

An Exploration of Poverty in Central Appalachia: Questions of Culture, Industry, and Technology

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Cara Robinson

Tennessee State University, Department of Social Work and Urban Studies, U.S.A.

Abstract: By most government statistical definitions, Central Appalachia is one of the most impoverished regions in the United States. Many of the region's residents are lowincome, dependent on government benefits, have high rates of obesity and diabetes, and low rates of college educational obtainment. Central Appalachia is historically tied to the coal mining and railroad industries. Many scholars believe this historical bond created an internal colony of company-dependent residents who have been unable to transition successfully from those industry's boom eras or escape the lingering effects of industry environmental, health and economic degradation. While coal mining stripped the land of Central Appalachia and often cheated its residents from access to economic well-being and opportunity by traditional American definitions, Central Appalachians have created a rich culture based on kinship, religion, fatalism and community pride. Today, significant questions arise regarding the impact of advanced communication technologies and the associated infiltration of a monolithic standard for American success; success defined by material gain idealized by middle-class suburban living. While advanced communication technologies are often praised for their capacity to advance education, employment and cross-cultural understanding, in regions such as Central Appalachia, they may undermine the foundation of culture the residents have built in order to survive decades of isolation and exploitation.

Keywords: poverty, Appalachian Studies, internal colonialism theory, digital inequality, ICT

Introduction

The relationship between technology, culture and poverty is complex. The advances of our new technological age lead some to proclaim that voices from all segments of global society are emancipated. In their eyes, the internet and its associated platforms creates a method for a globalized mixing bowl of cultural understanding and communication (Best and Kellner

2001). Conversely, some proclaim that these same technologies are actually homogenizing society. Essentially, the internet acts as a hegemonic tool through which mainstream western culture is setting the accepted standard of discourse (Kellner 2003). Both viewpoints have merit. On one hand the internet provides users with information about anything within seconds and, concurrently, provides space for communication across the globe. On the other hand, those with the most power through website ownership mimic those with the most power in standard society ("State of the Blogosphere" 2010). Within the United States there is an important discussion as to whether the infiltration of the internet equals an empowerment of cultures while serving as a space to gain knowledge previously unattainable for large segments of society or is it a space where a monolithic, standardized culture is weeding out subcultures; thereby, changing self-perceptions of those traditional subcultures? This is especially important for those traditional subcultures which many believe have been victims of internal colonization.

One disenfranchised subculture within American society that has been referred to as an internal colony is that of Central Appalachia. Central Appalachia is one of the most impoverished regions in the United States. Residents of the region have lower educational rates, lower income and wealth, higher levels of obesity and disease and less access to long-term, stable middle class wages and jobs than the majority of American communities. Central Appalachia also has a distinct culture that differs largely from traditional, middle class American culture. The geographic segregation of the region due to its heavy mountain terrain, its economic ties to coal mining and the longstanding, developed family networks has created an isolated community rooted strongly in the values of familial kinship, Christian Protestantism, community pride and fatalism (Appalachian Culture, n.d.). The strong ties of the region's residents to the coal mining occupation has had a substantial influence on Central Appalachian culture and its economic and social conditions. The long-standing reality for Central Appalachian residents has been one of great pride and great poverty. Geographic, cultural and social isolation have, however, always been a key component of that reality.

This paper explores Central Appalachia by contrasting the sobering statistics on resident health and quality of life with the region's strong traditions and its maintenance of cultural values in the face of an ever-changing society. The paper reviews and assesses the role of culture and technology in combating and enhancing perceptions and realities of poverty for a newly, digitally, non-isolated subculture by exploring the relationship between technology and persons in poverty as well as the way in which social issues in the Central Appalachian region specifically are being discussed online.

Central Appalachia and Internal Colonialism

The internal colony theory is one rooted in the spread of capitalism, globalization, and nation-building. There are varying definitions of an internal colony and the process of internal colonization. Loosely, internal colonialism can be defined as, the exploitation of a minority by a majority within a country's boundaries. Economic, social, and political power is suppressed to benefit the majority. The experiences of many minority groups have been studied utilizing the internal colony framework. These groups include African-Americans, Hispanics and Chinese immigrants in the United States; Inuits in Canada; and, indigenous groups across North America. Each of these groups experienced economic, territorial and institutional segregation, the denial of full citizenship rights and economic exploitation for the benefit of the majority. Scholars, notably Helen Lewis (1978) have also examined Central Appalachia through the theoretical lens of Internal Colonialism. It has been said that Central Appalachia is an internal colony because of the economic exploitation by the coal

mining industry of the region's residents, the violence of the coal mining industry on humans and the environment (leaving a vulnerable, unstable, isolated population), outside ownership of local land/minerals/resources and the dependency of the region on this singular, institutionalized, corporate sector including the political arena (dependent on coal industry donations). Central Appalachians were working the mines to power the electric grids across America at great personal risk (for the benefit of the greater society).

