Using digital media tools in cross-cultural research, analysis and representation

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Through a study of aesthetics and politics in Ghanaian visual culture, this essay demonstrates how digital media can be used to integrate text and images in cross-cultural ethnography, facilitating the processes of interpretation for both the ethnographer and reader. Drawing examples from the CD-ROM Cultures in Webs: Working in Hypermedia with the Documentary Image (Coover 2003)—a multi-site study of digital media and ethnographic research methods, the essay shows how differing kinds of representations and modes of writing can be used to contextualize collective representations. This essay evokes the hypermedia reading experience by interweaving photographs, text, interview excerpts and proverbs to suggest how relationships between visual and verbal referents evolve in the cultural imaginary.

When a box is carried, what is in the box is also carried. A chief is like an Odum tree; he has no front and back.

— Two Ghanaian proverbs

INTRODUCTION

Ethnographers working in the traditions of cultural and interpretive anthropology use disciplinary methods, media tools and individual skills of communication to make sense of cultural practices. They must then translate their observations in a way that others—with a culture other than the one being studied—can understand. As Paul Friedrich (1990) demonstrates, translation like interpretation is always and intrinsically incomplete. Using the translation of a classic Chinese poem by Tu Fu as his example, Friedrich shows how four differing translations express qualitatively different readings of the poem. While Friedrich promotes a diverse modal approach to the translation of a cultural artifact, one may also be struck by how, in reading four translations together, the reader also becomes engaged in an act of interpretation. Like the ethnographer, the reader looks for meaning in the modes of expression as well as the words themselves, in what is cut as well as what is kept, and in how meaning is shaped by obvious biases of the translators, revealed through juxtaposition. Working with sound and imagery similarly allows for the exploration of different views. An ethnographer learns to identify the qualities and meanings of visual material, and seeks ways to communicate culturally-learned ways of seeing through composition and editing. Electronic media can assist in the gathering and preparation of research data (Pink 2001, 2004; Ruby 1999-2004); they can also facilitate the expanded analysis.
and discussion of prior works, such as *Yanomamo Interactive: The Ax Fight* (Biella et al 1997) and Robert Gardner’s interactive DVD release of *Dead Birds* (2004).

James Clifford (1986, 1988, 1997) and George Marcus (1994, 1998) called for ethnographies that are not seamless narratives that cloak the ethnographer’s process; they argued that meaning is revealed by what has been cut or set aside as much as by what is included. Multimedia formats offer useful environments for revealing ethnographic process and developing multifaceted works, electronically or in print. Such works gain strength from the range of perspectives they can offer rather than privileging only one mode of interpretation; they give maximum attention to the *relationships* between cultural narratives, objects and viewpoints. The materials gathered in multimedia spaces may defy resolution or simple categorization. This condition mirrors the phenomena ethnographers encounter in cross-cultural research. Drawing examples from the CD-ROM *Cultures in Webs: Working in Hypermedia with the Documentary Image* (2003), a multi-sited study of digital media and ethnographic research methods, this essay demonstrates how digital media can be used to integrate text and images in cross-cultural ethnography.

*Cultures in Webs* was first developed using non-linear editing tools to organize a documentary film project. It became apparent that linear forms of film and video were less suited to the research materials I had gathered and the stories I found in them. In multi-site ethnography, materials gathered in different media through diverse methods, modes and cultural perspectives may not easily fit into a single model of representation. In Ghana, where cultural traditions privilege simultaneous and spontaneous performances, a hypertextual approach more appropriately reflected the cultural conditions, layered histories and ironic juxtapositions. Expanding the idea of the storyboard through the linking devices of the authoring program, Storyspace, and the use of tables and layers through HTML and Javascript, I began forming clusters of materials. On the screen, I laid out images and text in sets and series like I might have previously done with photographs and index cards on a wooden desktop. In this medium the materials could be more readily interlinked, fragmented, magnified or reduced, and time-based materials could be interconnected with static images and notes.

