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Jenna Burrell
Assistant Professor
School of Information
UC-Berkeley

[For Materiality and Organizing, Eds. Leonardi, Nardi, and Kallinikos]

The Materiality of Rumor

This case study of a circulating rumor deals with the process of materialization, of how something non-material comes into material being. In examining this process I mark a distinction between rumors material *aspects* and material *effects*¹. The effort to distinguish between what is part of (an aspect) vs. what follows from (an effect) raises the question of units of analysis, of defining the boundaries of the 'stuff' under examination. A broadly encompassing notion of the material is most appropriate to the current case and in working out these distinctions. By contrast to other chapters in this collection, I do not limit consideration of the material to the man-made or technological. This broader stance is aligned with material culture studies that has recently been developing complementary insights about matter and materiality in parallel to the work in organizational theory and in science and technology studies scholarship (Miller 1998; Miller 2005). The natural world and the corporeal also are included in this analysis as material. The materiality of rumor specifically is linked to the body and the production of speech through the vocalizing organs, and the functioning of human memory. These are critical in constituting rumor's material aspects.

Studying rumor from a materialist standpoint, however, helps to underline the point that **matter is not the only thing that matters** (Leonardi 2010). In other words, the non-material can also be hugely consequential. What this consequentiality might mean will depend upon where

one draws the line between what is material and what is non-material. To be consequential is to manifest in some way as a diverting force. Thus a critical question is how something non-material is ultimately enacted or manifested. I wish to add to this initial assertion a caveat - **without matter, nothing matters**. These two claims may seem to be contradictory and indeed are when a definition of material and non-material rests on their mutual exclusivity – i.e. that there are wholly material ‘things’ and then there are wholly non-material things. What I wish to establish instead is the interdependency and inextricability of material and non-material in an ontological and practical sense. I argue this in opposition to what Faulkner and Runde claim for an independent ontological status of non-material objects as independent of their material ‘bearer.’ (Faulkner and Runde 2011). When it comes to the non-material, to be able to experience and speak about it requires some form of externalization and this necessarily rests upon something, somewhere that is material. Thus while something non-material may be possible to conceptualize as independent it is never independent from the material as experienced.

A study of rumor, in particular, presents an intriguing challenge to materialist accounting because of the fundamental non-materiality of the rumor itself as a circulating tale of an event or happening that often proves illusory. The imaginary of such tales and their underpinnings in shared, but unarticulated concerns and anxieties is similarly non-material. However, this belies the powerful material force frequently generated in the wake of rumor, for example, in the mass movement of populations, collective boycotts, even riots or physical attacks that sometimes follow. Rumors show a capacity to generate an emergent organizing. Furthermore, a rumor, in and of itself, through its continual re-performance endures well beyond more ordinary and everyday acts of speech. A study of rumor as a special oral genre with such peculiar properties

lends itself to a broader reconsideration of speech and representation and the tie between materiality and discursivity, as is argued for elsewhere in this collection (see Cooren, this volume).

The materialist turn in social theory has typically been positioned as a critique of and alternative to analytical approaches that position language and discourse as constituting the social world. For example, the materialist argument of Actor-Network Theory offers a relational materiality performed and with effects through the assemblage of material elements, rather than as emanating from the fixed properties of things (Law 1999). This is explained by John Law, Bruno Latour, Madeleine Akrich and others through an analogy that relocates the principles of a *linguistic* semiotics (concerned with meaning produced in the relationship among words) to a *material* semiotics (concerned with the material effects of relationships between objects/entities) (Akrich 1992; Akrich and Latour 1992; Latour 1993). However, one outcome of this analytical move is that language, words, and the work of representation have been left with an ambiguous and underdefined role in ANT studies. This stance has yielded a concern with apparent material *entities* rather than material *continuities* and, in general, a tilt towards an object-centrism evident in the early fascination of ANT accounts of sailing ships, electric cars, door-closers, scallops, etc.

A new direction in materialist accounting has begun to explore instead not those cases of sharply bounded physicality, the tangible and substantial, but has moved to the conceptual edges to consider matter or substance that is not so evidently massed as an apparent 'object.' This is most evident in recent work engaging questions of digital materiality (Yoo this volume, Ekbria and Nardi this volume, Kallinikos this volume) (Sunden 2003; Kallinikos, Lanzara et al. 2010; Faulkner and Runde 2011). Likewise, a return to language and in particular to performed speech, attending to its distinctive and varied materiality serves to complement and extend this kind of

work. Verran (2001) in an early effort pursues this by exploring the materiality of numeracy through the bodily materiality of fingers and toes - in the base-10 system of counting in English vs. the multi-base system of 20, 10, and 5 in the Yoruba language . The present case of rumor is also a reminder that an expanded analysis of materiality does not depend upon the emergence of novel phenomena or material invention, but may also be pursued through reconsideration of something much more long-standing. Pervasive digitalization is a fascinating turn, but not the only way to consider materiality beyond the physical object.

