



New Media Practices in Ghana

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This article discusses trends in the appropriation of new media in Ghana, as evidenced in existing literature on mobile phones, the Internet, new media production, and gaming. A few themes are evident: the emergence of “smart consumption” practices to mitigate the high cost of mobile phone communication; the association of the Internet with the potential for quick economic gains, leading to varying degrees of criminal or unethical behavior; and what appears to be a clear separation of expectations and approaches to the Internet and mobile phones as technological tools. For example, the Internet points users outward to potentially greener pastures in Western economies, but mobile phones ground users in their local context, keeping them linked to social and economic resources that are more readily accessible.

Introduction

In a November 27, 2007 newspaper column, prominent Ghanaian journalist and author Cameron Duodu lambasted the government of Ghana for proposing an excise duty on every minute of airtime used, thereby increasing the cost of mobile phone communication:²

Taxing mobile phone usage will kill romance stone dead! Forget about warm greetings. Forget about endearments. If it's a lady you're calling, just demand to know whether she's coming tonight or not. Forget about the difficulty she said she was experiencing about getting an appointment fixed with her hairdresser and the emotional support you can offer her by sympathizing with her plight. That's none of your business. . . . Go straight to the point and forget the telephone-lovie business. No more telephonic foreplay for you, you hear?! In other words, Kwadwo Baah-Wiredu, what you have done

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Date submitted: 2009-11-13

¹ The author thanks Maria Garrido, Heather Horst, Mizuko Ito, Cara Wallis, and the two anonymous reviewers for their input.

² This strategy was designed to overcome the problems associated with collecting duties on mobile phone imports. Instead, the import duty and value-added-tax would be abolished in favor of a tax on users.

is that you've killed romance stone dead in Ghana with your airtime tax! You will go down in history as the Finance Minister who reintroduced lack of communication between Ghanaian men and their female paramours. (Duodo, November 27, 2007)

Although the controversial law was eventually passed in March 2008, Duodo warned, "Make no mistake about it, mobile phones have made a great deal of difference to the lives of our ordinary folks and anyone who attempts to discourage their blossoming will be severely punished by them, come an election" (ibid). Whether these predictions materialize remains to be seen—the next national elections will be in 2012, and mobile phone subscriptions show no sign of declining—but Duodo's lament points to the growing centrality of mobile phone communication in Ghana.

It is noteworthy that, in his critique of the tax, Duodo chose to address its impact on social and personal relationships, rather than on other possible spheres of life such as business or politics. In most African countries, discussions of new media technologies are located within the discourse on digital divides and socioeconomic development. In the case of Ghana, there is an expressed political desire not only to facilitate human development via information and communication technologies (ICTs), but also to become the digital technology hub of the West African region (e.g., Jalulah, 2008; Odame, 2008; Republic of Ghana, 2003). In fact, the nation's ICT for Accelerated Development Policy states its objective "to accelerate Ghana's socio-economic development process towards the realization of the vision to transform Ghana into a high income economy and society that is predominantly information-rich and knowledge-based within the next two to three decades or less" (Republic of Ghana, 2003, p. 14).³

The level of new media technology use among the general Ghanaian population is, however, limited by the sparseness of the existing telecommunications infrastructure, although significant strides have been made in recent years (fueled by industry deregulation and restructuring). The fixed line infrastructure is generally poor, as there was just over one fixed line per 100 inhabitants in 2007. The deficiency has been filled by mobile telephony, which reportedly stands at 12 million subscriptions ("Ghana's Mobile Subscriber," 2009) and has a penetration rate of over 50%. Ghana was one of the first African countries to get connected to the Internet in 1989–1990. However, for most Internet users, public venues (mainly Internet cafés and telecenters) are the primary source of access. The cost of this form of shared access has continued to decline over the years, making it the most cost-effective option for the population. Until the mid 2000s, residential broadband lines were virtually nonexistent. Though generally priced out of the reach of most residents, there are now several companies that offer broadband and wireless Internet access packages to individuals and households. In 2007, there were 16,200 broadband subscribers, 23,400 Internet subscribers, and 880,000 Internet users in the country (International

³ As of 2007, Ghana had a population of 23 million with an approximately 50–50 rural-urban split (*CIA World Factbook*, 2009). The population is relatively young—about 60% are below the age of 25, and about 5% are over 65. Socioeconomic goals are hampered by high illiteracy rates (47%, as noted by the U.S. Department of State, 2009), high secondary school dropout rates—half of secondary school entrants do not make it to the senior level—and high poverty levels (40% of population below the \$1 poverty level, as noted by the Republic of Ghana, 2003).

Telecommunications Union, 2009). While Internet cafés are the primary source of Internet access, telephones—especially mobile phones—are by far the main means of interpersonal communication.

This article discusses trends in new media development and practice, placing them in a context of relatively low access levels and socioeconomic constraints. It is based on a review of literature on new media technologies in Ghana. Sources included published and unpublished academic articles, media reports, and personal and institutional blogs, as well as Web sites. The results suggest that new media practices in Ghana are characterized by tensions related to resource limitations, and users' attempts to appropriate new media technologies to meet their individual goals. On the one hand, the types of ICTs available and their affordances have the capacity to constrain what people can do with them. On the other hand, users are notable in the ways they apply themselves to adapting technologies to their circumstances and needs. Within the country, uses of new media technologies are often characterized by the government, media, and segments of the population as being inappropriate, unproductive, unprofessional, or criminal, especially when the topic of discussion is young people (e.g., Amankwah, 2007; Anonymous, 2007; Gyebi, 2009; Nelson, 2009).⁴ However, even with criminal activity, these patterns of use represent the choices people have made about what is important to them and how they will use new media technology to meet those needs. The desire to appreciate and stay linked to local connections, as well as to escape the poor economic conditions prevalent in the country both find expression in the ways that people engage with new media technology. With the country's relatively young population (60% under 25 years old), it is likely that young people are implicated in most of the behaviors discussed in this article.