In *Cultures in Webs*, materials are recombined into readerly ‘webpages’, although there is nothing necessarily page-like about them. Essays expand in every direction, while rollovers, pop-ups and frames change the constitution of the ‘page’ environment. A reader scrolls through the first essay vertically, and pop-up videos and text and images augment the reading experience (Figure 2). The web ‘page’ changes form in the next essay – ‘The Harvest’ (Figures 3 and 4). The reader-viewer scrolls horizontally through a storyboard-like band of 50 images, almost 20,000 pixels wide,
METAPHORS, MONTAGE AND WORLDMAKING

Towards a theory of Avant-garde

Avant-garde is dissonant. We found that the best alternative apprentices for the creation of this project were the minor and counter-cultural. Scenes of the Avant-garde were very much in the same yearning for a new sense of reality. The Avant-garde’s attitude towards its audience was reflective, surviving the psyche of danse macabre worlds.

An emerging cliche. Experience

The image embodies a sense of the Avant-garde, evoking the memory of a vision, a dream, a memory, a puzzle, a mystery, and a quest. The Avant-garde consciously fuses multiple images, merging the psyche of dance macabre worlds.

FIGURE 2

FIGURE 3

FIGURE 4
with interconnecting lines of text running beneath. In the third multimedia essay
‘Concealed Narratives’ – text, stills, video clips and sound recordings are
embedded within slices of enlarged photographs with the goal of integrating reading
and viewing experiences. This integration seems necessary for the kind of discussion
of text and images in Ghanaian visual culture that I wanted to explore.

The computer offers organizational tools built upon the means and metaphors of
human thought. Terms such as ‘webs’, ‘highways’ and ‘links’, help describe virtual
constructions of space and ways of making movements between sets of ideas and
data. To paraphrase Gertrude Stein (1935), exciting words create movement. Poetic
uses of language, image and sound bring forward hidden nuances that tie recorded
data to meaningful cultural issues and their narratives. New media have increased
the repertoire of tools available to an artist or documentary filmmaker trying to make
sense of cultures and their artifacts; the metaphors by which visual media tools are
imagined – whether the film-like ‘bins’ of digital editing programs or an Adobe
Photoshop ‘canvas’ – shape how visual information is organized and edited.

In the first essay in Cultures in Webs, I suggest ways to build upon cross-cultural
filmmaking strategies using Web authoring tools. In a discussion of the editing
techniques used by Trinh T. Minh-ha in Naked Spaces: Living Is Round (1985),
juxtaposed stills show two different and seemingly irreconcilable impressions from
the filmmaker’s visit to a village. The film is about domestic spaces and their
metaphors in West Africa. It is narrated by three voices; the individuals offer
overlapping statements, observations and reflections about the culture, the
ethnographic experience and the process of learning to see through culturally-
specific metaphors and viewpoints. The film is a good example of a cinematic
experience that asks viewers to interpret the interconnected statements, sounds and
images, which are often disconnected through innovative editing techniques.
The film also demonstrates the use of visual juxtaposition to illuminate cultural
conditions, in ways readily articulated in digital media. In one scene, for example,
the filmmaker walks the quiet streets of a small Islamic town and is startled by the
image of a veiled woman sitting alone in a hot courtyard. There is no
communication between them, and the world seems shut off to the filmmaker as she
continues to walk the empty streets. The narrator encounters a brave young girl
who asks for cooking oil. An image of a girl appears on the screen during the story, but
then as others join that girl it is no longer clear which girl might have asked for the
oil. Trinh Minh-ha contrasts the images of the girls and younger women with the
seemingly timeless picture of the veiled (older?) woman in the courtyard. The images
in this sequence contrast with the narrative, pointing to exceptions or alternatives.
The filmmaker reveals how documentary images are ambiguous; hypermedia are well
suited for exploring the trajectories that Trinh Minh-ha evokes in her film.4

samples are used to demonstrate how cultural poetics can be represented through visual composition and
editing strategies. In this ‘screenshot’ from the essay, stills from Trinh Minh-ha’s film Naked Spaces: Living Is
Round are compared with each other and the video clip from which they originate.
In a way, the filmmaker arrives at a

descriptive images and

descriptions, but not in a

way, the filmmaker arrives at a

anthropological voice

camera: the architecture,

seems to be some other

people on the streets, and

image of a veiled woman

continuously returns to the

At first, the filmmaker is

streets but soon she

first thought. She

for oil. An image of a girl

as others join the girl it is no

asked for the oil.

girls and younger women.