As speech and the human voice are the typical and traditional format for producing instances of rumor, we may begin by considering how speech (and more generally the corporeal) has been situated explicitly or implicitly in materialist theory, specifically in early ANT work. The efforts of Actor-Network theorists to build a more inclusive social theory accounting for the material world made this case by emphasizing the limits of the human body (including voice) as a mechanism of social ordering. They turned their attention instead to the significance of structures, machines, and texts and their role in social constitution. Primatologist Shirley Strum with anthropologist Bruno Latour pointed out that baboon societies rely upon their bodies alone and that this limited the scope of their social ordering (Strum and Latour 1987). In human societies the great surplus of things, an ever-expanding object world, is how we are able to extend society beyond our primate neighbors. The point was not that the corporeal was non-material, but that there were limitations in the degree and the scope of the body as an enacting force.

Law makes a series of assertions in Organizing Modernity that summarize this point noting, "...some materials last better than others. And some travel better than others. **Voices don't last for long**, and they don't travel very far. If social ordering depended on voices alone,

it would be a very local affair. Bodies travel better than voices and they tend to last longer. But they can only reach so far – and once they are out of your sight you can't be sure that they will do what you have told them...machines, though they vary, may be mobile and last for longer than people. Texts also have their drawbacks. They can be burned, lost or misinterpreted. On the other hand, they tend to travel well and they last well if they are properly looked after.” (Law 1994: 102). Law constructs this provisional hierarchy (in terms of a *tendency* towards durability - from more durable to less):

Texts/machines/buildings



Bodies



Voices

However, to prevent a reification of this ordering (which would contradict the very principle of a relational materiality) Law uses the language of, “may have,” “is liable,” or “tends to.” He goes on to explain these qualifications asserting that, “it sounds as if I am saying that mobility and durability are properties given in nature. But this is wrong. Mobility and durability – materiality – are themselves relational effects.” Reasserting this point in a 2007 update of ANT where he restates the tendencies in durable ordering but again qualifies that, “stability does not inhere in the materials themselves” (Law 2007). What I attempt in the analysis that follows is to offer a compelling counter-example, to show how a phenomenon produced largely through voice, when caught up in the right sort of relations, may in fact be quite durable yielding a social reordering across geographic distance, i.e. thus inverting this typical hierarchy. In this way we might examine more thoroughly the idea of durability as a relational effect. An examination of rumor in the case considered below is meant to do precisely that.

While any given instance of speech may be ephemeral, once we add to that a more relational consideration looking at the contents of what is spoken and the larger unifying phenomenon (i.e. patterns in format, what motivates the speech in the first place, and what is being attempted through speech) what becomes apparent is the diverse materiality (both in terms of material aspects and material effects) of different formats of spoken exchange. Certain oral forms such as rumors, jokes, aphorisms, or songs can be contrasted to more mundane, unmemorable everyday utterances that make up the greater proportion of spoken exchange. These forms work along the vocalizing organs and the brain and memory in different ways. There is consequently a diversity to their particular materiality, both between formats (rumors vs. jokes) and even between instances of a format (different examples of rumor). This diversity is easily overlooked where materialist accounts treat speech/voice/language performance as the homogeneously weak other to the durability of physical artifacts. This chapter looks in particular at rumor, a speech form that challenges assumptions about the homogeneous ephemerality of the spoken. Rumors manage to spread far and wide, evading the efforts of official sources to refute and diminish them. Rumors can persist for years or decades. They endure in a way that the recent materialist analysis has tended to consider only in built structures, machines, or texts.

Matter, Human Scale, and Tangibility

To argue about the materiality of rumor, it's necessary to clarify further what I treat as matter (meaning substance) relating this to the way I have framed the issue around consequentiality, that is, of matter as a redirecting force. General definition work has sometimes used the measure of the sensing and receiving human body as the judgment of what is or is not matter. Leonardi in his suggestion for how we might come to understand digital (as opposed to

physical) artifacts rests the issue on tangibility, that sense of touch is the final arbiter on what is matter (Leonardi 2010). However, there is no compelling reason I can find as to why, for example, nano-sized manufactured items must be excluded from the material realm because our skin receptors are not fine-grained enough to feel them. Why a virus, for example, because we cannot pick up and grasp it, is not material. A magnified image of this virus printed onto paper showing it as an apparent and bounded object is material by such a judgment, while what is captured in the depiction is not. A similar line of thought seems to guide Faulker and Runde (2011) in their definition of non-material digital objects (more specifically, bitstrings) in a way that largely overlooks an inescapable and fundamental constitution in the materiality of the integrated circuit. The etching on silicon yielding the microprocessor is another microscale process whose results are boxed up in the computer case and thus removed from direct human apprehension. These examples show a certain arbitrariness to registering as matter only what is at human scale.