The article starts with a discussion of technology appropriation as a framework for examining user behavior. The subsequent sections discuss usage patterns in four areas: mobile telephony, the Internet, new media production, and gaming. The article closes with comments on technology appropriation and the availability of research on new media practices in Ghana. Compared to other regions, there is a relatively limited amount of published work on new media practices in Ghana. Thus, the following discussion should be interpreted with appropriate caution as a reflection of what this particular set of researchers and commentators have captured and not as a complete reflection of the reality of digital technology use in Ghana.

Technology Appropriation

Technology appropriation as an analytical lens focuses on how people engage with technology and the patterns of behavior that emerge in the process. Within this concept, it is usually acknowledged that a gap exists between technology design and technology use, with the result that users generally need to adapt technology once it has been acquired (e.g., Heeks, 2002). Furthermore, users are viewed as creative and innovative in making technologies work for their needs:

⁴ One of the challenges highlighted in Ghana's ICT policy is that of turning the youthful population into an asset for growth. Alongside this is a perception within the general population that ICTs represent a threat to the nation's sociocultural structure, particularly in their potential to expose young people to alternative lifestyles.

People are purposive, knowledgeable, adaptive and inventive agents who engage with technology in a multiplicity of ways to accomplish various and dynamic ends. When the technology does not help them achieve these ends, they abandon it, or work around it, or change it, or think about changing their ends. (Orlikowski, 1992, p. 423)

Definitions of technology appropriation range from those that include simple adoption or use of a technology (e.g., Carroll, Howard, Peck, & Murphy, 2002; DeSanctis & Poole, 1994; Silverstone, Hirsch, & Morley, 1992; Stewart, 2003; Surman & Reily, 2003) to those that reserve the term for unintended or unexpected uses (e.g., Bar, Pisani, & Weber, 2007; Eglash, 2004; Majchrzak, Rice, Malhotra, King, & Ba, 2000; Orlikowski, 1992). For the purposes of this article, I take a broad view of the concept, defining it to cover user behaviors—expected and unexpected—from the moment of adoption.

User appropriations of technology may lead to dramatic or mild deviations from the original purpose of the technology. Behaviors on the more dramatic end bring about significant structural change, either in the technology itself (e.g., defined by Eglash, 2004, as “reinvention”), or in organizational or social structures (the status quo). Other appropriations can be considered evolutionary because the changes they bring about are more subtle; for example, “baroque infiltration,” as outlined by Bar et al. (2007), occurs when users take full advantage of features provided by technology designers. Arguably, this range of behaviors is possible because technology embodies two forms of structure: structural features and spirit. Structural features are the types of rules, resources, and capabilities the system offers, such as how restrictive, sophisticated, or comprehensive it is (DeSanctis & Poole, 1994). The spirit of a technology refers to the values and goals underlying the structural features (ibid.), such as what types of uses are considered proper or not. Since multiple sources (e.g., designers and users) contribute to the spirit of a technology, it is subject to competing interpretations and may or may not be coherent as a whole. Furthermore, because different technologies vary in their spirit and structural features, they also encourage different types of social interaction. DeSanctis and Poole (1994, pp. 129–130) identify four aspects of technology appropriation:

1. Appropriation moves—the particular ways in which a group chooses to appropriate a structural feature, for example, to use it directly or in relation to other structures.
2. Faithfulness/unfaithfulness—this reflects whether the use adheres to or deviates from the structural features and spirit of the technology.
3. Instrumentality of use—the purpose for which the technology is used, for example, to manage communications or to exercise power.
4. Attitudes—users’ approach to the technology, for example, their level of confidence, perception of its value, and willingness to excel at using it.

While the type, manner, and outcomes of technology appropriation cannot be firmly predicted, DeSanctis and Poole (1994) propose that desired outcomes are more likely to occur under the following conditions: faithful appropriations; high number of appropriation moves; task/process-oriented, rather than power/exploratory-oriented uses; and positive attitudes towards appropriation. “Desired outcomes”

indicates that there are actors with a vested interest in technologies being used in particular ways toward particular ends. This is certainly the case with information and communication technologies in developing countries. Examination of practices in Ghana shows that users engage in a variety of appropriation behaviors, both “faithful” and “unfaithful.” Although the discussion of literature in this article does not systematically place behaviors in any particular appropriation categories, as a general concept, technology appropriation is a useful frame because it turns attention to understanding demand from the perspective of consumers, rather than from that of producers, and because it provides spaces to begin framing new media practices in different contexts.

Mobile Phones: “Smart Consumption” for Local Connectivity

User resourcefulness in getting around budgetary limitations is evident in the appropriation of mobile phone technology. There has been an astounding increase in mobile phone subscriber numbers since 2005 (Figure 1), even taking into account the distortion in statistics resulting from multiple SIM card ownership (Sey, 2008; James & Versteeg, 2007; Sutherland, 2009). No longer the purview of the wealthy, high- and low-end mobile phones are being accessed and used by people from all walks of life, and they are increasingly considered indispensable. Not surprisingly, among new media technologies in Ghana, mobile phones have received the most attention in recent times from researchers and journalists due to the innovative ways in which users are adapting this particular technology to their everyday needs.

