Multiplicities and the Subject:
Rethinking a Mix-of-Attributes Approach in the Digital World

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It has been 30 years since Clark made his call to focus on fundamental structures of media rather than media formats (such as radio or television) and more than 10 years since Eveland proposed a mix-of-attributes approach to media effects. This article suggests that it is time for a reevaluation of the mix-of-attributes approach, noting that there is a continued focus on format when studying media content. We argue for rethinking the assumptions that preempt a mix-of-attributes approach. As a way of accounting for the complexities of how messages move in the digital media ecology, beyond the constraints of singular media formats, we first invoke the concept of multiplicities (concurrent engagement with multiple information sources) and then propose that the role of the subject be foregrounded within a revised mix-of-attributes approach to studying media effects in the digital age.

Keywords: mix-of-attributes, MoA, digitization, form, content, subject, multiplicities, method

As early as the 1970s, media effects theorists such as Eveland, Clark, and others were calling for a more granular and transferable approach to understanding media effects, shifting the focus from "the veneer of [media] forms" to "the essential foundational structures" (Dylko & McCluskey, 2012, p. 271) that underpin the various media. As Clark (1983) and others suggested, rather than focusing on the medium itself, the focus should be on "attributes" of media and how these shape the way information is consumed. Although Clark's interest was specifically in learning and cognition, the idea that attributes rather than media per se (such as television or radio)—described by Clark as "vehicles for attributes" (1983, p. 452)—should be the focus of study opened new and fruitful potentials in media effects research.

In his article titled "A "Mix-of-Attributes" Approach to the Study of Media Effects and New Communication Technologies," Eveland (2003) proposes six attributes which he argues are potentially common to all media, to a greater or lesser extent. These attributes are: (a) *interactivity*, the degree to which the individual can interact with the technology; (b) *organization* or *structure*, the text layout (for

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example, linear or interrupted with hyperlinks); (c) user *control*, which Eveland suggests overlaps with interactivity and organization and may even be the product of the two; (d) *channel*, the visual and other senses used to receive the message; (e) *textuality*, the amount of content available in text form; and (f) *content*, the information conveyed by the medium (for example, sex or violence). As Eveland notes, "I have specifically relegated content as the final attribute of media to be discussed in part because, as McLeod and associates have noted, '[c]ontent-specific formulations continue to dominate conceptions of media effects'" (2003, pp. 399–400).

Eveland's mix-of-attributes (MoA) approach denies the preeminence of any particular defining media attribute, such as content or channel. Instead, his approach was intended to recognize the complexity inherent in studying the effects of media by introducing a multidimensional approach (Mills, 2005), which references media through a historicized matrix of attributes. Specific media are no longer the focus of interest; rather, the focus is on a combination of common attributes (related to, but independent of, any particular media format) that work to position "nuanced" (Jourdan, 2006) media experiences along a shared continuum, where differences are now a matter of degree rather than form. This does not deny the physicality of media; it does however background the technology and focus attention instead on the complexities of the communication experience. As Ha, Leconte, and Savidge (2013) suggest, Eveland's MoA approach manages to account for the "multi-dimensionality of the attributes about which the audience care" (p. 284). As Eveland and subsequent proponents of a mix-of-attributes approach have argued (and continue to argue), new media no longer require new theories. Instead, a common mix-of-attributes approach, addressing *degrees* of interactivity, organization, control, channel, textuality, and content can be used to better understand the variations—including the similarities and differences—in media use.

Revisiting MoA

It has been 30 years since Clark called for a more robust approach to media attributes research and more than 10 years since Eveland proposed his mix-of-attributes approach to understanding media effects. In light of this anniversary, and of the continued research emphasis on media *content* (Ghersetti, 2013; Weeks & Holbert, 2013) and media *format*, such as newspapers and television (Bachmann & de Zúñiga, 2013; Ha et al., 2013), we suggest it is now timely to review Eveland's MoA approach and to rethink these attributes more critically in relation to media complexity in a digital age.

In this article, we intend to focus not on the attributes themselves but rather on the assumptions that researchers bring to bear *before* applying all or parts of a mix-of-attributes approach. We argue that digitization, and the new modalities of media engagement which this enables, demand a reordering and a reevaluation of the assumptions made when using a MoA approach. In particular, prioritizing the subject (who is integral to the communication process) and addressing the complexity and inherent messiness of the digital landscape will help disrupt the ongoing tendency to focus on media *forms* as a way of approaching research in this area. Instead, research needs to refocus attention on the user experience of media attributes, especially interlinked or interconnected attributes, and the ways in which media messages are acquired in a multimodal, nonlinear media environment. In so doing, we aim to rethink assumptions brought to bear on Eveland's mix-of-attributes approach to better understand media use in a complex digital world.

We do not attempt to explain or account for the totality of *all* user types and experiences of (multi) media use (cf. D'heer, Courtois, & Paulussen, 2012). Nor do we attempt to completely rewrite the methodological core of a mix-of-attributes approach. Rather, we seek to reevaluate the underlying assumptions related to particular research approaches and (we argue) an indicative type of media users who routinely attend to multiple channels simultaneously. By taking this approach, we hope to draw attention to the assumptions brought to MoA in a way that will refine and revitalize it as a useful method within new media and communication studies.

