

## Hypernews, biological authenticity, and the mediation of what's important

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A subtle but important shift is unfolding in the capture and distribution of news events brought about largely due to advances in ubiquitous communication technology. This shift has spawned a new kind of witnessing, or firsthand observation, that has the potential to change the very notion of public affairs news. To understand this shift the idea of news has to be grounded on a functional, biological foundation, first for what will be called “hard news,” and then for the more problematic genre called “public affairs reports.”

News fundamentally consists of messages that increase the probability of survival into the next problem space. The more proximate news messages are to their intended audience—spatially, temporally, and psychologically—the more compelling the functional imperative to deal with them will be. A profound change is currently taking place in the nature of news because the perceived distance between users and consequential events has become negligible in some important respects. Further, the widespread adoption of handheld communication technologies has conceptually uncoupled proximity into two components: the distance of the event to the news interface, and the distance of the news interface to the user.

News is described here as falling into two categories: The first and most obvious is what journalists call “hard news,” or information bearing on sustaining the individual's social and biological integrity. The second and less obvious is what journalists call “public affairs reporting,” or information bearing on sustaining the

political and economic system's integrity. The biological imperative of the first category is more conspicuous than it is for public affairs reporting. However, that does not mean the imperative for political news is any less compelling than it is for hard news. Perhaps the single largest difference between the two categories has to do with the time horizon defining their respective problem spaces, where linking political news to specific survival contingent behaviors is usually more abstract and difficult than it is for hard news. There are, however, important exceptions to that rule, including wars and periods of extreme economic distress.

### *Information proximity as a biological imperative*

There are important qualifying conditions that need to be met before a message can be considered sufficiently proximate (spatially, temporally, and psychologically) to qualify as news. First, it must register significant threshold values on all three dimensions of proximity simultaneously. This is important because it helps avoid misclassification of messages that are only distinguished by their psychological proximity, which may be gripping but irrelevant, with genuine news. For instance, a message that is both physically and temporally proximate will by its nature be psychologically proximate as well. Some degree of collinearity among these dimensions, then, is unavoidable.

By way of example, consider the report of a sniper randomly killing innocent and unsuspecting victims in a viewer's hometown, which is universally recognized as news. The tale of a six-year-old boy purportedly stowed away in the basket of a hot air balloon set adrift over the mountains of Colorado, by contrast, may tug

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at the heart strings of cable television viewers but it is not news. The difference between the two events is subtle but important. First, even though the probability that the average citizen will fall victim to the sniper is very low, when the predator strikes, the region's transportation system will grind to a halt due to police roadblocks that make a palpable difference to the smooth functioning of the entire city. At the same time, details of the cold-blooded attacks may titillate prurient instincts, but the story remains at its core a newsworthy event.

On the other hand, while the saga of the "balloon boy" might be gripping, the incident did not have an impact on viewers' daily lives (except to absorb their attention during the ordeal) and was not news. Thus, in the first case the message was nearby, timely, and had the potential to disrupt the lives of commuters. In the second case the message could only claim psychological proximity and, while entertaining, was not news. This conceptualization of news is provocative in terms of what it leaves out as much as by what it includes. First, it explicitly grounds the locus of the meaning of news with the message receiver—what is spatially, temporally, and psychologically close—rather than with the message producer.

Second, it does not mention mediating information technologies or the social and cultural processes typically associated with discussions of news content, i.e., the content produced by media organizations, or what editors and producers think is news. Even Hall's seminal essay about dispositional readings of intended journalistic "meanings" in news accepts the idea that journalism is empowered to "make" the content embodied in news messages.<sup>1</sup> Once made, the messages pass through mediating technologies to their final destination, the "decoder," or message receiver, who may or may not understand and accept their meanings.

The point is that even when the message receiver is foregrounded, meaning creation is too frequently grounded in a discussion of journalism, which can be both ontologically and epistemologically misleading.