In addition to broadening the scale of what is material, I also find a certain arbitrariness in defining as *matter* only what registers via the sole sensory channel of touch. Particles, displaced sound waves, light patterns and disturbances, all of these are received primarily through other sensory channels, and yet can certainly initiate consequences in their own distinctive way. Since such displacements and disturbances are external to the one who senses them, they ought to be considered matter/substance. In this broader definition, one can see that anything at all that is experienced has its material component. This is precisely the point to make in arguing that without matter nothing matters. This definition work prioritizes processes of materialization (rather than the work of categorizing material and non-material). While an oral form (such as rumor) is not in its essence a material thing we must still ask the important

question of how it is materialized and how this compares to other formats of language production and specifically of speech acts.

The definition of matter/substance now calls reciprocally for a clear definition of rumor with reference to the material. I define rumor here as an account of some event the teller believes to have taken place in the real world, but that is received second-hand (rather than observed directly) by the teller. This is a different definition of rumor than the one that prevails in public understanding typically equating rumor to *false* belief. The problem with a fixation on truth in rumor is that it looks past the possibility of rumors constitutive role and focuses instead on the rationality and credulity of those who receive and tell such stories. This perspective can be critiqued as an example of what Barad calls the “trap of representationalism,” the normative notion that language performance is *supposed to be* a mirror of reality (with divergences such as false rumors a problem or failure of this normative order) (Barad 2003). As a comprehensive definition of rumor, ‘falseness’ also falls short since rumor scholars studying such tales in circulation have found they sometimes prove to be true (Kapferer 1990). That being said, that rumors are frequently false does help to illuminate how such a speech form constitutes something in and of itself rather than merely indexing the apparent physical/material world. On the whole, rumor defined as a second-hand account is the more consistent aspect of the definition and is what is carried through in the following analysis.

‘The Day the Nation was Fooled’

On January 12, 2010 a 7.0 magnitude earthquake struck the country of Haiti centered only 10 miles from the capital Port Au Prince. Shortly afterwards, once the global media outlets managed to land correspondents in country, the world began to see broadcasts of the grim

devastation. Imploded buildings, slabs of concrete leaning precariously, the bodies of unfortunate victims obscured beneath piles of rubble, and massive tent cities filled with distressed and dispossessed survivors.

Nearly 5000 miles away in the West African nation of Ghana, the populace began to receive these mass mediated images of the disaster on TV, on the radio, and in reports in the local newspapers. Then on the night of January 18th, 6 days after Haiti's earthquake, this distant event became suddenly personalized as a warning describing an impending earthquake due to strike Ghana at any moment began to spread. It moved from region to region in Ghana through mobile phone calls and text messages. Ghanaians urgently called family and friends urging them to leave the homes where only moments before they had peacefully slept, these often concrete-brick structures much like the buildings in Port Au Prince. People fled into the streets, gathering in open spaces, some carrying their most valued possessions – a television, important documents, jewelry, or cash. By shouting and pounding on doors, concerned neighbors attempted to rouse those unreachable by phone. Throughout the night, these displaced citizens prayed, listened to the radio, called one another until the phone networks failed from overuse, and eventually tried to catch a bit of uncomfortable sleep in the nighttime chill of harmattan season. By early morning, as the local news shows grappled with this event, seeking confirmation or clarification, it became apparent that no earthquake had taken place and that none was imminently due, that no official body had issued this prediction, and instead that a powerful bit of misinformation had swept through the telecommunication networks, from citizen to citizen generating this dramatic outcome. Authorities from the Ministry of Information, the Geological Survey Department (GSD), and the National Disaster Management Organisation (NADMO) gave interviews to the

newspapers, on the radio, refuting the rumor and urging citizens to return to their normal routines.