Close Window
VIDEO INTERVIEW: BOLGATANGA CHIEF

The soil does not owe the harvest to anyone.

*The person who holds the calabash does not spill the wine.*

*When the surface of the pot glistens that is because there is water.*

Royal leopard skin, Upper West Region
ONLY A LION DRINKS FROM THE BOWL OF A LEOPARD

In ‘Concealed Narratives,’ the third hypermedia essay in Cultures in Webs, I look at how the meanings of collective representations of power are put into play in the cultural imaginary through annual festivals, funerals and inter-village gatherings. Such events usually include a procession of local chiefs and guests who sit together in a town square or market space for a day of speeches, music and dance. These spectacles reconfirm alliances between chiefs and renew cultural traditions. Foreign and national representatives may also be invited these traditional durbahs, and visual representations of non-indigenous culture may be consciously or accidentally incorporated into these festive events. A traditional village chief oversees village resources, meets with village elders, plans events and presides over local disputes. He usually arrives at the durbah with his family, advisers and assistants, who carry royal objects that distinguish the chief and represent his local history. On a visit to northwestern Ghana, a paramount chief in the city of Wa explained to me that during ceremonial events chiefs in the Akan regions to the south sit on stools and northern chiefs sit on skins. As he pointed to the leopard skin hanging from the beams, he warned, ‘However, only the paramount chief sits on a lion or leopard skin, otherwise there would appear to be too many lions.’

When I arrived in Ghana, the nation was celebrating the formation of an elected national government, installed after more than a decade of military rule. The national government used visual media including television and billboards, as well as a presence in local events, to promote an image of national unity. There was also a significant international political presence. The national elections may have come about partly due to International Monetary Fund (IMF) policies. The IMF was promoting Ghana as a successful example of its reform methods. There were major trade shows in Accra as well as United Nations (UN) supported cultural events like Panafest, a Pan-African performance festival held at Cape Coast Castle. Throughout Ghana one could find foreign government organizations, such as the U.S. Peace Corps and non-government organizations (NGOs). Sometimes these groups invoked local religions to promote their goals, such as when, to advance an environmental agenda, an NGO built local support for a campaign against logging in a forest near Tamale by publicizing the religious function of the space as a locale for teenage initiation rites. At other times, such organizations promoted national or international agendas, such as by working with the Ghanaian government to develop a wildlife park in the Central Region. At the park, armed guards patrol the closed park boundary to prevent against poaching. Local chiefs, national government officials, foreign government officials, and NGO workers also worked with national and foreign commercial enterprises that were expanding the nation’s economic base. As I show in the CD-ROM, these groups are presented through symbols of power—such as fences, signs, and modern technologies—and images that promote their agendas. It struck me that, in this period of political transformation, there might indeed appear to be too many lions.

FIGURE 7 (Background). In this page from Cultures in Webs, descriptive text is layered upon a magnified image of an architectural detail above the entrance to a chief’s palace in northwestern Ghana. Proverbs appear on the screen along with a video interview, a map, and a still of a chief’s royal leopard skin that refers to a prior webpage.
SANKOFA

While the images cannot be restored to the actual moment of their being made, through juxtapositions and series they can be returned to what John Berger and Jean Mohr describe as a ‘context of experience’ (1982:289). They show how photographs function like quotations. Placed in a series, photographs offer a diverse range of perspectives about the themes of the overall work. As with lived experience, there is no single and all encompassing meaning to an image; the rightness – what Nelson Goodman describes as ‘worldmaking’ (Goodman 1978) – corresponds to the coherency of the vision of a world.