### *Real time as deadline*

The tenets of the information-processing paradigm in cognitive psychology and related fields like political psychology and communication research speak to the important qualities of news. They include:

- The information ecology in which humans exist is complex.
- The information processor has limited cognitive resources to bring to bear on that ecology, especially with regard to the allocations for attention and memory.
- To generate adaptive behavioral responses, the information processor is compelled to make those decisions on a "real time" deadline, often within a very short time horizon.

While the cognitive approach has gained currency as a way to model how people make sense of information conveyed by mass media, focusing the approach directly on news messages is still the exception rather than the rule. This is unfortunate because the strongest case to be made for a functional explanation of communication should be grounded in a discussion of messages containing survival-contingent information. News is just the place to find them. In statistical terms, news is information about stochastically irregular events in a highly dimensional and complex information space. Because it impinges on survival and daily existence, news biologically compels attention in ways other messages are simply incapable.

### *The ontology of authenticity*

Biological pressure for survival in a complex environment would not be so daunting if it weren't for the real-time constraint, but those are the rules. The broad evolutionary solution to the time problem is a suite of heuristics enabling us to make pretty good decisions based on limited information.<sup>2</sup> An important feature of the human information processing architecture in this regard is the need for direct sensory perception to be highly reliable. If we believed our senses, say, only half the time, just getting up and leaving a room would become so effortful that our ability to cope with our surroundings would be overwhelmed by day's end, leaving us aimlessly bewildered and directionless.

Following Bem's notion that sensory information serves as the foundation for fundamental belief, direct sensory input represents zero order experience and is grounded in what might be called the ontology of authenticity.<sup>3</sup> The premise is validated in figures of speech, such as "I couldn't believe my eyes," that are used to describe an extraordinary event. An important

feature of direct sensory experience is that the temporal and spatial proximity between the information processor and relevant stimuli in the environment is negligible (and is analogous, perhaps, to what Pynchon<sup>4</sup> calls “the real now”), making it inherently psychologically prominent and compelling.

Authenticity, then, is the domain of direct experience. And in a social context, it can be achieved only by the act of witnessing,<sup>5</sup> or direct environmental surveillance. Habermas makes two conditions explicit to qualify discourse in the public sphere—that it be rational and face-to-face.<sup>6</sup> Thus, denizens of the eighteenth century western European coffeehouses and salons he describes were bonafide participants in the discourse of public affairs. These conditions are troublesome to the idea of liberal democracy because full access to that public space, socially and intellectually, was (and remains) unachievable for most citizens.

This problem has gone unnoticed or at least underdiscussed for centuries if for no other reason than the unlikelihood of direct “authentic” experience in the public sphere. Because mass, and now networked, communication technologies opened up new spaces, the only realistic mechanism for participation involved relying on some agent who could gain access to the public sphere to act as surrogate witness for the rest of the polity. But in structuring public affairs as an indirect experience, biological authenticity became unachievable; information was mediated and some derivative stand in for authenticity—today what we recognize as “news”—had to be proposed in its place.

Two key concepts underlie the success (or failure) of successive media systems in generating messages that could achieve at least a modicum of authenticity for message receivers: They are (1) a message’s functional distance and (2) the ontological system employed to minimize that distance.

First, an object’s function distance is determined by the biological necessity to deal with it in a timely fashion. Marr’s model of vision lends a good example. He describes human vision as a 2½ dimensional construct.<sup>7</sup> The very first steps in the process organize the visual ecology into objects. Once that is done, those objects are classified according to size and relative position to one and other. Thus, a small object behind other objects will be ignored because it is least likely to have any immediate or imminent impact on the organism’s continued survival. On the other hand, a

large object in front of other objects demands immediate attention. Thus, functional distance in Marr’s visual system is a metric fundamentally based on the potential of an object to affect the well being of the organism. Marr hedges in his description of the last half dimension, but in regards to the discussion here it can be thought of as an object’s salience, say as predator versus prey. Thus, in the hyperauthentic “real now” space, time and psychological distance are functionally zero. That is to say, there is no separation between an object’s appearance, its perception, and the opportunity to either approach or avoid it.