My research assistant Kobby referred to the event with a sense of humor as, “*the day the nation was fooled.*” A feature article from the Ghana News Agency recalling the incident a couple of weeks afterwards was titled, “the text message that robbed Ghanaians of sleep.” Having encountered a report of this event while browsing Ghana’s major Internet site Ghanaweb, I decided as part of a planned return to Accra, Ghana’s urban capital city that I would try to collect some first-hand accounts of the event as it was experienced by Ghanaian citizens. This extended an interest in story-telling and technological sense-making sparked by rumors about ‘big gains’ from Internet scams that I had been told years before by Internet café users in Accra (Burrell 2011). The resulting interviews carried out four months after the incident captured the event from the perspectives of a diverse cross-section of Ghanaian society. The group of interviewees ranged in educational attainment though skewed towards the more educated and English-fluent. They included both men and women, held a range of different religious beliefs (animist, protestant, evangelical, and muslim), and ranged from affluent, well-connected professionals to low-income and unemployed individuals.

Among those I spoke with, all but two heard the rumor that night giving some sense of its pervasiveness in the well-connected urban capital. It was, however, received with varying degrees of skepticism and belief. Among the highly skeptical, the rumor was not passed along. In fact some made attempts to counteract its spread. For example, there was Farouk a young local leader from Mamobi, a low-income settlement in the heart of Accra, a local boy-made-good who had recently graduated from University. He received many calls the night of the rumor from people seeking to verify its truth, “*people were calling to find out. And because of, you*

know, I read papers. I get more information and people will want to find out from me, is it true, is it true? In our house, if there's any news, people want to hear from me whether that is the news...so people called and I tell them that 'oh, you should forget about this, it's not true.'"

However, those who accepted some small possibility that the warning might be true passed it along in light of the messages life-or-death implications. Freeman, a policeman, stated, *"I was not thinking it will happen,"* yet despite his doubts he was moved by his sense of obligation and concern noting, *"as a citizen of the country you show love to others. I can't wait for my colleagues to also die...I won't be happy if I should lose a friend or a family member. Especially a family member whose responsibility is on me."* Consequently as soon as he had received the warning he worked through his mobile phone address book calling people one by one to make sure his entire social network had been informed.

The actions undertaken by those who heard the earthquake rumor to alert others stemmed from this sense of responsibility, but also required a basic sense that the tale was credible. Ghanaians mentioned several reasons why they took this particular earthquake prediction as likely to be true. The rumor itself was often passed along with a reference to an authoritative source which contributed to its credibility. Rumor tellers referred to reliable mediums (the radio, the Internet) as well as official institutions such as NADMO and certain professions presumed to be authorities on the matter. In particular, meteorologists, geographers, geologists, and astronomers were mentioned. Another contribution to credibility was the precedent set, not just by the Haiti earthquake, but by smaller earthquakes that had been reported in Ghana, including one that had occurred in the mid 1990s. One young woman Joyce also noted that the actions and retelling by others confirmed for her that the story had some truth to it. She noted, *"I summoned the people in my house and lo and behold someone too has heard it. So it's like, there was*

evidence and when we came out, we saw people outside.” Belief that stems from the fact that others tell and believe a tale generates a “social truth” (White 2000) typical in the circulation of rumors. As it is retold and diffuses more widely it therefore gains credibility and becomes further strengthened.

Material Aspects of Rumor

From a materialist stance, what is apparent in rumor is its enactment and constitution in a pattern of continual reperformance through face-to-face speech (and, as of late, in other interpersonal modes such as phone calls, text message, e-mail, etc). This reproduction depends also upon the way it lodges in the memories of those who hear it. Yet it is not just that such a story is remembered, but that it compels retelling. Speech and memory are employed in producing the rumors material aspects, critical to how it comes to be known, experienced, and socially consequential. Rumor is materialized again and again with each spoken instance. Rumor is defined not only by the disembodied symbolic elements of the story but also by this particular pattern of widespread reproduction. Thus rumor is not a non-materiality existing apart from the way it is borne materially, rather its non-material and material interdependency distinguishes a rumor from a singular and ephemeral recounted story.

While accepting that rumor is not just a particular kind of story (apart from its materialization), we may still ask what role is played by the contents of the rumor itself, the sequence of words, in accomplishing this durability. One might consider whether rumor’s impact is through its indexicality, the way it points to material things in the world positing a relationship amongst that which it indexes. This would bring the motivating force underlying the spread of rumor back around to a materiality outside of it – in this case concrete structures, the movement

of the earth, and the threat this poses to fragile human bodies. However that this particular rumor is *false* and is eventually acknowledged as such is how we can see that rumor is rather a shared imaginary and in this aspect non-material. There is not an actual NADMO prediction the rumor stems from, no actual earthquake that hit within a reasonably immediate timeframe², rather these exist only in the rumor itself. Certainly to have the kind of impact it does, rumor leverages material relations drawing from the kinds of patterns experienced or witnessed in the world (i.e. in the coverage around Haiti's earthquake), but is also surplus to that.