In films like Les Maitres Fous (1957) and Jaguar (1970) Jean Rouch depicts Ghana as a cosmopolitan country where people go to clubs with names like ‘Weekend in California’ and ‘Weekend in Havana’; it is all the more so today. Foreign words and imagery are added to objects, flags, trotros and minibuses, taxis, boats and building walls. Some of these are remnants of the colonial era, others are contemporary and range from political icons – the American flag – to images from film and music – Daffy Duck and Bob Marley. In looking at any one event the ethnographer is continually reminded of the cross-cultural contexts and at times ironic commentary provided by these images and text. Working in a linear way I found I would lose these juxtapositions. In digital spaces material surrounding, associated with or commenting upon a primary narrative could be included through collage, montage, rollovers and links. The researcher constructs a referential web in which the components of images are dynamic because they are not confined by how they are represented in any single composition or text.

Travellers to Ghana see visual reminders of the colonial past in numerous castles, forts and colonial homes built by colonial era nations and entrepreneurs. The oldest of these, Elmina Castle (Castelo São Jorge da Mina), was built by the Portuguese in 1482. It is located in the town of Elmina a few miles from the larger city of Cape Coast in Ghana’s Central Region, about equidistant from the nation’s eastern and western borders. Elmina Castle was built to develop trade routes in Africa and to provide a safe port for ships heading to the Indian Ocean. Europeans coming to the Gold Coast mostly sought gold, ivory and slaves. The colonial forces established trade relations with local communities, which for the most part maintained their traditional social structures. The Europeans established alliances with local chiefs, and in some cases one European nation would assist villagers in the overthrow of another. In Elmina for example, the Portuguese presence ended in 1637 when the Dutch, with the support of the local population, attacked the Portuguese castle from a hill in the centre of town. The British established colonial rule in Ghana in the 19th Century. They were headquartered in nearby Cape Coast and turned Elmina Castle into a police-training academy.

FIGURE 8. Three architectural details of Elmina Castle.
FIGURE 9. A tourist postcard of Elmina Castle purchased at the castle.
FIGURE 10 (Background). Elmina Castle St. Jorge (Castelo São Jorge da Mina).
Today, Elmina Castle (Figures 8-10) is a tourist site managed by the Ghanaian Commission on National Culture (CNC). Castles like this one may be familiar to North Americans from travel literature and slave histories about West Africa and from movies, such as Haile Gerima’s narrative film *Sankofa* (1993), a film about the African-American slave trade.

Tourists visit Elmina Castle to learn about the colonial history and the horrors of the slave trade, but they also marvel at the grandeur and aesthetic quality of the colonial architecture. Guides and tourist literature describe the history of the castle and teach visitors how to interpret its importance. However, local views about these colonial buildings are often more complex than the official story. Locals rarely have reason to enter these castles, which are almost always in view. Once sites of colonial power, castles like the one in Elmina are usually run by the national government, which charges admission to tourists and offers guided tours. Some castles have restaurants, some let rooms and some are used for events like Panafest, which draws attention to the African American slave experience. Other castles are used as prisons or for other local and national needs. To control panhandling, the harassment of tourists and defecation on the nearby beaches, a sign in front of Elmina Castle reads, ‘Tourists only’.

Elmina Castle is surrounded by tall, graceful palm trees. From the castle walls and turrets visitors overlook a lively and attractive fishing harbor with painted boats and a white sand beach, which local officials are trying to keep clean for public (especially, tourist) swimming. If slavery and pretty beaches sit oddly together for the tourist, so too does the juxtaposition of other local colonial era images such as those of the statue of a European battleship above one Asafo building (Figure 13), Adam and Eve statues at another Asafo structure (Figure 17 c,d), and American, British and other foreign flags painted on boats (Figure 16).

Colonial era imagery, tourist literature, and films about the slave experience all describe forms of displacement. In *Cultures In Webs*, unresolved narratives evoke the displacement by articulating the fragmentary nature of a cross-cultural experience. The web design is intended to remind the reader of the displacements that occur for European or American visitors discovering imagery from their own cultures and histories in dynamic new contexts. When images and objects from another period in history are used in ways they had not been used before, the displacement is both spatial and temporal. The multimedia environment is also useful for showing the displacements inherent in ethnographic representation itself; the meanings of images evolve even after they have been categorized or contextualized.