Caught up in the social complex of the new industrial communities, many mountaineers found themselves unable to escape their condition of powerlessness ant, dependency. By coming to a coal mining town, the miner had exchanged the in-dependence and somewhat precarious self-sufficiency of the family farm for subordination to the coal company and dependence upon a wage income. He lived in a company house; he worked in a company mine; and he purchased his groceries and other commodities from the company store. He sent his children to the company school and patronized the company doctor and the company church. The company deducted rent, school, medical and other fees from his monthly wage, and under the prevailing system of scrip, he occasionally ended the month without cash income. He had no voice in community affairs or working conditions, and he was dependent upon the benevolence of the employer to maintain his rate of pay. (Lewis 1978, p. 41)

Much has been written on the isolation of Central Appalachia. Its unique topography, rural populace, historical coal mining legacy and strong community culture have led many to identify the region as highly isolated. This isolation has contributed to the popular image of local residents as hillbillies; a negative image that serves as a central piece of cultural identity and contributes to a suspicion of outsiders. (Slocum 2012) Traditionally, "people raised in Appalachia were viewed as unfit for urban life, because it was assumed that their acculturation, values, education and training failed to prepare them to adapt to a rapidly changing, highly technological, urban America... Appalachians were often forced to choose between leaving their environments or risking lifelong poverty." (Sarnoff 2003, p.124) While many Central Appalachians have left the region in pursuit of a better economic future, many of Central Appalachia's people choose to stay.

Alternatively; David Walls (1978) – using the internal colony framework of van den Berghe (1957) – argues that Central Appalachia does not meet the rigorous standard as an internal colony. The region's residents are not a racial or ethnic minority, were not forced into settlements within territorial Central Appalachia and there is not a separate governmental agency or legal status for the region's residents. Walls does, however, see Central Appalachia as a region on the internal periphery. "...it seems reasonable to me to apply the term peripheral to such regions within advanced capitalist countries as Appalachia which share many of the characteristics of underdevelopment, poverty, and dependency found in the peripheral countries of the Third World." (Walls 1978, p. 13) The application of the periphery theory to Central Appalachia recognizes that the region's economic and social development lags behind the "core" of American society and that the region's residents are not directly benefiting from the greater prosperity of the nation. Both theoretical analyses (internal colony and internal periphery) discuss Central Appalachia's singular industrial dependence, cultural isolationism and entrenched poverty as key regional characteristics. While the internal periphery gives credence to the "otherized" nature of Appalachian residents, the internal colony theory really focuses on this otherization by identifying the residents as a distinct cultural group. In other words, the internal colony theory sees Central Appalachians as a distinct group akin to a colonialized population not just victim of economic

exploitation – the defining feature of a population in the internal periphery (Mattox 2015). "A group of people is colonized if and only if they are socially subordinate to some culturally, socially, or politically distinct group that discursively marks the colonized as having some perceived or imaginary ethnic (cultural, social, bodily, and/or political) inferiority which makes them the target of such oppression." (Mattox 2015, p. 7) The distinct nature and history of poverty and culture within Central Appalachia have created a stereotypical Central Appalachian caricature or image (hillbilly, missing teeth, no shoes, heavy accent, prevalence of incest etc.) – one even used by President Lyndon Johnson to sell his War on Poverty initiatives. Central Appalachians have been otherized by the mainstream. Coupled with the history of economic exploitation the internal colony theory provides an important theoretical framework for discussing the interplay between Central Appalachians and our increasingly globalized, digital society.

The Realities of Central Appalachia

Central Appalachia is one of five subregions within the Appalachian region of the United States. The Central Appalachia region encompasses 29,773 square miles comprised of 82 counties in four states – Kentucky, Tennessee, Virginia and West Virginia. The majority of the counties (53) are located in the state of Kentucky while the remaining are disbursed between the other three states (fifteen in Tennessee, seven in Virginia and seven in West Virginia). The Appalachian Regional Commission (ARC) designates Appalachian subregions based on geographic, economic and demographic factors for the purposes of research and analysis. These factors include unemployment rates, household poverty, employment type, and educational attainment¹.

Today, approximately two million people reside in Central Appalachia (Pollard and Jacobsen 2012). Central Appalachia has an older and whiter population than the United States at large. Central Appalachia is also poorer, less healthy and less educated than most other regions within the United States. As of Fiscal Year 2013 49 of Central Appalachia's counties (60 percent) were officially designated as economically distressed: to be designated as economically distressed, a county must have a poverty and unemployment rate that is 150% of the national average (Appalachian Regional Commission 2007). Currently, the region's poverty rate stands at 23 percent (as compared to 15 percent nationally). This rate is six percent higher than any of the other four Appalachian subregions. The unemployment rate is eight percent and the median income is \$32,887 per year (Pollard and Jacobsen 2012). The median income in 2012 was substantially below the national median of \$51,017 (DeNavas-Walt et al. 2013) and below each of the other Appalachian subregions by, at least, \$9,000. In addition, Central Appalachia still faces stark disparities in education and health as compared to the rest of nation. Twelve percent of Central Appalachian residents aged 25 and over have Bachelor's degrees, compared to 27 percent nationwide (Pollard and Jacobsen, 2012). "Central Appalachia...has higher rates of heart disease, cancer, particularly breast cancer, stroke, and chronic obstructive pulmonary disease (COPD) compared to the United States as a whole (Halverson, Ma, and Harner 2004)." (Pugh 2014, p.1) Fifty percent of Central Appalachian counties have only one hospital and 20 percent have zero (Appalachian Community Fund, n.d.). These statistics, while sobering, have been a part of Central Appalachian life for decades and an image seared into the American mindset.