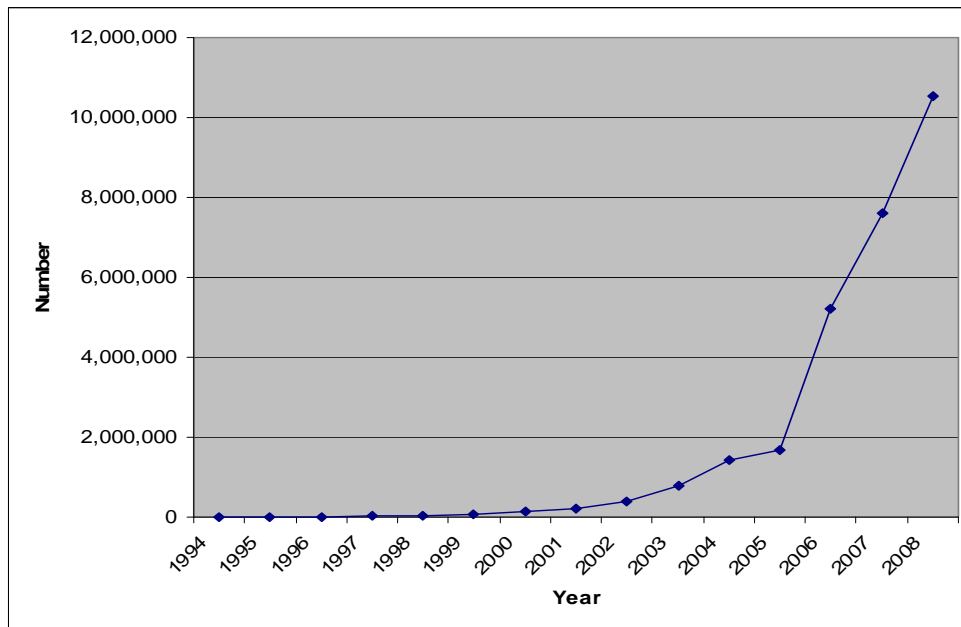


Figure 1. Mobile Phone Subscriptions, 1994–2008.

Sources: *Ghana National Communications Authority*, *International Telecommunications Union (ITU)*.

Commercial and Entrepreneurial Uses

The push for ICT-facilitated national development has manifested itself in a number of intentional and emergent systems designed to capitalize on the mobile communication platform. Deliberate attempts to apply mobile telephony to economic development are evident in ventures such as Tradenet, an SMS-based price information service introduced by the BusyInternet café to facilitate linkages between sellers and potential trading partners (*The Economist*, 2007). Empirical data from studies of commercial uses of mobile phones show that cost reduction and the benefits derived from convenient communication channels are the primary drivers of mobile phone adoption among groups such as farmers and fishermen (Abissath, 2005; Boadi, Boateng, Hinson, & Opoku, 2007) and traders (Frempong, Essegbey, & Tetteh, 2007; Overå, 2006). This is strongly tied to the informal business economy in which the demands of an uncertain economic environment, high transaction costs, and the building of relationships of trust are paramount. The commercial benefits are, however, somewhat constrained, especially by inadequate transportation infrastructure and poor wireless network coverage in some areas. And as others such as Donner (2006) have found elsewhere on the continent, the primary utility of this type of communication may be more for the maintenance of existing business networks than for the creation of new associations.

The affordances of mobile telephony have also given rise to commercial forms based on the technology itself. For example, between 2004 and 2006, an influx of entrepreneurs turned their mobile phones into payphone access points (Figure 2), not just for nonsubscribers but also for opportunistic subscribers (Boadi & Shaik, 2006; Sey, 2008). This development became an eye-opener for network service providers and arguably drove a period of industry innovations to reduce the cost of mobile phone airtime, particularly through the introduction of electronic micro airtime transfers (Sey, 2008). For small-scale entrepreneurs, however, the business opportunities provided by the mobile phone industry are tenuous at the very least because they are not always able to keep up with market changes (*ibid*).



Figure 2. Space-to-space Mobile Payphone. Source: Sey, 2006.

Social Uses

Slater and Kwami (2005) have noted that mobile phones appear to play a very particular social role in Ghanaian society in that they provide the means for users to manage local embedded relationships.⁵ Whether examining social, economic, or political uses of mobile phones—in as much as they are separable—this finding by the two shows some validity, as the evidence suggests that managing social relationships, near and afar, is a high priority for mobile phone users (McKemey et al., 2003; Overã, 2006). Contrary to global and national expectations that mobile phones would be used explicitly for business activities, social networking tends to be the dominant use, in particular for making rather than receiving calls, and for maintaining links with family and friends (Bertolini, 2002; Frempong, 2004; McKemey et al., 2003, Sey, 2008). There is, of course, a fine line between social and economic uses of communication technologies. For example, through the same social networking processes, mobile phones play a role in facilitating the remittance economy (e.g., McKemey et al., 2003; Slater & Kwami, 2005), a significant aspect of poverty reduction in developing countries. Coupled with the relatively high cost of communicating for people living close to or below the poverty line, this leads to particular configurations of mobile phone use to manage, control, and share the cost of maintaining social relationships with the associated economic underpinnings (Sey, 2009, 2010). Strategic communication practices include using mobile phones to receive calls only and a combination of other behaviors to meet ongoing communication needs—for example, “flashing” (generating missed calls), text messaging, and using payphones—depending on a user’s financial situation at any particular moment in time. These are not unusual findings, though, as even the wealthy adopt measures to control cost when necessary. Nevertheless, users have demonstrated innovativeness in adapting mobile telephony to their needs through such “smart consumption” practices (Alhassan, 2004).

In particular, the practice of flashing has generated significant attention. Dialing a number and hanging up before the recipient can pick up the call enables a voiceless form of communication, because the action leaves a trail of the caller’s identification. At its inception, flashing was primarily a means to request a call back from the recipient, usually because the sender could not afford to place a call. However, the practice has matured and now has broader goals. As in other developing countries where this practice is common, Ghanaians flash for a variety of reasons: to get a return call, send a precoded message, or just for fun. This is such a popular practice that the term “flashing units”—the minimum airtime required to generate a voice call, and by extension, to generate a missed call—has made its way into the lexicon of mobile telephony in Ghana (Sey, 2008). Flashing definitely has a light side, but it also reflects and reproduces power relationships, where flashing is based on perceptions of the recipient’s economic superiority and therefore greater capacity to bear the cost of a phone call (Donner, 2007; Pelckmans, 2009). Another less obvious dimension of power here is the struggle between network providers and users for resources—flashing as a strategy enables users to circumvent network providers’ billing systems and essentially use network capacity free of charge (Sey, 2008). Users try to make maximum use of the ability to code messages into the combination of phone rings and caller identification, while networks seek ways to make users place actual calls. The introduction of “Call Me Back” services by some network providers and continual efforts to reduce the cost of airtime are direct responses to the high

⁵ They contrast this with the use of the Internet for “the realization of the ideal (foreign) relationship” (p. 12). See section on Internet use.

incidence of flashing. One network provider goes as far as to suggest the emergence of Ghana as “a nation of flashers” (ibid).