**FIGURE 11.** Elmina Castle on a sunny day.
**FIGURE 12.** Cape Coast Castle. The colonial era British structure is now a museum.
**FIGURE 13 (Background).** The Number Five Asafo clubhouse, Elmina.
What ever you feel to write, you write it. For example, Kae me bre, the meaning (of the saying) is . . . that the owner suffered before he bought the vehicle, so whoever handles it should call back to the sense of his suffering . . .

Nyira nka boafo...The meaning is simply that someone helped you to gain something like this, so you need to praise him, so you say, 'God should bless my helper.'

-- Daniel K., minibus drivers' union,
Kwame Nkrumah Circle stop, Accra.

FIGURES 14 a-b

FIGURES 15 a-b
Wo fi ne wo fi (Your house is your own house)

Sometimes the political meanings of images shift unexpectedly in the course of an event, as occurred during a recording session that I joined in Cape Coast. The CNC was conducting a music survey in the coastal and forest towns of Ghana's Central Region to identify talent that might represent the region at Panafest to be held at Cape Coast castle. One afternoon a CNC official scheduled recording sessions with two music groups on the lawns of the old colonial governor’s mansion. The mansion, with its manicured lawns, flowerbeds and statues, exaggerated the artificial nature of the performances. The composition of the recording team and its choice of this setting for the recordings seemed to describe, in ironic ways, a new system of national and international collaboration.

The groups represented two very different approaches to music. The first, a traditional woman’s group, most of whose members had surely been alive during colonial rule, played for traditional village events. The second, a small, serious, semi-professional group of younger musicians, was oriented toward tourism and commercial markets. When the second band began performing, the first was eager to show its respect and pleasure through spontaneous dance. The more that the recording team tried to limit the interference with the second group’s performance for the microphones and video camera, the more aggressive and provocative the first group’s dancing became. Grounded in a professional trajectory, the second band was not appreciative of the first band’s interference. The brief melee, aided by not insignificant drinking common during singing and dancing, revealed a set of irreconcilable ironies and juxtapositions. The women danced around, and with, the statues tripods and cameras, insisting on their right to do as they liked in this space. Was this not also a kind of political negotiation in which the nature of the recording session and its use of this location were being confronted through performance?

FIGURE 14 a-b. A bus driver and union member explains sayings and images that decorate minibuses (excerpted from a video interview).
FIGURE 15 a-b. Bumper stickers on the minibus with the words Nyíra Nka Boafo.
FIGURE 16 (Background). Boats at Erima harbor are painted with the images of flags, traditional and political symbols, images from popular culture, proverbs such as, ‘If you do good’.
Guinness Is Good For You

The incorporation of traditional, contemporary, once-colonial and non-indigenous cultural imagery in events brings a temporal and theatrical quality to the sense of displacement; this is explored in a digital environment using pages that talk and move. Electronic media provide the means to combine video and text. Juxtaposed video clips describe the simultaneity and sponaneity common in Ghanaian festivals. Playback functions that halt clips at differing moments and provide links from clips can be used to examine images and to demonstrate how differing kinds of representations interconnect during festivals such as the Bakatue.

The Bakatue is a June festival in Elmina which announces the beginning of the fishing season after a month-long ban on fishing and on music. Traditionally, the only exception to the no-music rule occurred on Tuesday afternoons, when one of the town Asafo groups would lead a small procession through town, and these images were recorded during one of those processions (Figures 17-21). The group passed by Asafo buildings and shrines where the Asafo poured libations and danced with their traditional flags (Figures 17 a-b, 18). While much of the libation pouring route was based on local religion, Christian images infront of one of the Asafo clubhouse demonstrated the group's Christian religious beliefs, and European military images at other Asafo buildings symbolized the kinds of power harnessed by one or another Asafo group. During this month-long ban on fishing old boats were repainted and new ones were launched, decorated with aphorisms, flags, traditional symbols and images from popular culture.