¹ Appalachian Regional Commission - Map of the Appalachian Subregions: http://www.arc.gov/research/MapsofAppalachia.asp?MAP_ID=31

The realities of Central Appalachian poverty became part of the American mainstream psyche in the late 1950s and early 1960s when scholars and journalists started taking an interest in the striking poverty of the region. Books were written, documentaries released and campaigns waged to help the people within the area. Unfortunately, the region's residents were often used as the face of American poverty in policymaking and political arenas. The images of the poor mountain child with dirt on his face, messy hair, torn pants standing on a dilapidated house on a mountainside became the common image of a Central Appalachian resident. These images, while highlighting the inequities and inequalities faced by residents, further separated the Central Appalachian people from mainstream life. The Appalachian Regional Commission (ARC) was created to help develop the area, federal anti-poverty programs sent in service workers and religious organizations created mission projects to "save" local residents. Essentially, Central Appalachians had become an "other" needing to be rescued within American society.

Central Appalachia and Coal

While the mainstream image of Central Appalachia was one of extreme poverty and need, the Central Appalachian people had created a culture of resilience and determination rooted in deep religious faith after decades of work in coal mining and related industries. Coal mining to Central Appalachians is what lobster fishing is to Mainers or banking is to Manhattan. It has been the core of Central Appalachian economic development and, at the same time, hardship. The relationship has traditionally been long, complex, and violent (Gaventa, 1980). While coal mining historically provided the main source of employment in the region it also created communities built on corporate control. Miners were underpaid (and fought with their life for unionization), they often resided in company towns where everything from the stores to the schools were owned by the coal mining companies and, lastly, their occupation was inherently dangerous (and made more dangerous by lax safety standards and oversight). Unionization fights were notoriously bloody (see the Battle of Blair Mountain) as workers did not even have access to private space in which to organize. Company towns were owned exclusively by coal mining companies and non-company towns were run (through political and legal networks) by coal mining companies. Unionization did finally succeed in the region's mines but the almost singular dependence for economic development on coal companies continued. Still today, it is very difficult for individuals to own land in Central Appalachia. Due to the value of coal much of the land and mineral rights are owned by the industry (Gaventa 1980). Sixty percent of the land and eighty percent of the minerals in Central Appalachia are owned by outside coal interests (Burns 2007). The changing nature of the coal mining industry has created a community suffering the short and long-term effects of coal mining while receiving little benefit from its continued operation.

In 1932, the Appalachian coal mining industry employed 705,000 miners (Lewis 1978). Advances in modern technology and the coal mining industry are intertwined. While large portions of the Central Appalachian public came to directly and indirectly rely on coal for their economic well-being, the coal mining industry began to make technological advances to mechanize the industry. This mechanization transformed coal mining from a person-based, underground operation to a machine-based surface mining operation (the wage and safety gains made through unionization were lost through mechanization as a labor force was no longer needed). As a result, the region suffered significant job losses and, subsequently, losses in economic spending associated with an employed middle class labor base. "Coal employment has declined from approximately 475,000 jobs at the end of World War II to only around 38,000 today. From 1973 to 2003, the region lost 62 percent of its coal jobs."

(Coal and the Future, Para. 1) Moreover, the region has taken another hit with the increase in more profitable coal mining in the country's western states (e.g. Wyoming). In two years (2011-2013), Harlan County, Kentucky (one of the nation's poorest counties) went from 44 active mines to 22 (Maher 2013). The combined influence of mechanization and competition have left the region's residents with additional strains in an already economically distressed region.

Corresponding to an increase in surface mining practices, the number of mining jobs in Appalachia has declined by more than 50% between 1985 and 2008 (Freme, 2008). These declining economic opportunities place the population at greater risk for layoffs, job loss (with corresponding multiplier effects through local economies), and poverty. (Hendryx, 2011, p. 45)

Surface mining and its most destructive form, MTR (mountaintop removal) mining, cause many harmful environmental and human impacts in Central Appalachia. The blasting of the mountain peaks often causes local homes and buildings, many of which are old, to be rocked off of their foundations; thereby, further impacting one of the few community assets in the economically distressed local towns and cities. Mountaintop removal alone has blown off 1.4 million acres of mountain top since 1970 (Sierra Club, n.d.). The blasting and mining processes also create substantial health impacts in these communities. The coal dust settles on local buildings and in the lungs of residents. Asthma and cancer rates in Central Appalachia are among the highest in the nation. Further, local rivers and forests are being polluted and destroyed by coal sludge. The region's best asset, its natural landscape, has been used to feed big coal rather than to feed the economic needs of the residents (e.g. through tourism) (I Love Mountains [ILM] 2007; Clean Air Task Force 2002).

The industry that helped build the region and molded its resilient culture have left it with little else to rely on. It has been be said that the previous reliance of the region on coal for employment, business development, economic well-being and infrastructure created an internal colony (Lewis 1978).

The Digital Society and Poverty

As with the mechanization of the coal mining industry, technological advances have been a mixed bag for many of America's poor and disenfranchised. Mechanization in particular has afforded companies with the capacity to continue producing at a high rate while reducing labor costs; therefore, many industries which had been the backbone of local communities reduced payroll and abandoned factories, mines and mills which resulted in economic devastation for cities across the nation. In an isolated region like Central Appalachia, which had been primarily dependent on coal mining, there is little to fall back on. Concurrent to industry mechanization, however, advances in computers and communication have created another reality for the disenfranchised. The vast wealth of knowledge on the internet coupled with its capacity to link individuals globally has opened up the globe and its innovations to individuals in isolated regions.