Since cost figures so highly in usage levels, use of advanced (more expensive) mobile phone features is low. Text messaging is perhaps the dominant data service, and those who use this feature tend to be high-intensity users. However, due to low literacy levels, text messaging as an appropriation of mobile phone technology is less prevalent than voice calls. Ghanaian scholar Amos Anyimadu has suggested that, in a low literacy environment such as Ghana’s, multimedia mobile communication may be the most efficacious way to facilitate communication with and by the general populace.⁶ In this instance, an additional barrier to cost is bandwidth availability to carry audiovisual or graphical data. On the other hand, anecdotal information suggests that younger users do favor downloading and sharing ringtones, wallpaper, and music, and that there is a growing local production industry for this material, particularly the development of ringtones from local music. The introduction of 3G services by Zain and MTN Ghana in late 2008 to early 2009 (“MTN Ghana instigates,” 2009; Struthers-Watson, 2008) points to an expectation of increasing demand for platforms that can support higher levels of multimedia activity. As happened with the initial introduction of mobile phones, active use of 3G services is likely to first become evident in the business and high-income populations, with local appropriation following (if and when) lower-income populations find ways around the high usage costs.

Other manifestations of mobile phone appropriation are more complex, illustrating that technology appropriation does not have solely positive outcomes. For example, there is some evidence that mobile phone acquisition and use fuels certain gender stereotypes in the country. Women are considered notorious for requiring the newest mobile phone models from their romantic partners, and rightly or wrongly, this belief usually tags young unemployed women who own mobile phones as disreputable (Sey, 2008; Slater & Kwami, 2005). On the other hand, anecdotes circulate about young men who mimic speaking on fake mobile phones, or who carry mobile phones that are inoperable (Alhassan, 2004), or that they cannot afford to load with airtime, all in efforts to impress both female and male counterparts. Alhassan suggests that this type of behavior represents attempts to participate via simulation in digital consumption. These dynamics are also played out in expectations of flashing behavior involving opposite sexes. Alhassan also notes a gender dimension to flashing, with males being more likely to be the recipients of flashes. Flashing is often dismissed as “women’s work,”⁷ especially in romantic situations where males who flash females may be considered “cheap” and unworthy suitors, but other factors, such as friendship or mutual understanding of temporary financial constraints, also moderate gendered flashing (Sey, 2008).

The high value attached to mobile phones in Ghana has also resulted in related crimes, particularly mobile phone theft, which is labeled “mobile phone snatching” because the phones are usually stolen by simply snatching them from a user’s hand. Some of these thefts involve murder, and there is a thriving black market in handsets stolen locally or abroad. According to the deputy director of police public affairs in Accra, the number of reported mobile phone snatching cases increased from 209 in 2004 to 417

⁶ Personal communication: comments made at a conference on mobile telephony in Accra, 2006.

⁷ Comment by interview respondent (Sey, 2008).

in 2005 (BBC, 2006). A particular form of appropriation that has been observed in other parts of the world is the use of mobile phones as fashion statements or expressions of identity (e.g., Ito, 2005; Katz & Sugiyama, 2006). However, in Ghana, fear of personal loss and physical injury has constrained most people from making public displays of their mobile phones.

Internet Use: Targeting Foreign Connections

The high cost of personal computers and residential Internet access puts private access out of the reach of most Ghanaians. Thus, Internet cafés are the primary means of access to the Internet for most of the population. These shared access venues are concentrated in urban areas. International Telecommunications Union statistics estimate that there were about 880,000 Internet users (3.8% of the population) in Ghana by the end of 2008, but it's not clear how accurate this figure is considering the high level of shared access.⁸ Notwithstanding the low access levels, media reports point to a bustling business for Internet café owners, as evidenced in headlines such as "The Cybercafé Craze" (*Daily Graphic*, 2003). Access points range from small microentrepreneurial outfits with a handful of computers using dial-up connections to large enterprises equipped with up to 100 computers and high-speed wired and wireless Internet access. The majority are located in the capital city, Accra, attracting anywhere from 10 to 1,500 patrons a day (ibid). Users range from students browsing the Internet to business entrepreneurs for whom Internet cafés serve as office space. The language barrier to broader use of the Internet is also potentially being lowered by the introduction of vernacular translations of Google's search engine (e.g., in the Akan language—<http://www.google.com/intl/tw/>) and development of local language software such as *Nkraata*, an Akan language word processor. The extent to which the Ghanaian population is aware of and uses these tools remains to be seen.

The Internet as an "Escape" Mechanism

While there are several tales, as well as some research, illustrating the application (or projects attempting application) of the Internet to business and community development, indications are that, for a significant proportion of users, the Internet represents an "escape" mechanism (Slater & Kwami, 2005) that literally and metaphorically enables them to connect with the Western world as a poverty reduction strategy.⁹ The Internet provides users with tools to contact people in Western countries who are considered potential sources of financial means to travel outside of Ghana. Other users who do not anticipate physically leaving the country might content themselves with enjoying Western life vicariously through foreign content online. Thus, foreign portals and content appear to dominate user traffic.

⁸ Southwood (2001) suggested that the then-estimate of one million cyber café users was probably an exaggeration. Bruce, Engman, and Yador (2004) believed there were 20,000 private and corporate subscribers, as well as about one million Internet users in 2004.