Still to be accounted for is the critical role played in fanning the flames of this rumor by the mobile phone network providing 24-hour connectivity. Why is rumor the focus of this materialist analysis rather than the seemingly more significant materiality of this novel technological infrastructure? The availability of cheap phones and widespread phone ownership had taken place only within the last 10 years in Ghana becoming nearly ubiquitous only in the past few. Prior to the mobile phone, phone access was generally limited to urban areas and, for most Ghanaians, to the daytime hours when public phone kiosks were open for business as residential phones were uncommon.

Before considering the materiality of the mobile phone, it was not just the new convenience of calling and reaching someone directly day or night, but additionally the social conventions around phone use in Ghana, as well as competition between networks and promotional pricing schemes that played into the rapid spread of this rumor. Ghanaians typically kept their phones on and at the ready overnight. I found that there was little social approbation against late night phone calls and at the same time it was common for callers to take offense when they called and the call was not picked up. Furthermore, with the many phone network providers in Ghana competing to win customers, given the price sensitivity of this customer base,

each network heavily promotes pricing schemes including discounted hours, special in-network rates, and bulk air time buying discounts. Ghanaians often became expert at these schemes, keeping multiple SIM cards on hand for different phone networks in order to optimize calling rates. Given the time of night when the rumor spread, typically a time when phone traffic was light, calling rates were heavily discounted. As Freeman the policeman noted, “*it was ‘free nights’ when you call, [the phone network provider will] give you 99% [discount]. So I called more than 30 people. When I call you I will also tell you to call a different person. Whom you know, call him and get him informed.*” Further contributing to the credibility of the rumor, as the phone network became overloaded and calls no longer went through, this too confirmed a sense of the out-of-the-ordinary, of breakdown³ and of a vast, collective response underlining the social truth to this rumor.

There was an undeniable role that must be attributed in the materialization of this event to the changes in communications infrastructure brought about by the mobile phone. Many Ghanaians themselves mentioned mobile phones and the role they played in realizing this nighttime exodus. Fauzia, a young unmarried woman who the night of the rumor was residing in Tarkwa, a mountainous area about 120 miles from Accra, said she heard about the earthquake warning in person from a neighbor. When asked about what made such a scenario possible, she responded that it is, “*the way the world is these days.*” She recalled a prior reliance on the postal system, written letters she remembers receiving many years ago from a sister who had traveled abroad. These days, as she noted, “*news spread with the help of the mobile phones.*” Jacob, a University-educated bank worker living in a suburb of Accra began to wonder following the event about the value of mobile phones in Ghana. He noted, “*the message spread very fast even through the hinterland....*,” and though in this case it was a false tale, “*we realized that [this]*

electronic way of communication...if something should have happened...a lot of people would be alerted and they would have saved a lot of lives.” This concern is also reflected in a news item on the Ghanaweb site titled “Ghanaians ready for early warning systems⁴” noting the rapidity of the messages diffusion with the new telephone infrastructure in the country and the apparent responsiveness of Ghanaians to such a warning. The inclination from such comments is to blame or credit the mobile phone (and its network) as a kind of responsible party to the event. Yet, certainly none would admit to the mobile phone having a capacity to write and spread such a message autonomously. Instead Ghanaians pointed to a deceptive human source, an unknown rumor-monger and called for the authorities to trace, identify, and hold this person accountable. Thus motive was located exclusively in a human source and a critical materiality principally in the phone. What I have attempted to show instead by bringing the many pieces of this story together and by considering the aftermath that motive and materiality were diffused across various human and non-human components in what was an emergent unfolding scenario.

Ultimately, despite being referred to as, “the text message that robbed Ghanaians of sleep⁵” the common denominator in the earthquake rumor event in Ghana was the rumor itself that, in practice, circulated in several formats - voice calls, text messages, and face-to-face retelling. The rumor provided the impetus for this compressed and rapid message dissemination that the phone was in place to facilitate. Thus the rumor itself (and underlying it certain anxieties and notions of plausibility) served as the initiating force and the constant, while the phone was its amplifier. Of course, the rumor was no more essential to the particular way this event unfolded than the phone. It would not have taken place with quite this scope or rapidity without either.

Material Effects of Rumor

Apart from the material aspects of this rumor, there are also its material effects in the large population moving *en masse* from their homes into the streets as a result of the circulation of this mere rumor. One can imagine how astounding the figure would be if we were to calculate all the kinetic energy expended seemingly from thin air. An immediacy and urgency in the response is evident, for example, in the way Joyce recalls her response to hearing the rumor. She noted (laughing at the memory of it) that she fled into the street without even being fully dressed, “*a friend of mine called me around 3 o’clock...I wake up take my cloth [wrap]. I wasn’t even wearing pants! oh... I was afraid!*” Reflects a measure of its force that the issued warning: ‘NADMO has predicted an earthquake is about to strike here in Ghana’ in combination with a spoken command – ‘leave your room, go outside’ -- yielded almost total conformity.