In a study titled, "Information Economy Report 2010: ICTs, Enterprises and Poverty Alleviation," the UN body [United Nations Conference on Trade and Development] said that on the back of the widening diffusion of information and communications technologies (ICTs)--especially mobile telephones--new micro-enterprises are mushrooming in developing countries, creating new livelihoods for the poor. (Amojelar 2010, Para. 2)

In addition to providing internet access and tools to the disenfranchised, internet technologies have, and have additional capacities to, change the face of poverty reduction strategies, community organizing and civic engagement. These innovations have changed the way in which individuals interact with their computers and one another. The internet has provided communities across the globe with mechanisms to foster empowerment among local residents, innovate techniques for business development (e.g. microfinance) and build community-based systems for governance and participation. Even with these exciting changes, however, big questions regarding access, online stratification and participation remain. Moreover, questions regarding the impact of these technologies on the loss of local cultures is of large concern (Bissell 2004; Postman 2011).

What Does Digital Inequality Mean?

Historically, concerns of access to the internet were a large focus of policymakers concerned about the equitable distribution of the internet. As concerns of access have diminished across the United States, many policymakers and advocates are now focused on a new set of internet concerns – those dealing with digital inequality. This new set of concerns centers largely on the differences between populations based on what they do online and how they do it not simply whether different populations have physical access to the online environment. Moreover, digital inequality looks at the political economy of internet usage and how it impacts relationships between populations and internet usage.

As the technology penetrates into every crevice of society, the pressing question will be *not* 'who can find a network connection at home, work, or in a library or community center from which to log on?', but instead, 'what are people doing, and what are they *able* to do, when they go on-line.' Second, we would recognize that the "Internet" itself is not a fixed object, but rather a protean family of technologies and services that is being rapidly reshaped through the interacting efforts of profit-seeking corporations, government agencies and nongovernmental organizations. Patterns of inequality will reflect not just differences in individual resources, but also the way in which economic and political factors make such differences matter. (DiMaggio & Hargittai 2001, p. 3-4)

Looking at these questions of digital inequalities creates the opportunity for meaningful examination into a potential effect of the legacy of economic and political decisions on a subpopulation (i.e. the legacy of internal colonialism in Central Appalachia) as evidenced by online activity.

The new poverty created from digital inequality reflects the structural social-economic dimensions of the rest of society. Ono and Zavodny (2007) found that this new poverty based on digital inequality was reflective across five different countries on three different continents. Norris (2001) characterized this new poverty as creating technological-based groups of haves and have-nots. The have and have-nots divide is evident in three areas – technology (type of equipment, capabilities of internet connection type), proficiency (skills-knowledge of available tools and how to use them online), and opportunity (outcomes of internet use – financial investment, employment opportunities, knowledge building) (Whitacre & Mills, 2007; Hargattai, 2007; Mossberger, Tolbert, & Stansbury, 2003). Hargittai and Hinnent (2008) suggest that there are clear distinctions between the types of activities in which users from middle and upper class backgrounds engage via internet versus those from lower class and impoverished backgrounds; specifically, what they call "capital-

enhancing" activities (employment opportunities, networking, financial advice, civic engagement) – those from middle and upper classroom backgrounds engage in more. These activities can potentially assist and improve the economic and educational opportunities for active users and, if that improvement is linked to the users original economic status, contribute to enhancing economic inequality through digital means (Hseih, Rei, &Keil, 2008). Thereby, if a subpopulation is starting from a foundation built on a history of internal colonialism, the internet can potentially serve to create a new form of poverty especially when society is increasingly reliant on digital technologies for job placement (e.g. LinkedIn), education (online courses), and civic engagement (e.g. Twitter, email, message boards, petitions).

Central Appalachia

Central Appalachia has faced significant barriers to internet participation from the onset. The topography of the region and its sparse population created obstacles for the introduction of internet (particularly broadband) in the region. Moreover, the poverty faced by the region's residents resulted in concerns regarding digital inequality as seen in other rural areas. "[There is a] persistent gulf in technological diffusion to rural areas results in a decreased propensity to take advantage of the opportunities that information and communication technologies provide for aiding users in everyday activities." (Stern, Adams, & Elsasser 2009, p. 413) Many individuals cannot afford the technology and as time went by, they fell further and further behind the learning curve due to the rapid rate of internet growth. Of particular note is the large number of seniors which reside in the region; a subpopulation which has had specific issues related to technological adaptation (LaRouge, Van Slyke, Seale & Wright 2014). As access concerns have been reduced, however, many Central Appalachians have begun to use the internet in traditional (e.g. research, gaming, social media, banking) and nontraditional ways.

The Central Appalachia Regional Network (CARN) has been a leader in utilizing online technologies to fight for broadband access and land ownership rights in the region. The Art of the Rural is utilizing community radio and internet streaming to showcase issues and culture in Central Appalachia. Finally, Appalshop is a nonprofit organization whose mission it is to highlight and preserve Central Appalachian culture through a variety of multimedia techniques including the vast array of internet options (e.g. photo cataloguing, internet storage and recording etc...). In addition, many organizations have used (and are using) internet technologies to organize. This is evident by the formation of websites with interactive tools such as Wikis, calendars, meetup groups etc... as well as Calls to Action posted via web technologies on websites and social media networks (e.g. Facebook).