The second concept, a media system’s ontology, bears on its ability of that system to lay some claim on its value relative to authentic experience. The Oxford English Dictionary describes ontology as the science or study of being, or of being in the abstract. The idea of being in the abstract is most salient here because a media system’s ontology is a system of knowing derived from a few key assumptions intended to lend messages as equivalent to authentic sensory experience.

Three core ontological frameworks are relevant here: the objectivity of newspapers, the liveness of television, and the access of the Internet. The idea of ontology is not used here as equivalent to the idea of ideology. Taborsky sees a subtle but important difference between the two.<sup>8</sup> An ontology is a framework for knowing that is dynamic and mutable whereas an ideology is not. An ideology, in her mind, is a static system bounded by dogma. Here, concepts such as objectivity lose their symbolic value and become iconic and unable to adapt to change. Such an ideological system is frozen in time and functionally “dead.” As will be seen in the following discussion, this may be the root of the problem facing currently facing traditional journalism.

### *The ontology of objectivity*

As human society has grown ever more complex, the need for survival-relevant information beyond the range of direct sensory perception also has increased dramatically. A critical feature of such information is that it represents second order experience. Thus, an important challenge for these messages is to propose a plausible ontological placemaker for the authenticity of direct sensory experience to make them compelling. This was accomplished with the advent of daily mass circulation newspapers in the 1830s and is usually

associated with the appearance of a class of information workers called journalists whose job it is to generate news messages embracing the ontology of objectivity. Objectivity was based on a set of principles intended to (a) generate authentic reports of events distant in space, and sometimes in time, and (b) produce narratives readers could accept as credible. Thus, objectivity could lay partial claim to be a surrogate for sensory authenticity.

Interestingly, while other technological advances, such as telegraph, telephone, and wireless radio, increased timeliness, most definitions of newspaper news mention proximity only in terms of physical distance.<sup>9</sup> Timeliness is certainly at the top of the list but curiously left to stand alone. This may be at least a tacit admission that “objective” journalism at its best was still not quite able to overcome the temporal separation between a distant event and the reader. One explanation for this segregation of space is that while newspapers reduced the functional distance between readers and events, they could not do the same for time.

#### *The ontology of liveness*

Broadcasting, first radio and then television, presented the first major challenge to the temporal priority of daily newspapers in the form of liveness. Auslander points out that new media technologies don't destroy old systems but instead populate them with their own way of knowing.<sup>10</sup> Television could “go live” at any moment in ways that newspapers or even film could not. Even though TV rarely does go live, the fact that it can makes all the difference in how it is perceived. Television (and to some extent radio) offers audiences a psychological sense of “being there” wholly unlike that of previous news media.<sup>11</sup> Now the distance from an event to the media interface is negligible for both time and space. There can be no more poignant example of this premise than the live transmission of images of a commercial jetliner flying into the side of the World Trade Center on September 11, 2001, much like the slow-motion image of a bullet passing through an apple. Thus, liveness achieved via televised broadcasting substitutes for sensory authenticity.

It should not be surprising that traditional journalism has always cast a jaundiced eye on television. Having an apparatus capable of psychologically removing the distance between an event and the

message receiver in both space and time had the palpable effect of calling into question the core legitimacy of the journalistic function—packaging and narrating news. Schudson points out that journalism may have damaged itself in this regard when it elevated the ontology of objectivity to the level of an ideology in the first few decades of the twentieth century.<sup>12</sup> Newhagen and Levy argue that while journalism may have been able to invoke cultural norms to legitimize its stranglehold on the news production process for a while after the advent of television, it now finds itself helpless to adapt to change in the face of new media because it is frozen in the confines of what it considers to be an immutable doctrine of truth, embolden by a posture of professional integrity, just at the very moment when flexibility is critical to its survival.<sup>13</sup>