This particular rumor generated a kind of emergent organizing, facilitating a leaderless movement tapping into the *wisdom* or the *madness* of crowds, or perhaps both. The earthquake rumor and its aftermath in Ghana, as some observers noted, served unintentionally as a dress-rehearsal for an emergency-response system. In the comments emerging after this rumor event, there was a certain awareness and celebration of how the collective population handled the circumstances - the consideration Ghanaians expressed not only for kin, but for acquaintances and neighbors, for more vulnerable groups such as the elderly, and the rapidity of the alert and response. “*We thank God that we have community,*” Fauzia noted.

Officials of NADMO and other agencies refuted having ever issued such a warning, This left Ghanaians to sort through alternative explanations to try to make sense of the rumor and how it got started. The aftermath of the rumor generated other sorts of rumors. Meta-level analysis of the event yielded new rumors intended to make sense of the original earthquake rumor. There

was nearly universal consensus, as noted above, that the rumor was a willful act of deceit. It was “somebody’s lie” as Joyce described it. There were calls from political leaders, journalists, and the general public to identify the responsible party or parties. Those considered to be the most likely candidates for this act of deceit included attention-seeking radio DJs, entrepreneurial Christian preachers, armed robbers attempting to create chaos and expel people from homes in order to loot, or politicians wishing to generate an incident that would distract from political campaign problems.

A young man named Nana who was living in the low-income slum of Mamobi had the most detailed theory around the rumors political motivation. His explanation turned first towards an analysis of the radio stations in Ghana, what political parties they supported, who owned the station and their political affiliations. The NDC were the party in power at that time with the NDC president John Atta-Mills taking office in January 2009. Nana asserted that the rumor, “*was political because we heard, a day before, NDC had come to Tamale to elect their leaders and the information I got from a friend in Tamale was...that some people [there] started texting [the rumor].*” Having situated the rumors origins in a particular political event in the major northern town of Tamale, Nana then explained the motive for such a tactic, “*a lot of people think there was going to be chaos at the election...it was not going to be successful. They know the media was going to talk about it. So they just brought that thing for people to put their attention to the earthquake.*” Nana, in resolving the rumor, situated the tale within broader cultural terrain. In referencing these key figures, he drew upon a shared set of expectations about how such figures operate in and upon society, the most likely suspects who would desire this sort of influence and be capable of effecting it.

Alternately, in the literature on rumor, scholars generally argue that false narrative details in rumors likely stem from misunderstandings and guesswork under circumstances of incomplete information (Allport and Postman 1965; Shibutani 1966; Turner 1993) not the puppet-mastering of malicious individuals or groups. Supporting the notion that rumors as essentially sourceless and emergent, no one was ever officially identified as the source of Ghana's earthquake rumor, just as with all prior documented studies of rumor⁶. Rumor to some degree is always beyond the initiation or control of the long chain of individuals who receive or retell it. This suggests that even sequences of action that originate in the non-material can effect a kind of 'inverse instrumentality' as Ekbia and Nardi argue (this collection) in describing how humans are positioned as users to complete a material system in ways that are not clearly voluntaristic. Here humans are instruments of a rumors demand to be spread where in Ekbia and Nardi's cases it is a networked game (World of Warcraft) and electronic medical records that do this. This gestalt of rumor further underlines the significance of considering its distinct materiality.

In these material effects we may gain some sense of why societies have and even why they may, perhaps, *need* rumors. Clearly this efficient, populist mechanism of message dissemination communicates information rapidly when information is desired. It helps to look at the patterns documented in scholarly work on rumor to further illuminate the role they typically fill. Certainly not every second-hand narrative becomes a rumor. We may think of enduring rumors as the survivors of a filtering process among all the everyday, spoken exchanges between people. They offer the most memorable of tales that resonate with the fears and imagination of a population. Bodily threat is a recurring and compelling theme. One common type of rumor involves a claim that powerful persons, institutions, or governments are intentionally spreading disease among certain undesirable populations or rendering these populations infertile (Turner

1993), stealing their organs (Scheper-Hughes 1992) or blood (White 2000). White considers at length, enduring rumors circulating in East Africa for decades suggested that colonial authorities were killing and extracting blood from colonial subjects (vampire-like) to render health or economic advantages.