Community organizing is a strategy employed across communities which focuses on bringing together residents in geographic locals and their allies to fight for or against a variety of issues affecting local well-being. The foundation of community organizing is empowerment and the role of community identity in mobilization. The internet has expanded traditional community organizing by opening up communication channels for the dissemination of information beyond the mass media and person-to-person based communication. This has been especially important for the organizations in Central Appalachia fighting against the coal industry and its harmful environmental practices.

While it is hard to dispute the role of the internet in community organizing, cultural preservation and advocacy, questions about the internet's role in homogenizing culture remain. One key question is how does the internet shape perception of poverty for disenfranchised communities?

Cultural Hegemony

Studies show that, in the United States, success on the internet is closely tied to the same standards which define success in the non-virtual world. In online political forums, for example, using the right type of language (no ethnic dialects, for example) is a key component to gaining popularity and respect. Most successful internet blogs are those belonging to middle to upper-middle class white men. (McLeod 2008, Pole 2010). 'Hegemony' [according to Gramsci] in this case means the success of the dominant classes in presenting their definition of reality, their view of the world, in such a way that it is accepted by other classes as 'common sense'. (Goldberg, n.d., Para. 1) Hegemony is the consistent implementation of processes, norms, rules, laws and policies across cultural institutions to create and enforce a dominant ideology. Studies have found that the online activity is largely confined to websites promoting cultural hegemony. At the same time, members of the non-dominant group do visit and spend time on websites with counterhegemonic themes at higher rates (Dorsher 1999). In a study of Latino uses of the internet, Lillie (1998) found

Members of virtual communities do engage in types of social uses such as maintenance of a collective identity shared with other members of virtual communities. The survey results show that communication with other US Latinos for the purpose of sharing personal experiences and ideas about Latinos has been a valuable use of Internet technologies for most of the respondents (Section VI).

Findings indicate that members of minority groups can and do utilize online sources to discuss, maintain and strengthen culture but at the same time the internet structure itself is dominated by a few websites promoting a hegemony. While the ideal of the internet may be a tossed salad of diverse cultures the reality may mean a more globalized assimilation of cultures. This potential reality raises important questions for the maintenance of subcultures (particularly those within disenfranchised communities) and perceptions of wealth and poverty. As society moves more toward a digital reality do subcultures find a place to thrive or does language, image and value become a set standard across the globe?

The Central Appalachian Subculture and Perceptions of Poverty

The Central Appalachian subculture is rooted in familial kinship, Christian Protestantism, community pride and fatalism (Walls 1976; Welch 1999). Many families have a long history of residence in the region. The residential settlement patterns resulted in strong familial bonds as many settled together in areas known as hollers. These isolated areas between two mountains or hills created strong ties between residents due, largely, to the lack of immediate access to neighboring communities. Thus, community support and mutual reliance (familial and relational) is a key component of the subculture. This support and reliance is further enhanced by the relationship between the residents and the church. The majority of Central Appalachians are Protestant evangelicals ranging from the stereotypical snake handlers to Pentecostals to modern Methodists and Southern Baptists (Spiker 2014). Common characteristics of churches in the region include "...[an] independent church, strong emotionalism, the primacy of the Bible, and an uneducated ministry. Worship practices include conversionist preaching and rituals such as footwashing and baptism by immersion." (Rice, n.d., para. 7) Tied to this religious fundamentalism is the strong thread of fatalism

that exists in the Central Appalachian subculture. Traditionally, fatalism has been tied to religious fundamentalism (Quinney 1964). Central Appalachians accept life's good and bad and the conditions associated with its realities. "Fatalism and religious fundamentalism developed to deal with the harshness of the land, the consequences of poverty, and the physical isolation." (Elam 2002, p. 10) One area where this fatalism is most prevalent is in healthcare. "An equal barrier to controlling diabetes, Salyers [a former County Health Director in the region] says, is a deep-seated fatalism about both health and poverty. "They come in and say, 'It runs in the family. I've known I'm going to get it. Just give me a pill." (Browning 2012, para. 12) Lastly, dealing with these realities has also contributed to strong strains of community and civic pride among Central Appalachians. The region's cultural folk art and music are key components of the American tapestry. Across Central Appalachia, museums, antique shops and tourism stops have all been opened focused on the promotion of and education about these rich traditions.

Family, faith and fatalism have shaped the Central Appalachian subculture and helped the residents face the hardships associated with poverty. Inevitably these hardships also helped shape resident perception of poverty. Poverty has been found to create long-term disparities in health, education and employment; however, research has found that when individuals live in communities where people experience similar hardships, the self-perceptions of poverty are less stigmatized.