⁹ An exception is a study of teenagers by Borzekowski, Fobil, and Asante (2006) that found a significant proportion (53%) of respondents used the Internet as a source of health information, among other uses. Health may represent one topical area where information seekers can find relevant content irrespective of the local context.

Alexa.com (2009) data show two local content sites—Ghana Web, a news portal, and Myjoyonline, a local FM radio station—among the following top 10 Web sites visited in Ghana:¹⁰

1. [Yahoo!](#)
2. [Google](#) (Ghana version of search engine)¹¹
3. [Facebook](#)
4. [Windows Live](#)
5. [YouTube](#)
6. [Ghana Web](#)
7. [Microsoft Network](#)
8. [hi5](#)
9. [Wikipedia](#)
10. [My Joy Online](#)

As is the case with mobile telephony, the Internet is also largely appropriated as a communication and entertainment tool. Sending e-mails, finding and communicating with “pen pals,”¹² applying to schools abroad, watching movies, listening to music, and playing games have been found to be primary activities at Internet cafés (Alhassan, 2004; Burrell, 2009; *Daily Graphic*, 2003; Slater & Kwami, 2005). In particular, the aspiration to find avenues to escape the local economy seems to drive Internet-based activities. Alhassan (2004, p. 197) states that “about three of every four students who surfed the Web explored avenues of leaving the country.” Mark Davies, founder of the largest Internet cafés in the country, is quoted as saying of [BusyInternet](#) users, that “four out of five are trying to find ways to get out of Ghana” (Zachary, 2002, p. 72). Internet activity is thus infused with desires to connect to (often random) foreigners in the hope that the relationships developed online will provide a path to greener pastures abroad, including invitations to visit, marriage proposals, visa assistance, physical cash, and so on (Alhassan, 2004; Burrell, 2009; Slater & Kwami, 2005; Zachary, 2002). Some do this through information seeking (e.g., on educational opportunities), while others focus on communication channels, such as chatting, instant messaging, and social network sites. Furthermore, some of these endeavors are well meant, whereas others are elaborate scams designed to dupe gullible contacts (see upcoming section on cyber fraud).

Examining Internet traffic data for an Internet café in Ghana, Du, Demmer, and Brewer (2006) found a fairly high degree of traffic to personals sites (over 6%) relative to other sites, which they proposed may be related to the social atmosphere in Ghanaian Internet cafés. Although this was data from a single site and does not distinguish local from foreign dating sites, the findings do provide some support for the view that online dating (whether genuine or scam related) is an important activity for a certain breed of Internet user in Ghana.

¹⁰ Foreign portals may, of course, be users’ routes to local content.

¹¹ Google now offers a Ghana version of its search engine, although it does not presently provide any unique capabilities for Ghanaian users ([Ajaq](#), 2008).

¹² New remote friends cultivated primarily through e-mail or messaging.

In this sense, Slater and Kwami (2005) frame Internet use in Ghana as a poverty reduction strategy aimed at the realization of idealized foreign relationships, while Burrell (2009) characterizes it as providing the ability to “migrate virtually.” Likewise, Tetey (2006), describing cybersexual activity in Ghana, concludes that the participation of female youth in the online sex trade, though sometimes unwittingly, is often an economic redress and illustrates ingenuity in dealing with financial hardship.

“Sakawa,” “419” (Cyber fraud)

Known locally as *sakawa* or “419” (see Figure 3), cyber fraud is a particularly problematic phenomenon that now has Ghana ranked as number two in notoriety (after Nigeria), and several North American merchants block e-commerce transactions from Ghana (Harvey, 2009; Kwablah, 2009; Nelson, 2009). Scams include making online purchases with stolen credit cards, conducting online dating scams, and inviting contacts to participate in supposedly mutually beneficial money transfers. Internet dating scams have become so prevalent that user help sites, such as DelphiFAQ.com¹³ and the eHarmony blog (eHarmony.com, n.d.), have emerged all over the Internet. The U.S. Embassy in Ghana reportedly receives up to 15 calls a week from American victims of online dating scams (Morse, 2006).



Figure 3. Internet Café Signs Warn Against “419” Activities.

Source: Sey, 2009.

According to a report on Myjoyonline (Loh, 2009), the perpetrators of Internet scams are usually young men between the ages of seven and 30, typically known as “café boys.” Interestingly, in addition to noting the negative side of cyber crime, this report also identifies a number of actual and potential

¹³ For example, see http://www.delphifaq.com/faq/russian_marriage_scams/f1369.shtml?p=68

benefits, including development of computer skills, stabilization of the local currency as a result of remittances, fewer youth engaging in criminal activity on the streets, redistribution of wealth, and patronage of Internet café and ISP services. Burrell (2009) similarly identified people less than 30 years of age as the main practitioners of "pen pal collecting," driven in large part by a sense of frustration with poor social and economic conditions, as well as by unsuccessful and humiliating attempts to secure visas to migrate out of the country. Furthermore, Internet scammers tend to draw on existing stereotypes and social roles about Africa to construct the cover stories for their scams. These include playing along with expectations that an African would demonstrate poor English grammar, or capitalizing on the perception of high levels of corruption in African governments, thus making it plausible that people would have large stashes of ill-gotten funds in foreign banks. Paradoxically, these scammers often have to reveal their identity at some point to effect the transfer of funds into a physical account that they can access (Burrell, 2008), or to access in some way whatever benefit they sought from the foreign benefactor. Burrell (2009) explains that the social construction of the Internet as a space for wealth acquisition perpetuates futile attempts by Internet café users to tap into this source through Internet scams. Rumors of the fortunes of successful scammers fuel other perpetrators who, while unsuccessful, and often with no direct knowledge of anyone who has been successful, continue to pursue and expend resources on this perceived path to riches.