On the whole, rumors often take a more vague sense of opposition, animosity, or threat and attach it to concrete events and actions, pinning institutional responsibility, fixing a date and time, pointing to the method of the threat, and sometimes suggesting certain mitigating practices to manage it - in this instance, fleeing into open spaces for safety. Rumors thus channel and diffuse ambiguities and anxieties (Turner 1993: 29-30). They may offer a release, a sense of purposeful action taken, of a threat having been handled. Thus it seems that materialization in and of itself is perhaps cathartic, releasing a population from the burden of the isolation of an unarticulated worry. In the best case scenario this process of materialization can be essentially harmless as in the current example, though darker scenarios of violence against scapegoats stemming from what turns out to be false information is also possible⁷.

Conclusion

The turn to questions of materiality – in understanding organizational forms – need not be a wholesale abandonment of language. Rather a materialist stance can serve as a grounding for the consideration of how language is performed and the broader material effects spun off from these performances. There is much to be gained from studying speech acts, the construction of narratives and the relationship among words in and of themselves and how they come to be diversely materialized. There is a flexibility in language (and the way it is performed orally or in writing) that must also be acknowledged. Specifically, the possibility of speaking about

something that does not otherwise exist, to speak in the future tense, or to knowingly tell a fictional tale, to speak of and share abstract and non-literal concepts reflects its inescapable tie to the non-material despite its apparent material aspects.

Upon careful examination it is clear that speech acts exhibit diverse materiality with some formats (such as rumor) demonstrating remarkable durability in the sense of traversing across social networks or enduring through time. Here I have argued for this materiality as two-fold. One, in the uttering of the rumor itself, as a product of the body and its speech capabilities and of human memory. By compelling retelling rumors travel far and wide and distinguish themselves from more ordinary day-to-day speech acts. A second aspect of the materiality of rumor was its capacity to motivate a population to act quickly and decisively in response to what ultimately proved to be false information. This material consequentiality of a 'mere' speech act is a sharp contrast to the way spoken commands and voice in general has been propped up in some materialist theorizing as generally and typically ephemeral and as less impactful than other material modes. This chapter further cautioned against overstating the significance of a novel technological artifact (in this case, the new role of mobile phones play in spreading a rumor) in materialist accounting. The novel or most apparently material element is not necessarily the driving force or unifying element in a studied phenomenon.

The earthquake in Haiti itself was a powerful and sudden inversion of the hierarchies of durability that as John Law notes, 'tend to' hold. The terror of buildings crumbling and turning to rubble, of what was previously silent and immobile, a haven of protection and security crashing down upon its unfortunate inhabitants. In Haiti there was also a rapid sweep of rumors in the wake of the earthquake, specifically rumors of a tsunami threat that motivated Haitians

panicked flight from tent camps. Furthermore, rumors emerged in distant lands, specifically in Ghana where such a news item resonated in a deeply personal way.

A final note on the time I've spent in urban Ghana that I have come to see as an especially verbose society, a society that relishes wit, the brilliant turn of phrase, where popular musicians brag of the authenticity of their training in proverbs⁸, and where Internet scammers often attribute their own success or the success of others to 'powerful words.' It is therefore appropriate in such a context to restore to this discussion of the material - language performances and broader non-material realms of affect, myth, and metaphor, or even theory and ideology considering the interdependency between non-material and material. My claim here, though, is that the materiality of language performances matter everywhere, *not* that they constitute a distinctively Ghanaian condition. No population is inherently susceptible to rumor and it is very much a phenomenon of circumstance appearing out of anxiety and uncertainty. The highly educated (Scheibel 1999), public officials and journalists (Tierney, Bevc et al. 2006) are all susceptible to false rumors and, at any rate, rumors do not always prove to be false. Words matter, but not as merely a floating realm of signifiers. We will benefit in a broad variety of research contexts from considering materiality in a way that avoids excluding language and its production as an unfortunate slip into the rejected realm of pure symbolism.

References

Akrich, M. (1992). The De-Description of Technical Objects. Shaping Technology/Building Society: studies in sociotechnical change. W. E. Bijker and J. Law. Cambridge, MA, MIT Press: 205-224.

Akrich, M. and B. Latour (1992). A Summary of a Convenient Vocabulary for the Semiotics of Human and Nonhuman Assemblies. Shaping Technology/Building Society: studies in sociotechnical change. W. E. Bijker and J. Law. Cambridge, MA, MIT Press: 259-264.

Allport, G. W. and L. Postman (1965). The Psychology of Rumor. New York, Russell & Russell.

Barad, K. (2003). "Posthumanist Performativity: Toward an Understanding of how Matter Comes to Matter." Signs: Journal of Women in Culture and Society **28**(3): 801-831.