FIGURES 17 a-e (Row). This row of images shows an Asafo procession arriving at an Asafo clubhouse decorated with statues, including those of Adam and Eve. A sequence like this presents a ways of seeing the images as part of a set; however, objects pictured within one such series may also fit in another set or narrative sequence. Keeping 'cut' images on the page or screen keeps alternative ideas on the periphery of the mind. With images, as with memory, details that went unnoticed at the moment of recording may emerge from the background. As Nelson Goodman writes in Ways of Worldmaking (1978), our minds are constantly reevaluating how the fragments of experience make up our sense of the whole; a multimedia ethnographer can reveal this process to propose various ways of understanding cross-cultural images (Coover 2001).

FIGURE 18 (Top, center). Another Asafo flag, one of a set of flags presented during the procession.

FIGURES 19 a-b (Left). The procession stops on several street corners before arriving at a traditional religious shrine, where libations are poured and the sheep is sacrificed to local deities in ritual tradition.

FIGURE 20 (Far right). A sculpture of a mermaid on the second floor of the building in Figures 17 b-e.

FIGURE 21 (Background). A statue in the back row, behind Eve.
culture. The anachronisms and juxtapositions of images on the painted boats would often seem to comment on events as they happened.

On the day of the Bakatue a grand procession began near the chief’s administrative building on the edge of town. The procession travelled along the main street between colonial era Dutch and British buildings, stone structures and wooden stalls and bars. Members of the royal entourage carried the chief’s objects including parasols and stools. The crowds crossed a bridge that spans the entrance to the lagoon and arrived at the grassy field between the castle and the fish market. Others watched the durbar and regatta from the grassy slopes beneath the fort. In Ghana, like elsewhere in the world, where there is money there is the potential for corruption. The year I filmed there was some controversy surrounding the festival because the chief was implicated in a scandal concerning the questionable appropriation of funds from the town’s bus line and salt flats. Adding to the debate about the scandal was the chief’s poor health. Several locals told me that they believed it was necessary for the chief to play his festival role by participating in the procession and durbar even if he was extremely ill, so as to not give the impression he was hiding from the accusations. Ghana’ s president would often attend the Bakatue. However, attending events is a sign of confirming alliances. Speculation was that the president-elect did not come because he would not want to be associated with the troubled local chief. There was a notable police presence. The event, attended by local chiefs, national politicians and foreign dignitaries, is sponsored by the beer company, Guinness. This year’s marketing slogan was, ‘The Power’.

By demonstrating contexts and differing views, cultural images move from being representative of general ideas to being culturally specific. When potential tensions revealed through visual juxtaposition across media, the images become potent: they evoke stories that have taken or might take place. Seemingly contradictory expressions are held together in a sense of the whole. The movements one makes between views are defining characteristics of worldmaking and of meaning-making in multimedia environments alike. As the fragments are not fixed and conflicting representations need not be resolved, the world described on the screen is fluid, like constructions of reality they change with new perspectives and information. Bringing out the details of frames and lining up stills next to associated images and the sets and series to which they belong, local and specific images are also grounded in cultural patterns of representation. The meanings are in these patterns of appropriation as well as the content of an image and how it reflects a specific or general idea. On the surface, images of such events look
alike from year to year; but how one reads images that show police presence, the Guinness sign, the tourists, the castle, the slogans on buses or the boy carrying the sheep, changes with context.

In events like the ones pictured in *Cultures in Webs* and in this essay, cultural images and practices from the past are renewed during public events while their meanings evolve. A dynamic multimedia presentation can evoke ways that images of power are in flux in the cultural imaginary. In one way this festival in Elmina seems timeless – the kind of ‘typical’ event shown on television and described in tourist guides. The same images also fit together to describe a particular circumstance commenting on the conditions of the day. And as one popular proverb on the bumper of a bus says, ‘No condition is permanent’. 

FIGURE 23 (above). The procession and Guinness banner. 