Media Boundaries and the Specter of the Black Box

Research that has adopted a mix-of-attributes approach (or some recognizable variant) within a digital environment has, for the most part, continued to foreground the vehicles for attributes, or the affordances of particular platforms or media containers, such as television, radio, or (even more problematically) the Internet. Despite overt use of attributes, research too often defaults to a focus on media *format.* Although this ongoing recognition of media boundaries (television and radio are considered to be separate and distinct media formats) enables research clarity and appropriate points of comparison, such work, as a whole, does not account for the lived experience of the digital age, such as viewing on-demand TV on the Web or tweeting while watching the evening news on television. This "container approach" to applying MoA runs counter to the call to move beyond the "veneers of media forms" and to focus on the underlying and "essential foundational structures" of the media landscape (Dylko & McCluskey, 2012). Such use of MoA within a bounded media environment fails to fully and critically explore—and indeed justify—the assumptions underlying *what* is chosen to apply a mix-of-attributes approach *to*.

Of course, theorizing about media effects by media format, such as television or radio, can be an attractive, even logical, research proposition. Studying media effects in this way may make things simpler, and the television, radio, or newspaper usefully presents boundaries that help define and confine the research activity. However, isolating particular media containers or forms can be problematic when attempting to analyze media effects, potentially black-boxing the particular media under scrutiny; inputs are transmuted in an unscrutinized (and, one might even argue, technologically determinist) fashion into outputs which then have an effect that can be studied. As Winner (1993) describes, "One need not understand anything about what goes on inside such black boxes. One simply brackets them as instruments that perform certain valuable functions" (p. 365).

Opening the Black Box With an MoA Approach?

By introducing a mix-of-attributes approach in 2003, Eveland attempted to open the black box and revisit our understanding of media effects in terms of shared elements that are common to all media. Explicating media through shared attributes rather than format or container is not, however, an easy process in practice. Although researchers within media and communication studies have attempted to do just that, either by reapplying a selection of Eveland's suggested MoA or by building on Eveland's model and developing variations of these common attributes, this tendency to group together areas based on the

vehicle for attributes (i.e., the platform, format, or container)[1] is commonplace, even when researchers are aware of the limitations of such approaches (Ghersetti, 2013). As a result, research that has claimed to use a mix-of-attributes approach (to a greater or lesser extent) has inadvertently continued to reinforce the black-boxing of media messages inside particular media containers, whether they be newspapers (Beaudoin, 2008; Shen & Eveland, 2010), television (Ben-Porath, 2007; Vesa & van Heck, 2005), video (Grant, Wilkinson & Guerrazzi, 2013; Ha et al. 2013), online news services (Carpenter, 2010; Miller & McKerrow, 2010), news platforms (Bachmann & de Zúñiga, 2013), mobile devices or websites (Renwick, 2012), or even specific services such as Twitter (Binder, 2012).

This misuse of MoA—that is, claiming to use the approach, then either misunderstanding or misapplying it—goes some way toward explaining the continued focus on media *format*. As already outlined, however, there is nothing inherent in an MoA approach that encourages interest in format (in fact, Eveland argued quite the reverse) beyond perhaps some unexplored bias that makes this seem the best point of entry into exploring media use. Ongoing attention to format has inadvertently black-boxed many of the assumptions feeding into understandings of attributes, which then shapes the conclusions reached.

In their research into the effects of political communication in a more realistic online news environment, Dylko and McCluskey (2012) do appear to open the black box. The authors unpack media format and focus, instead, on a nuanced mix of attributes that are particularly applicable in the user-generated content environment in which they are researching. However, despite usefully unpacking blogs, wikis, and other conventionally categorized user-generated media containers and converting them into their mix of attributes, the authors then *repackage* these media vehicles according to their various attributes, and blogs and wikis effectively reemerge within a single container; the boundaries around different media are once again reinstated.

Of course, such criticisms have to be moderated by an acknowledgment that no research can fully account for the messiness and interconnectivity of the everyday experiences of those living in a digital society. Comparable examples might share a container or format and thus suggest themselves as an obvious research nexus. However, we challenge approaches that have neatly eviscerated the object of study from the wider media ecosystem within which it was situated, resulting in the site of study becoming distanced from other important factors that may influence message production, reproduction, and consumption. We challenge the value of focusing on a mix-of-attributes approach on singular media formats and argue that this fundamentally undermines the usefulness of a mix-of-attributes approach. Maintaining discrete boundaries around each media format or container creates a danger of not only black-boxing that particular media format—the newspaper or television—under scrutiny but, more importantly, making it more (rather than less) difficult to appreciate the wider connections that undoubtedly now exist within a networked media landscape. We stress the importance of accounting for the interconnectedness and overlap of the experience of media texts and messages in a digital, multimodal environment. Rather than isolating particular media containers, we need to reexamine the underlying connectedness of media

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[1] The terms *vehicle*, *format*, *platform*, and *container* are used interchangeably throughout this essay. These terms refer to the various media technologies that, prior to the digital era, were routinely viewed as separate media, distinct from one another (for example radio, television, and newspapers).

messages across different platforms and formats and (re)foreground this interconnectivity in the examination of effects.