Those with concealable stigmas (students who indicated that they were gay, that they were bulimic, or that their family earned less than \$20,000 each year) reported lower self-esteem and more negative affect than both those whose stigmas were visible and those without stigmatizing characteristics. Only the presence of similar others lifted the self-esteem and mood of students with concealable stigmas... Thus, contact with similar others protects the psychological self from negative cultural messages. (Frable, Platt, and Hoey 1998, p. 909)

In the past, the isolation of Central Appalachia certainly contributed to less stigmatization of economic class differences. Historically, images of Central Appalachia were used to gain national support for the War on Poverty. The images of poor mountain white kids were utilized to counter the idea that War on Poverty programs were going to only help minorities. These images became internalized by many of the region's residents who, prior to the mainstreaming of Central Appalachian poverty, did not include "being poor" as a main cultural characteristic or identity. In the case of Central Appalachia, it is important to consider the transition of these cultural messages in the digital age where images and interaction are no longer severely limited to those in your immediate networks and neighborhoods. Rather than simply relying on those closest to you by physical proximity for interaction and communication, Individuals create their own identities online through the autonomous sharing and transfer of information across networks chosen by the individual and this autonomy has transformed social relations and, by extension, cultural exchange. "What is clear is that without the Internet we would not have seen the large-scale development of networking as the fundamental mechanism of social structuring and social change in every domain of social life." (Castells 2013: p. 145).

The internet can be used a means to promote self-pride, access previously inaccessible information and/or create a new personal reality. All of these can have a positive impact on self-perceptions of poverty. While the internet (and media in general) seems to mainstream images of McMansions, Caribbean vacations, BMWs and Louis Vuitton as normal, those images can be easily counteracted by the characteristics of a subculture. The strong religious identity in Central Appalachia, for example, promotes the importance of living for the next stage of life and the idea that God only gives you what you can handle. This type of belief

system is echoed on social media sites across the internet. These mechanisms help the religious cope with hardship. For example, in his 2013 study, Knowles found that many religious organizations are now utilizing the internet effectively to promote traditional Christian beliefs including fatalism. Knowles examined the content of and moderation techniques of a popular Christian website, RaptureReady, and found that, "Internet is effectively utilized to strengthen religious authority." Howard (2011) contends that new religious communities rooted in fatalism have been formed in the discursive space of the internet. Beyond explicit religious-based websites, however, scholars have found that the internet can weaken and/or strengthen fatalistic attitudes amongst persons with life-threatening or life-altering diseases based on the type of resources sought online (Lee, Neiderdeppe, & Freres 2012).

Central Appalachia residents have also used the internet to form associations for and against a variety of political causes, to organize cultural events and to foster civic pride based on the strong history of the region. For example, in West Virginia, where the majority of resident still identify as Democrats, residents were not happy with the direction President Barack Obama was taking the nation². In 2012, the residents utilized the internet to organize support for a federal inmate as a primary challenger to Obama in the presidential race. The inmate garnered 40 percent of the vote (Associated Press 2012). Many West Virginians viewed this as taking a stand. Conversely, outsiders mocked the vote and the residents for their backwards views. The cultural clash was evident. Needless to say, however, this was a case where a subculture organized and resisted in the face of dominant hegemony despite the cries of "stupid hillbilly" being flung around the public sphere. The self-perception of Central Appalachians was one of resistance and rebellion not of stupid, dumb and poor.

The fight over mountaintop removal is also being played out online. Residents are strongly divided over the issue as coal is seen both as a cultural identity/source of pride and as an evil industry continuing to destroy. The common theme of both groups, however, is that neither see themselves as victims. They are fighting for what they view as right and the "true" values of Central Appalachia. The internet has afforded Central Appalachians with a means to change the perception of the region to outsiders and to, concurrently, reflect on the role of poverty as an image and reality. The internet is a double-edged sword; a means to communicate one's own message and to receive the strong messages of others. The influence of both has important implications for the Central Appalachian subculture. In addition, it is important to reflect on the legacy of internal colonialism on perpetuating digital inequality. Many of the activities in which Central Appalachians are engaged – mountaintop removal, community organizing - are rooted in needing to overcome the legacies of internal colonialism and economic exploitation. While these activities are potentially empowering, they also require time that those who are technological haves (versus have nots – see page 12) do not necessarily have to engage in. Central Appalachians are using the internet to empower through activities that give them rights already afforded to many technological haves ecological safety, basic income, and positive cultural stereotypes. Finally, the geographic isolation, demographics (e.g. aging population) and socioeconomic realities of Central Appalachia create an environment wherein internet knowledge and internet tools lag behind other United States regions; thus, potentially creating a new Central Appalachian digitallybased poverty.

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² President Obama's approval rating in West Virginia in Sept. 2012 was 32 percent (Public Policy Polling 2012)

Conclusion

Central Appalachia is a region in the midst of change and resistance. The region remains one of the poorest in the United States. The health of the residents and the environment are continuously under pressure from the coal industry and the negative effects are growing. The link between internal colonialism and the coal industry remain. Concurrently, the internet has created new ways for residents to integrate into mainstream American culture while also promoting the subculture of the region. The internet also has the capacity to the persistence of poverty through the formation of digital inequality. Today, Central Appalachia and its residents are still seen by mainstream Americans as poor and, often, hillbillies but, to some extent, the moniker of the hillbilly is now a source of pride. The internet allows for images of subcultures to come from the subculture itself. This alone creates the capacity for subcultures to change their own image and the perceptions of that image to self and society. There is more to Central Appalachia than poverty and the residents are proving it. Residents and policymakers alike, however, have to be mindful of the impact on and relationship to societal structural inequities that internet technologies have created and the reasons behind those inequities. Questions regarding the Central Appalachian internet experience remain.