Burrell, J. (2011). "User Agency in the Middle Range: Rumors and the Reinvention of the Internet in Accra, Ghana." Science, Technology and Human Values **36**(2): 139-159.

Faulkner, P. and J. Runde (2011). The Social, the Material, and the Ontology of Non-material Technological Objects. Working Paper.

Kallinikos, J., G. F. Lanzara, et al. (2010). "Introduction to the special issue." First Monday **15**(6-7).

Kapferer, J.-N. (1990). Rumors: uses, interpretations, and images. New Brunswick, Transaction Publishers.

Larkin, B. (2008). Signal and Noise: Media, Infrastructure and Urban Culture in Nigeria. Durham, NC, Duke University Press.

Latour, B. (1993). We Have Never Been Modern. New York, Harvester Wheatsheaf.

Law, J. (1994). Organizing Modernity. Oxford, Blackwell.

Law, J. (1999). After ANT: complexity, naming and topology. Actor Network Theory and After. J. Law and J. Hassard. Oxford, Blackwell Publishers: 2-14.

Law, J. (2007). Actor Network Theory and Material Semiotics.

Leonardi, P. (2010). "Digital materiality? How artifacts without matter, matter." First Monday **15**(6-7).

Miller, D., Ed. (1998). Material Cultures: why some things matter. Chicago, The University of Chicago Press.

Miller, D., Ed. (2005). Materiality. Durham, NC, Duke University Press.

Scheibel, D. (1999). "'If Your Roommate Dies, You Get a 4.0': Reclaiming Rumor with Burke and Organizational Culture." Western Journal of Communication **63**(2): 168-192.

Scheper-Hughes, N. (1992). Death Without Weeping: The Violence of Everyday Life in Brazil. Berkeley, CA, University of California Press.

Shibutani, T. (1966). Improvised News: a sociological study of rumor. Indianapolis, The Bobbs-Merrill Company, Inc.

Strum, S. and B. Latour (1987). "Redefining the Social Link: From Baboons to Humans." Social Science Information **26**(4): 783-802.

Sunden, J. (2003). Material Virtualities: approaching online textual embodiment. New York, Peter Lang.

Tierney, K., C. Bevc, et al. (2006). "Metaphors Matter: Disaster Myths, Media Frames, and Their Consequences in Hurricane Katrina." The Annals of the American Academy of Political and Social Science **604**: 57-81.

Turner, P. A. (1993). I Heard it Through the Grapevine: rumor in African-American culture. Berkeley, University of California Press.

Verran, H. (2001). Science and an African Logic. Chicago, IL, University of Chicago Press.

White, L. (2000). Speaking with Vampires: rumor and history in colonial Africa. Berkeley, University of California Press.

¹ Thanks to Paul Leonardi for pointing out this distinction at the workshop.

² Though it should be noted that some interviewees did seem to believe that an earthquake had hit at some point after the rumor began to spread, but a smaller one, and in another region of Ghana.

³ In Larkin, B. (2008). *Signal and Noise: Media, Infrastructure and Urban Culture in Nigeria*. Durham, NC, Duke University Press. Larkin points to breakdowns as a key materiality to consider in African studies. His study of media infrastructures in Nigeria demonstrating how breakdowns reflect matters trajectories beyond what human intentions invest in them.

⁴ “Ghanaians Ready for Early Warning System” (January 18, 2010), Ghana news Agency, <http://www.ghanaweb.com/GhanaHomePage/regional/artikel.php?ID=175315>

⁵ “The Text Message that Robbed Ghanaians of Sleep” (February 5, 2010), Ghana Broadcasting Corporation, <http://www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=176127>

⁶ The most carefully documented example of rumor-mongering (apart from psychology experiments) is in corporate rumors about ‘tropical fantasy’ a drink that targeted African-American consumers and was thought to be made to cause sterility in those who drank it. Turner (1993) documents how the corporation invested a great deal of time and energy into tracing this profit-impacting story finding that business adversaries participated consciously in spreading the rumor, but they found no evidence that it was these business adversaries that started the rumor.

⁷ Here I am thinking specifically of rumors after the World Trade Center bombings in New York that circulated in some countries of the Middle East that the bombing was a Western conspiracy and that all Jews who worked in the building were warned in advance and stayed home on 9/11. This functioned as grounds for continued ethnic and religious opposition. Rumors after Japan’s 1923 Kanto earthquake that Koreans were poisoning wells, committing arson and robbery, led to mob violence and the murder of thousands of Koreans, Chinese, and others it is estimated.

⁸ For example there is this line from a popular song “Borga, Borga” by Sarkodie who in a boast directed at young music industry upstarts he says, “When you people started I was in the village speaking proverbs.”