New Media Production: Practices and Representations

By touring Ghanaian-related content on the Internet, one can distinguish between online media production activity, where there is limited research data, and offline media production, which has attracted more attention from academics. There is, however, unmistakable evidence of a fairly active online community of people with an interest in Ghana, although it is unclear whether participants in this community are predominantly Ghanaians living in Ghana, Ghanaians in the diaspora, or non-Ghanaians with personal attachments to the country. Whichever it is, YouTube videos, personal blogs, discussion forums, and other Web sites circulate imagery and commentary that ensure an online presence for Ghana.

With local online media production, poor infrastructure and access levels, as well as low literacy levels arguably limit the population's ability to pursue advanced Internet-based activities. For example, Calvin (2005) noted that he was able to upload files successfully to his blog, but stated that bandwidth availability was the major obstacle to video blogging from Ghana. Describing the landscape, Zachary (2002) observed:

The people I've met are more adept at using these technologies, and are hungrier for them, than most experts believe. But their efforts to put advanced technologies to work in Ghana are often thwarted by the failings of much older infrastructure technologies—the phone system, the electric grid, even the roads. (p. 68)

It is not clear how much local content is available to Internet users in Ghana, nor is the extent to which Ghanaians generate their own content known. Still, resource limitations have not prevented some individuals from using the Internet as their platform for media production of some sort. Some of this activity is evidenced in the last Blog Action Day, which saw members of the [Ghana Blogging Group](#)

contributing messages on climate change (Mac-Jordan). Afrigator's list of top-ranked blogs shows 115 blogs (on a variety of topics) for Ghana, of which the top two are Ethan Zuckerman's blog on life in Accra and David Ajao's blog on telecommunications and related issues in Africa. The top 10 Ghana blogs are as follows:

1. [My Heart's in Accra](#)
2. [Oluniyi David Ajao](#)
3. [Nubian Cheetah](#)
4. [Koranteng's Toli](#)
5. [Accra by Day & Night](#)
6. [Wo Se Ekyir: What Your Mamma Never Told You About Ghana](#)
7. [The Trials and Tribulations of A Freshly-Arrived Denizen](#)
8. [Annansi Chronicles](#)
9. [Ramblings of a Procrastinator in Accra](#)
10. [Odzangba Kafui Dake's blog](#)

Source: <http://afrigator.com/blogstats/countryblogs/Ghana/page/1>

Unlike other countries where online activity (especially by youth) tends to congregate around particular content or programs (e.g., Orkut in Brazil), there appear to be no dominant Web sites, blogs, or media production forums patronized by the general public.

A variety of short videos depicting everyday Ghanaian life can be found online, ranging from demonstrations of local food preparations such as *fufu*¹⁴ to coverage of cultural events like Earthdance day,¹⁵ football matches, and funny videos.

The Low-Budget Video Movie Industry

The on- and offline media worlds come together in one significant realm—that of video movie production (Figure 4).¹⁶ The VCD (video compact disc) industry began in the late 1980s, “born out of people’s desire to see their own culture mediated through a television or cinema screen” (Meyer, 1999, p. 98). At that time, movie theaters were saturated with Western movies and were generally accessible only to the middle and elite classes of society. In line with the then-government’s approach to film as a means to educate the populace, there was limited state investment in storytelling with mass appeal outside of local language dramas on television and “concert parties” (a popular form of comedic musical theatre).¹⁷ The state-owned film company, Ghana Film Industry Corporation, focused on producing cultural and other educational documentaries. This gap in local popular entertainment was readily filled by (mostly

¹⁴ For example, see <http://www.metacafe.com/watch/912514/ghana/>

¹⁵ See http://www.metacafe.com/watch/916954/ghana_ghana_day_of_percussion_earthdance_2007

¹⁶ Similar (and other) trends may be visible in the music industry. However, the discussion is limited to video production as illustrative of one active form of new media production in Ghana.

¹⁷ Television also had a high proportion of imported programming.

untrained) producers, both young and old, and from diverse backgrounds, when VHS recorders became widely available. Combined with liberalization of the media, this gave producers both the technology to produce low-budget movies and broadened outlets for their products. The market became even more attractive as more and more Ghanaians were able to afford personal video players. The industry now produces more than 50 English-language and vernacular movies a year, covering a variety of genres—rags to riches, Pentecostalism, occult, horror, comedy, and epic (Okome, 2007; Omoera, 2009; Wendl, 2007). Nigeria is currently the regional leader in the industry, producing tenfold the quantity of movies coming out of Ghana. Still, with growing Nigeria-Ghana collaboration and the expansion of the Ghanaian movie industry, the term “African movies” has come to be synonymous with low-budget video movies from Nigeria and Ghana (Omoera, 2009).



Figure 4. Ghanaian and Nigerian Movies. Source: Sey, 2009.

The growth of the video movie industry in Ghana is not without precedent. As Fumanti (2009) and Burrell and Anderson (2009) have observed, the practice of capturing life events on video for the purpose of sharing with absent family has been a central feature of technology use by Ghanaians in the diasporas, flowing either from them to relations in Ghana or vice versa. Videos are produced to cover a variety of events such as birthday parties, weddings, or funerals and serve as a means for absent members to participate in the event—“presence of absence” as Fumanti (2009, p. 16) terms it—but they also function more deeply as outward displays of success (ibid.) and arenas for promoting cultural unity between and among dispersed communities (Burrell & Anderson).