#### *The ontology of access*

While it has been apparent for about two decades that nonlinear communications architectures represented a genuine revolution in media technologies, only recently have the full implications of such systems begun to emerge. This is not an historically typical renewal cycle, as described by Newhagen.<sup>14</sup> Rather, it resembles something more akin to the relentless and permanent revolutionary roil envisioned by Mao Tsetung in political systems.<sup>15</sup> The phenomenon was first described as a physical network (ARPAnet) and later identified as the Internet. Then the inherent nature of the technology became more abstract, described as software and manifested in the form of the graphical user interface (GUI). This advance represented an ontological watershed in the sense that the first GUI browser, Mosaic, was the product of “open source” development rather than a proprietary business model. At the same time, important advances also took place in terms of code structure, where the iterative, recursive, and digressive nested processes in languages such as Fortran were replaced by object oriented models based on hierarchical inheritance in programming languages such as C++.<sup>16</sup> Some models even attempted to base code on human cognitive processes.<sup>17</sup>

The pace of engineering advances during this era are best described by Moore's Law, which predicts that the number of transistors that can be placed inexpensively on an integrated circuit will double approximately

every two years. The capabilities of many digital electronic devices are strongly linked to Moore's law, including processing speed, memory capacity, sensors, and even the number and size of pixels in digital cameras. As for advances in computers, desktops became laptops, which in turn have become handheld devices such as smart phones. In terms of connectivity, dial-in became broadband, which has now become wireless. And so increases in computational capacity and decreases in apparatus size were integrated with high-speed broadband wireless access and converged in devices that are portable and ubiquitous and suddenly there is no down time.

Ubiquitous computing has had a dramatic, if little understood, impact on news in the form of an overlooked component of proximity: the collapse of distance between the user and information interface. Interface distance between audiences and news events has become so trivial in comparison to earlier systems that it has basically gone unnoticed. But on reflection the distance between the news interface and user was the final frontier to be conquered for a mediated experience to gain the status of authentic, direct sensory experience.

Even with its compelling liveness, televised real-time reporting requires that the viewer seek out or go to the receiver. Indeed, for the proximity of a televised event to be zero depends on the coincidence of a viewer being in front of a receiver at the time the event takes place. The newspaper, though highly portable, is delivered just once a day and lacks liveness. Radio solves the liveness problem but lacks visual realism and distances the listener from events by only appealing to certain senses (and sensibilities). Mobile, networked media, which combine the advantages of all previous media in a portable design, deliver temporal, spatial, and psychological proximity to events while also zeroing out the distance between the user and interface. Short of a sci-fi hardware jack plugging directly into the central nervous system, ubiquitous hand held communication devices appear to reduce both event-to-interface and interface-to-user proximity to insignificance, giving them full status as direct sensory experience.

#### *The future of journalism, the future of news*

McLuhan observed that the introduction of new media promote a climate of reassessment, where

overlooked assumptions about old media are reexamined.<sup>18</sup> An important irony is that while innovation after innovation in communication technology cascade into the general population, professional journalism and the news production industry have foundered. Newspaper circulation has been in what Meyer calls a "death spiral" for decades.<sup>19</sup> The economic downturn has forced many into bankruptcy and circulation continues to decline at unprecedented rates; some major daily newspapers have cut publication of print editions to three times a week.

But does the minuet between profit-generating news corporations, news consumers, and the journalistic establishment signal the end of news? Certainly audiences are no less dependent on news than they were in previous decades. Indeed, a central theme of this essay has been to explicate a model of news production driven by user demand. Communication technologies will become increasingly transparent and employed in both the generation and reception of news. With the diffusion of ubiquitous handheld devices, this process may soon be free from the control of a particular business enterprise or formality of professional canons. The processes described here do not represent some new for-profit model for the industry. Self-generating, or user generated, news is on the way and media organizations will no longer have the stranglehold over news and public affairs reporting that they have enjoyed for well over a century.

