXiv:arXiv:1011.1669v3
- [48] Gayatri Chakravorty Spivak. 1988. Can the Subaltern Speak? In *Marxism and the Interpretation of Culture*.
- [49] Ramesh Srinivasan. 2006. Indigenous, Ethnic, and Cultural Articulations of New Media. *International Journal of Cultural Studies* 9, 4 (2006), 497–518.
- [50] Michele M. Strano. 2008. User Descriptions and Interpretations of Self-Appearance through Facebook Profile Images. *Journal of Psychosocial Research on Cyberspace* 2, 2 (2008).
- [51] F. Stutzman. 2006. An evaluation of identity-sharing behavior in social network communities. *International Digital and Media Arts Journal* 3, 1 (2006), 10–18. <https://doi.org/10.1.1.91.617>
- [52] J Treem and Paul M. Leonardi. 2012. Social Media Use in Organizations: Exploring the Affordances of Visibility, Editability, Persistence, and Association. *Communications Yearbook* 36 (2012), 143–189.

- [53] Morgan Vigil and Elizabeth Belding. 2014. Social Media Locality in a Tribal Network. *Proceedings of the Fifth ACM Symposium on Computing for Development* (2014), 119–120. <https://doi.org/10.1145/2674377.2678269>
- [54] Morgan Vigil, Elizabeth Belding, and Matthew Rantanen. 2016. Repurposing FM: Radio Nowhere to OSNs Everywhere. *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing - CSCW '16* (2016), 1258–1270. <https://doi.org/10.1145/2818048.2820001>
- [55] Morgan Vigil, Matthew Rantanen, and Elizabeth Belding. 2014. A First Look at Tribal Web Traffic. In *Proceedings of the 24th International Conference on World Wide Web*. ACM, 1155–1165. <https://doi.org/10.1145/2736277.2741645>
- [56] A. S. Wolf. 1989. The Barrow Studies: An Alaskan's Perspective. *American Indian and Alaska Native Mental Health Research* 2, 3 (1989), 35–40.
- [57] Susan Wyche, Tawanna R Dillahunt, Nightingale Simiyu, and Sharon Alaka. 2015. "If God Gives Me The Chance I Will Design my Own Phone": Exploring Mobile Phone Repair and Postcolonial Approaches to Design in Rural Kenya. In *2015 ACM International Joint Conference on Pervasive and Ubiquitous Computing*. ACM.

PREPRINT