A testament to the draw of African movies is their growing presence online, where they can be purchased (e.g., [Africa Movies](#) and [African Movie Place](#)) or streamed live, sometimes for free.¹⁸ Vibe Ghana also carries digitized episodes of old television favorites including *Showcase* and *Osofo Dadzie*. The placing of this content online can be interpreted as targeting audiences outside Ghana, as few people in Ghana are likely to have the bandwidth to view full-length movies online. Some online forums also feature passionate debates about the quality, merits, and future of Ghanaian movies and actors.¹⁹

The traditional dramatic forms continue to be popular, although they have effectively been supplanted by video movies. For example, the weekly concert party performed at the National Theatre is usually broadcast on television and enjoys a wide audience. Even more significant is the emergence of comedic video movies with actors such as Agya Koo and Idikoko that appear to draw on concert party features of buffoonery and melodrama. A typical live session of concert party with the iconic Bob Okala includes stand-up comedy, music, and a short drama, generally in the Akan language.²⁰ Similar tendencies can be seen in movies featuring Agya Koo.²¹ The themes (dangers and trials of life “abroad”) and melodrama of *Osofo Dadzie*, the made-for-TV drama, are mirrored in several full-length video movies.²²

Issues of production values, storytelling quality, and themes have turned the low-budget video movie industry into a site for cultural contestation (Jørgensen, 2001; Meyer, 1999; Okome, 2007). Jørgensen (2001) notes ambivalence within the country about appropriate cultural symbols, which she attributes to attempts by the first president of Ghana, Kwame Nkrumah, to promote an “African Personality.” This ambivalence plays out in debates similar to the high versus low culture debates around television culture in Europe. The videos have come under significant criticism from the cultural establishment—the elite strata of society, scholars, and trained practitioners of cinema—for catering to base instincts and promoting unsavory images of Ghanaian culture. “High art” cinema, such as Kwa Ansah’s critically acclaimed *Heritage Africa*, emphasizes colonial emancipation and the dignity of traditional culture in stark contrast to popular videos that often present perspectives on local culture that suggest traditional culture is at the root of social and economic backwardness. Pentecostal-themed movies, or “hallelujah videos” as Okome (2007, p. 4) calls them, in particular, tend to eschew traditional culture, associating it with the negative elements of the spiritual world. Thus, rather than focus on the lofty themes favored by trained filmmakers, producers of video movies draw on deep rooted religious and spiritual convictions, effectively blurring the lines between religion and entertainment (Meyer, 2004; 2005). In fact, those trying to tell different types of stories often find themselves held hostage to audience

¹⁸ For example, see [GhanaCinema.com](#) or [VibeGhana](#)

¹⁹ For example, see <http://www.naijarules.com/vb/stars-celebrities-nigerian-movies/21852-who-has-saved-ghanaian-movie-industry.html>

²⁰ See <http://www.youtube.com/watch?v=-EWcwJlLbdA&feature=related>

²¹ See http://www.youtube.com/watch?v=SCRM7t_95q8

²² See http://www.youtube.com/watch?v=a4ZfvFL_2mU

preferences for movies with Pentecostal themes, whether blatant or subtle. Meyer (2004) notes that, in order to be successful, a Ghanaian video movie must “feature and extol recognized markers of modernity” (p. 102), “take as their basic narrative structure a strict dualism between God and the devil” (p. 103), and “offer a form of vision similar to the one that Pentecostal pastors usually present as their source of power” (p. 104).

At the same time, these movies act as “sites for reflection about modernity’s attraction and malcontents” (Meyer, 1999, p. 111). Storylines are replete with narratives around migration out of rural settings, upward social mobility (usually associated with get-rich-quick schemes and/or occultist practices), betrayal and punishment, or redemption. This, as well as the religious flavor, is consistent with a long-standing perspective among Ghanaians that storytelling, either digital or analogue, is a medium for moral instruction. As Ukadike (2000) notes:

. . . video films are actually providing the means and critical methods for re-examining consciences through popular culture. It has also become a medium that compels people to accept criticism of their traditions, and to laugh at themselves while at the same time being entertained. (p. 257)

Despite their low production values and often sloppy scripts, Ghanaian video movies have captured the imagination of the working class and are probably also growing into a guilty pleasure for the middle and upper classes. They have effectively edged out American, Chinese, and Indian movies,²³ and are slowly gaining ground on Nigerian movies, which are still dominant, even in Ghana. They are “the great success story of African cinema” (Haynes, 2007).

Gaming: An Emerging Field

Gaming (on and off-line) is a completely unexplored research area in Ghana, and as such, there is no empirical evidence to indicate the existence of a digital gaming industry in the country. It is, however, useful to get a sense of how much is known about gaming in Ghana relative to other forms of new media use.

A search for literature on this topic unearthed two instances of Ghanaians working to develop computer games. In the first case, the founders of Leti Games, based in Ghana, announced in early 2009 that they had developed a game—*Bugzvilla*—for the iPhone (Hash, 2009). The developers indicated that the game would be available on iTunes in April. Ultimately, Leti Games released a different game—*iWarrior*—now available via iTunes (Figure 5).

²³ There is still a large market for pirated foreign movies, usually in the form of multiple movies burnt onto a single disc, offering excellent value for the money in exchange for poorer quality video.

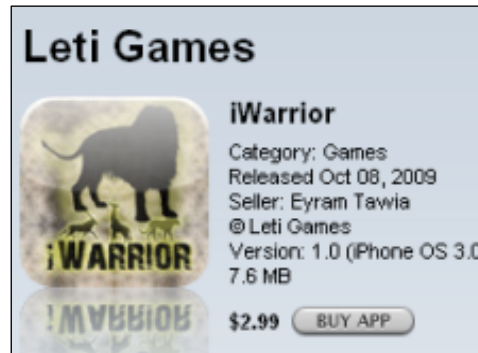


Figure 5. *iWarrior* mobile phone game in iTunes App Store.

Source: iTunes App Store.

This achievement is one of the few successful forays into this world by Ghanaian software producers. As the name suggests, *iWarrior* draws on themes, art, and sounds associated with forests in Africa, with the main goal being to protect livestock from wildlife, such as rhinos and hyenas. Leti Games states that it focuses on mobile phone game applications with an African theme. Nevertheless, the organization points out that although their mission is “to explore and expose the beautiful [*sic*] culture of africa [*sic*] through our games, we are [*sic*] deem it as a responsibility to be global” (Leti Games, n.d.).²⁴ Another Ghanaian (with a screen name of Eyram), in response to the assertion by a blogger (Hash, 2007) that a game created by a Kenyan programmer was possibly the first 3D game in Africa, notes in an online forum that he developed the first such game as a school project, (which had won a competition in 2006) and points readers to the competition results announcement on the Ghana Think Foundation’s Web site (Barnor, 2006). It does not appear that the game went into production.