More insight into the future of how news, political or otherwise, will be organized or displayed can be gained by looking at collaborative open source models, but even that approach will have its limits. The idea of a news "aggregator," casting a broad net into the information milieu and organizing its daily catch for display on Web portals that have little or nothing to do with traditional journalism, is already commonplace. Although they are likely to persist for some time as cultural products, the daily paper and nightly newscast are already outmoded.

#### *A new kind of witnessing*

Journalism and public affairs reporting lost its soul when it turned its back on the central claim it had to authenticity, the act of witnessing.<sup>5</sup> It may have been the fault of corporate accountants so eager to attend to the bottom line they forgot the importance of first hand

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reporting. It may have been the fault of journalists themselves, covering the president's speech from a TV monitor in the newsroom rather than sending someone to the actual event. Or it may have been an artifact of new communication technologies that literally made the formal journalistic ritual of witnessing obsolete, empowering just about anyone who happens to be at the right place at the right time with a cell phone with similar authority. More likely, it was probably some combination of all three.

Journalists break out in a cold sweat when they think about random citizens transmitting real-time streaming video from the center of a terrorist bombing. "How can what they're doing be trusted?" they wonder. From the viewer's point of view, the question becomes "How can live images from the scene of a newsworthy event *not* be trusted? A passenger on the US Air jet that made an emergency landing in the Hudson River captured an image of the plane on his cell seconds after he was rescued by a ferry boat and posted it to FaceBook. Meanwhile CNN's Wolf Blitzer, working only with a video feed and no live support on the ground, went on for 10 minutes during his "Situation Room" show hyping the drama of the passengers inside the craft, and even consulting an "expert" about what might happen when a door was opened and the cabin depressurized. One can only wonder what the passengers wrapped in blankets sipping hot chocolate in a nearby ferry terminal might have thought of Blitzer's report.

As such episodes become more common they represent more than just a passing embarrassment for mainstream media. Central to the discussion of the emergence of ubiquitous media is the reemergence of the centrality of witnessing. Verification has become the mantra for journalists holding out against collaborative stochastic models of information management such as Wikipedia. But an event must be witnessed to be verified as real, and journalists cannot be everywhere that news unfolds.

Increasingly, news from this brave new world will be real time and spontaneous, supplied by a cadre of witnesses who have enough of their senses about them in time of crisis and importance to take out their smart phones. Their messages need not be vetted within the scrutiny of a professional cannon; they are authentic by their very nature on account of user proximity to the event. Narration, analysis, and interpretation then

become the primary domain of journalism and public affairs reporting.

### *News and politics*

The biological underpinnings of the need for political information may seem distant from a discussion of plane crashes and terrorist attacks, but even traditionalists such as Kovach and Rosenstiel seem to acknowledge the biological foundations of news.<sup>20</sup> But within conventional explanations of and apologies for traditional journalism, such "far flung" notions are quickly abandoned in favor of a more conventional discussion of the importance of journalism as an institutional pillar of liberal democracy.

The claim of journalism's democratic legitimacy traces its roots to arguments by Milton and others defending freedom of speech, which were memorialized with the establishment of the First Amendment. Interestingly, the key assumptions of the information processing paradigm can be seen in Milton's famous claim from the *Aeropagitica* that "...though all the winds of doctrine were let loose to play upon the earth, so truth be in the field ... let her and falsehood grapple; who ever knew truth put to the worse, in a free and open encounter." Milton assumes the political information ecology is complex, but then claims the individual citizen has the cognitive capacity to take on the onerous task of making sense of it. It seems odd that contemporary debates surrounding journalism's legitimacy as a quasi-political institution is grounded in the idea that citizens need someone to tell them what is important. Politicians have understood they can circumvent journalism and communicate directly to their audience via broadcast media some time ago. They get better at it with every passing election cycle and, just as Milton predicted, not all their efforts are benign.

In a real sense the journalist's function in public affairs has been trivialized to be merely annotational, where its task is to certify the legitimacy of an event or analyze it after the fact rather than to witness it.

### **Note**

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