References

- Amojelar, D. (2010, October 15) 'Internet, mobile phones can help reduce poverty.' *The Manila Times*. Retrieved January 23, 2014 from http://smart-grid.tmcnet.com/news/2010/10/15/5069270.htm
- Appalachian Community Fund (n.d.) *Did you know?* Retrieved March 12, 2011 from http://www.appalachiancommunityfund.org/html/aboutcentralA.html
- Appalachian Culture (n.d.) Mountain-Top.org. Retrieved January 12, 2014 from http://www.mountain-top.org/files/forms/Appalachian%20Culture.doc
- Appalachian Regional Commission (2007) *County Economic Data*. Retrieved April 12, 2011 from http://www.arc.gov/index.do?nodeId=56
- Associated Press (2012, May 9) Federal inmate makes strong showing against Obama in West Virginia Primary. Retrieved January 23, 2014 from http://www.foxnews.com/politics/2012/05/09/federal-inmate-makes-strong-showing-against-obama-in-west-virginia-primary/
- Best, S. & Kellner, D. (2001) *The Postmodern Adventure: Science, Technology, and Cultural Studies at the Third Millennium.* New York, NY: The Guilford Press.
- Bissel, T. (2004) 'The Digital Divide Dilemma: Preserving Native American Culture while Increasing Access to Information Technology on Reservations.' *Journal of Law, Technology and Policy* (1), 129–150.
- Browning, F. (2012, August 8) Diabetes in Appalachia: "Just Give me a Pill," *SALON*. Retrieved July 22, 2015 from http://www.salon.com/2012/08/08/diabetes_in_appalachia_just_give_me_a_pill/
- Burns, S. S. (2007) Bringing Down the Mountains: The Impact of Mountaintop Removal Surface Coal Mining on Southern West Virginia Communities. Morgantown: West Virginia University Press.
- Castells, M. (2013) 'The impact of the Internet on society: a global perspective.' In F. González (ed.) *Ch@nge. 19 Key Essays on How the Internet is Changing our Lives*. Madrid: BBVA, pp.127-148.

Clean Air Task Force (2002) North Carolina state profile of exposure to coal-fired power plants. Retrieved April 12, 2011 from http://www.catf.us/resources/factsheets/files/Children_at_Risk-North_Carolina.pdf

- Coal and the Future (n.d.) Retrieved February 1, 2014 Appalachian Transition. from http://www.appalachiantransition.org/coal-and-the-future/
- DeNavas-Walt, C., Proctor, B. D., Smith, J. C. (2013). 'Income, poverty, and health insurance coverage in the United States: 2012.' Resource document P60-245. U.S. Census Bureau. Retrieved July 12, 2015 from http://www.census.gov/prod/2013pubs/p60-245.pdf
- DiMaggio, P. & Hargittai, E. (2001) 'From the 'digital divide' to 'digital inequality': studying internet use as penetration increases.' Princeton University, Center for Arts and Cultural Policy Studies. Working Paper no.15. Retrieved July 12, 2015 from https://www.princeton.edu/~artspol/workpap/WP15%20-%20DiMaggio%2BHargittai.pdf
- Dorsher, M. D. (1999) Hegemony online: the quiet convergence of power, culture, and computers. Unpublished Doctoral Dissertation. University of Maryland at College Park. publ. nr. AAT9957137, 60(12), 4232(A).
- Elam, C. (2002) Culture, poverty and education in Appalachian Kentucky. *Education and Culture*, 18(1) 10-13.
- Frable, D., Platt, L. & Hoey, S. (1998) 'Concealable stigmas and positive self-perceptions: feeling better around similar others.' *Journal of Personality and Social Psychology*, 74(4), 909-922. CrossRef
- Gaventa, J. (1980) Power and powerlessness: Quiescence and rebellion in an Appalachian valley. Urbana: University of Illinois Press.
- Goldberg, M. (n.d.) Hegemony. Retrieved July 22, 2015 from http://faculty.washington.edu/mlg/courses/definitions/hegemony.html
- Halverson, J., Ma, L., Harner, J., Hanham, R., & Braham, V. (2004) *Adult Obesity in Appalachia: an Atlas of Geographic Disparities*. Morgantown, WV: West Virginia University.
- Hargittai, E. (2007) 'The social, political, economic, and cultural dimensions of search engines: an introduction.' *Journal of Computer-Mediated Communication*, 12(3), 769–777. CrossRef
- Hargattai, E. & Hinnant, A. (2008) 'Digital inequality differences in young adults' use of the Internet.' *Communication Research*, 35(5), 602-621. CrossRef
- Hendryx, M. (2011) 'Poverty and mortality disparities in Central Appalachia: mountaintop mining and environmental justice.' *Journal of Health Disparities Research and Practice*, 4(3), 44-53.
- Howard, R. G. (2011) Digital Jesus: The Making of a New Christian Fundamentalist Community on the Internet. New York, NY: New York University Press.
- Hsieh, J. J., Rai, A., & Keil, M. (2008) 'Understanding digital inequality: comparing continued use behavioral models of the socio-economically advantaged and disadvantaged.' *MIS Quarterly*, 32(1), 97-126. CrossRef
- I Love Mountains (2007) Frequently Asked Questions About Mountaintop Removal. Retrieved April 12. 2011 from http://www.ilovemountains.org/resources/
- Kellner, D. (2003) The Media Spectacle. New York, NY: Routledge.
- Lee, C-j., Niederdeppe, J, & Freres, D. (2012). 'Socioeconomic disparities in fatalistic beliefs about cancer prevention and the internet.' *Journal of Communication*, 62(6), 972-990. CrossRef