As far as actual gaming behavior within the populace is concerned, data on personal computer-based games is sparse. One study of mobile phone users found that they frequently play games on their phones, especially when bored. Almost one quarter (24.6%) of 118 mobile phone subscribers in the survey indicated that they play mobile phone games at least once a day, about 21% each said they do so at least once a week and at least once a month, while another 21% said they do not play games on their phones (Sey, 2008).

Despite the lack of empirical information on gaming, games are an important aspect of cultural life in Ghana as in other parts of the world. While the digital world of games may not quite have permeated society, an interesting 15-minute video, *Short & Tight*, brings local games onto the global platform with an account of *ampe*, a local girls’ game that involves singing, skipping, and jumping, and is

²⁴ See <http://www.letigames.com/letigames/faq/>

usually played by elementary school children.²⁵ This video was produced as part of Ghana's 50th independence anniversary in 2007, but it is narrated by and appears to have been produced by a European. Other online representations of offline games can be found on [YouTube](#) among other forums.

Appropriation of New Media Technologies in Ghana

Clearly, the field for research on new media practices in Ghana is wide open. At present, it appears that the reality of the digital divide in all its forms so dominates the landscape that the majority of scholarship on new media technologies in this region focuses on issues of national policy and access. Only recently have researchers on Ghana begun to branch out into explorations of usage trends. In this article, I have attempted to pull together the work of some of these researchers, who are largely based in southern Ghana (mainly the capital city, Accra), and explored a limited variety of user behaviors in Internet cafés and on mobile phones. Nevertheless, the existing evidence tells a story about patterns of online and offline new media use in Ghana. The research done in Accra paints a picture that, even if accurate, may not represent user behavior across the country. Undoubtedly, there is other activity going on, including ICT for development efforts led by non-governmental organizations. These efforts have not been the focus of this review, although in most cases, these are either new initiatives that have yet to exhibit results, or older ones whose current status is unclear.

A few themes are evident in the existing literature: the emergence of "smart consumption" practices to mitigate the high cost of mobile phone communication; the association of the Internet with the potential for quick economic gains, leading to varying degrees of criminal or unethical behavior; and what appears to be a clear separation of expectations and approaches to the Internet and telephones (both fixed and mobile) as technological tools. The Internet points users outward to potentially greener pastures in Western economies, whereas telephones ground users in their local context, keeping them linked to social and economic resources that are more readily accessible. The one commonality is that both vehicles seem to be, in practice, communication tools more so than they are information-seeking applications. Media production, particularly the production of video movies, arguably has a similar orientation to that observed in Internet and telephone use. A dichotomy can be observed between images and themes of otherworldliness (providing audiences with escape into fantastical worlds) and themes that are grounded in social reality (reflecting audiences' everyday triumphs and struggles). Overall, preoccupation with affordable communication with local and diasporic kinship networks, and/or pursuing foreign tickets out of the country, may be the primary forces shaping patterns of new media appropriation in Ghana.

This discussion of new media practices in Ghana shows how users have appropriated new media technologies for diverse ends, even in the face of limited access. One might characterize some of these uses as faithful appropriations, as defined by DeSanctis and Poole; these are consistent with expectations from service providers, or even governments (e.g., the use of mobile phones to facilitate business transactions). Other uses are a source of concern in some quarters, falling more in the realm of unfaithfulness to the spirit of the technology (e.g., mobile phone network providers are unhappy with the

²⁵ See http://www.globaltimoto.com/pages/movie_ampe.html

flashing phenomenon, while policymakers may be less than thrilled with the relatively high incidence of social- and entertainment-oriented usage patterns). In terms of the range of activities enabled and/or pursued by users, it is clear that some areas are more advanced than others. The communicative capacities of the Internet and mobile phone technologies have seen more vigorous uptake than that of their purely informative functions, with the associated emergence of innovative behaviors either to save (e.g., mobile phone calling patterns) or gain (e.g., Internet fraud) financially.

On the production side, the low budget video and gaming industries represent two extremes: In the former, a vibrant storytelling culture thrives, while in the latter, there appears to be much less activity. Though both industries are enabled by the spread of new media technologies, it could be argued that the gaming industry requires a level of technical skill and interest that is not yet evident in the country. If this is indeed the case, then we see how the manner in which technology is appropriated can be influenced by the structural features of the technology (DeSanctis & Poole, 1994), or by contextual factors such as skill levels (this, however, is an issue to be settled empirically).

Technology appropriation is often defined as the process through which users make a technology "their own" by adapting and incorporating it into their unique life circumstances. With the wide range of appropriation possibilities and expectations, one can expect that the use of technology becomes an arena for contest in the manner described by Bar et al. (2007), who see technology appropriation as a power struggle between the providers and users of technology. While some onlookers may consider certain types of user appropriations to be undesirable, there is a corresponding tendency for others to see the same or different types of appropriations (especially those that deviate from expected uses) as positive developments that demonstrate user creativity. Indeed, from the academic standpoint, technology appropriation tends to have positive connotations. It is important to acknowledge, however, that, "appropriated technologies do not have an inherent ethical advantage" (Eglash, 2004, p. xvii). For instance, some appropriations may be coping strategies that are not beneficial in the long run, or an appropriation could be linked to marginalization or social exclusion, in which case it is more important to address the underlying problem (Eglash, 2004). To what extent do the new media practices observed in Ghana represent symptoms of problems that need addressing, for example, at the level of national policy? Ultimately both dependencies and independencies facilitated by appropriated technologies should be examined and the layers of benefits, deficiencies, inequities, and structural drivers acknowledged. This article begins to map out these elements as a starting point for such analyses.

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