FIGURE 24 (background) Crowds watch the Bakatue regatta from Fort Jago.
ACKNOWLEDGEMENTS

This essay includes samples of original text and images found in the hypertextual CD-ROM, *Cultures in Webs: working in hypermedia with the documentary image*. Cambridge: Eastgate, 2003. These are printed with the permission of the publisher. The CD-ROM also includes clips and images from works by Trinh T. Minh-ha, Vincent Monnikendam and Robert Gardner published in the CD-ROM with permission from the filmmakers.

ENDNOTES

[1] Most of the proverbs in this collection were gathered during field research in Ghana 1992-4. Many are also found in various collected volumes. Versions of these first two proverbs can be found in the recently translated 1879 work by J.G. Christaller (1990). Proverbs, like other tropes in language (and image, perhaps) connect specific issues to collective memories, cultural narratives, and social values; tropes offer ways to make sense of abstract and unstable ideas (Fernandez, 1986). A proverb invites a perspective upon a situation, which in turn, circles back upon the proverb clarifying its metaphor(s). Proverbs are frequently used in cross-cultural studies of Ghanaian culture, such as in Adler and Barnard's *African Flags of the Fante* (1990), to identify underlying historical themes and issues. Reaffirming their role in Ghanaian collective memory, these sayings are written on trotros, taxis, boats, walls - just about everywhere, in fact. They remind people of cultural narratives, morals, and ideals, bringing the past into play with events unfolding in the contemporary public spaces in which they are found.


[3] More about the metaphors of the computer environment can be found in Steven Johnson's works *Interface Cultures* (1997), which examines the development of terms such as the 'desktop' by which computer uses organize and imagine digital information, and *Emergence* (2002), which asks how humans organize themselves and exchange information. The founding editor of the now defunct on-line Journal *Feed* shows how ways of using digital environments change, and are changed by the metaphors that are used to give form to a world of ones and zeros. Loss Pequeño Glazier (2001) similarly discusses how code shapes the use of language in the writing of poetry. He advocates works in which the code is exposed and contributes to the process of both writing and reading.

[4] There is a tendency in website production to create vast archival studies, such as Burton Bledstein's Chicago-based history website, *In the Vicinity of the Maxwell Street Market, Chicago 1890-1930: A Virtual Museum of History* (In development). While the quantity of research is impressive in such ever-expanding projects, they miss important meaning if they are unable to destabilize the categorization of an archival structure -- if they are unable to offer a richly informed range of ways to judge images within and outside of the categories in which they are placed or the text used to explain their meanings. Digital tools can also be used to illuminate gaps between the original intentions that gave form to particular imagery through the use of multiple modes of writing to examine work, through the use of comparative analyses and through shape-shifting interlinked categories; such production methods can make "visual thinking" (Bledstein n.d.) all the more self-aware, critical and vital.

FIGURE 25 (Background). A chief and his entourage carry a 'Kodak' umbrella at a funeral in the village of Atofo in the Central Region, Ghana.
REFERENCES


FILMOGRAPHY

Burgundy and the Language of Wine 2003 (52 minutes), Director: Roderick Coover, Distributor: Natural Words. USA.

Dead Birds 1964 (83 minutes), 2004 (DVD), Director: Robert Gardner. Distributor: Harvard Film Study Center. USA.

Forest Of Bliss 1963 (90 minutes). Director: Robert Gardner. Distributor: Harvard Film Study Center. USA.


Mother Dao the Turtlelike 1995 (90 minutes), Director: Vincent Monnikendam, Distributor: Zeitgeist Films. 1995, Netherlands.

Naked Spaces: Living Is Round 1985 (135 minutes), Director: Trinh T. Minh-Ha, Distributor: Women Make Movies. USA.

Nanook Of The North 1922 (69 minutes), Robert Flaherty. USA.

On the Play of Performance in Ghana 1996 (34 minutes), Director: Roderick Coover, USA.

Sankofa 1993 (125 minutes), Director: Gerima, Haile. Distributor: Mypheduh Films. USA.