LaRouge, C., Van Slyke, C., Seale, D. & Kevin Wright (2014) 'Baby boomers' adoption of consumer health technologies: survey on readiness and barriers.' *Journal of Medical Internet Research* 16(9) e200. CrossRef

- Lewis, H. (1978) 'The colonialism model: the Appalachian case.' In Helen Lewis, Linda Johnson & David Askins (eds.), *Colonialism in Modern America: The Appalachian Case*. 9-31. Boone, NC: Appalachian Consortium Press.
- Lillie, J. (1998) Cultural uses of new, networked internet information and communication technologies: implications for US Latino identities [Master's Thesis]. The University of North Carolina at Chapel Hill. Retrieved February 1, 2014 from http://www.ibiblio.org/jlillie/thesis.html#vi
- Maher, K. and McGinty, T. (2013, November 26) Coal's decline hits hardest in the mines of Kentucky. *The Wall Street Journal*. Retrieved March 1, 2015 from http://online.wsj.com/news/articles/SB10001424052702304337404579212262280342 336
- Mattox, D. (2015) Construction an internal colony: the discursive construction of Appalachia. [Seminar Paper] Retrieved July 12, 2015 from http://www.academia.edu/9761365/Constructing_an_Internal_Colony_The_Discursive_Construction_of_Appalachia
- McLeod, S. (2008) Education Blogosphere Survey. Retrieved July 22, 2015 from http://www.scottmcleod.org/2008EducationBlogosphereSurveyResults.pdf
- Mossberger, K., Tolbert, C. J., & Stansbury, M. (2003) *Virtual Inequality: Beyond the Digital Divide*. Washington, DC: Georgetown University Press.
- Norris, P. (2001) *Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide*. Cambridge, MA: Cambridge University Press.
- Ono, H. & Zavodny, M. (2007) 'Digital inequality: a five country comparison using microdata.' *Social Science Research* 36(3), 1135-1155. CrossRef
- Pollard K. & Jacobsen, L.A. (2012) *The Appalachian Region: A Data Overview from the 2006-2010 American Community Survey*. Retrieved April 12, 2014 from http://www.arc.gov/assets/research_reports/PRB-DataOverview-2012.pdf
- Postman, N. (2011) *Technopoly: the surrender of culture to technology*. New York, NY: Vintage Books.
- Pugh, J. (2014) Down Comes the Mountain: Coal Mining and Health in Central Appalachia from 2000 to 2010. Paper presented at the Proceedings from Population Association of America (dissertation) University of Louisville. Retrieved October 12, 2015 from http://ir.library.louisville.edu/cgi/viewcontent.cgi?article=2161&context=etd
- Quinney, R. (1964) 'Political conservatism, alienation and fatalism.' *Sociometry* 27(3), 372-381. CrossRef
- Pole, A. (2010) *Blogging the Political: Politics and Participation in a Networked Society.* New York, NY: Routledge.
- Rice, C. (n.d.) Leonard, Bill J. ed. Christianity in Appalachia: Profiles in Regional Pluralism. (Knoxville: The University of Tennessee Press, 1999), xxxii, 328. Retrieved April 12, 2014 from http://are.as.wvu.edu/rice.htm
- Sarnoff, S. (2003) 'Central Appalachia still the other America.' *Journal of Poverty*, 7(1-2), 123-139. CrossRef
- Sierra Club (n.d.) *Mountaintop Removal*. Retrieved October 12, 2015 from http://www.sierraclub.org/tennessee/mountain-top-removal
- Slocum, A. (2012) Exploring Community Through Literature and Life: Adolescents Identity Positioning in Rural Appalachia. [PhD Dissertation] Ohio State University. Retrieved March 11, 2013 from http://rave.ohiolink.edu/etdc/view?acc_num=osu1345547728

Stern, M., Adams, A., & Elsasser, S. (2009) 'Digital inequality and place: the effects of technological diffusion on internet proficiency and usage across rural, suburban, and urban counties.' *Sociological Inquiry* 79(4), 391-417. CrossRef

- Spiker, J. (2014) The Commission on Religion in Appalachia and the twentieth-century emphasis on rural Identity [Master's Thesis]. East Tennessee State University. Retrieved July 23, 2015 http://dc.etsu.edu/etd/2332
- "State of the Blogosphere" (2010) *Technorati.com*. Retrieved October 15, 2015 from http://technorati.com/state-of-the-blogosphere-2010
- Walls, D. (1978) 'Internal Colony or Internal Periphery?' In Helen Lewis, Linda Johnson & David Askins (eds.), *Colonialism in Modern America: The Appalachian Case*. 319-341. Boone, NC: Appalachian Consortium Press.
- Welch, J. B., (1999) 'Uneven Ground: Cultural Values, Moral Standards, and Religiosity in the Heart of Appalachia. In Bill J. Leonard (ed.) *Christianity in Appalachia: Profiles in Regional Pluralism.* 52-72. Knoxville: University of Tennessee Press.
- Whitacre, B. E. and Bradford F. Mills (2007) 'Infrastructure and the Rural Urban Divide in High-Speed Residential Internet Access.' *International Regional Science Review*, 30(3) 249–273. CrossRef