It is important to explore the underlying assumptions that determine how objects of research are apportioned *before* a mix-of-attributes or other research tool is applied. This will ensure that the object of study is no longer divorced from its network of associations in the digital media environment; that the metaphorical baby is not thrown out with the bathwater.

Foregrounding the Subject With an MoA Approach? A Review of the Literature

Another weakness of using a mix-of-attributes approach to understand media use effects in the digital age is the lingering tendency toward a technologically deterministic view of media and the relegation of the subject as an active agent. Dylko and McCluskey (2012), who work thoroughly within a mix-of-attributes framework, effectively counter accusations of technological determinism by emphasizing the importance of first attending to the "technological piece of the larger theoretical puzzle" (p. 255). They also, importantly, stress the inherent connectivity and inseparability of the technical with the nontechnical within media effects research, pointing to the "intertwining" of ICTs with social or individual factors. Interestingly, however, their conclusion does not entirely reflect this intertwined aspect of the social with the technological. "Understanding these temporally stable structures underlying media *and then moving* [emphasis added] to examine how they interact with social factors . . . can productively move media-effects field forward in today's quickly evolving communication environment" (p. 271).

Similar attempts to reinstate the subject are made by other researchers working in the digital environment and acknowledge the value of a mix-of-attributes approach (although not all employ such an approach directly in their own research). Ahn (2011) adopts a "social informatics approach" to understanding how the use of social networking services affects young people. Her interest is primarily in causality, but her conclusions, like those of Dylko, direct attention beyond the purely technological as she brings the user experience—that is, "the subject"—back into focus: "The critical question for future studies is not whether youth use one technology or another, but what kinds of interactions and content they experience in these virtual settings" (p. 1443). Similarly, Sohn (2011) and Nowak, Watt, and Walther (2005) also attend to the social in their research on computer-mediated communication (CMC) and interaction. Sohn suggests that, although interactivity involves a human agent (i.e., user perception), this attribute is more generally treated as a purely technological or mechanical characteristic, typically associated with the Internet. Citing Sundar (2007, p. 90), Sohn suggests, "the more bells and whistles there are on the site, the greater its interactivity" (2011, p. 1322). Sohn rejects this simplistic, technologically deterministic approach as being *suggestive* of "the site's potential interactivity" (p. 1322) rather than indicative of the subject's actual experience. He states that linking interactivity to a particular medium's existing features and functions further restricts research potentials. This echoes our earlier observations about how ongoing attention on media format limits or constrains research in the new media environment.

Nowak et al. (2005) do not address attributes overtly in their study on synchrony (a concept discussed in more detail below), but instead look at "media affordances" (which echo Eveland's text-only

"textuality" and multisensory "channel") and computer-mediated communication interaction. In fact, the authors question the extent to which Eveland's "more abstract properties or constructs that can be linked to such system variations" can be applied within CMC research at all. Significantly, however, like Dylko, McCluskey, Ahn, and Sohn, their results point to the need to reprioritize the social, noting "rather than simply technologically deterministic predictions . . . [focusing on the] intervening variables from non-technical social processes may offer greater potency in revealing the ultimate and indirect effects of communication technology systems" (Nowak et al., 2005, conclusion, paras. 4, 3).

The question around the place of the social in computer-mediated communication specifically is also picked up by Garrett et al. (2012) in their study of new ICTs and politics. They examine how new "technological affordances" (features of technology, similar to attributes, either as described by Eveland or in some other combination) enable new possibilities, but they stress that changes are as much about *users* and how they actively engage with different media technologies: "Scholars must strive to avoid making deterministic assumptions through remembering that consequences are defined by how technologies are used and by whom, not by what they enable" (p. 223).

Garrett et al. are firmly situated within the digital, multimodal environment, and they continue to work with (or rather they claim to work with, or at the very least reference) some aspect of Eveland's mix-of-attributes approach. Importantly, however, despite their claims to the contrary, their articles also highlight the difficulties inherent in prioritizing the messy but ultimately more revealing social experience over the technological. Dylko (2013), in particular, strives to navigate between the technological and the social, but by continuing to maintain boundaries around media format (as outlined above), he, too, like others working with a MoA approach, fails to fully address the complexities of the digital environment in which information is produced, shared, and consumed.

To deepen and strengthen the effectiveness of mix-of-attributes–based approaches to understanding media effects, this article suggests that it is necessary in the digital media environment to first reexamine the media landscape—in particular, the underlying assumptions of media circulation, interconnectedness, and acquisition—and, second, to reevaluate the importance of the subject as a heterogeneous user in navigating and bringing together the interconnectedness of media texts and messages.

From Synergistic Use of Bounded Media to the Concept of Multiplicities

Much of the research that claims to adopt or adapt an MoA approach focuses on the sharing and consumption of political and other news. For example, Shen and Eveland (2010) revisit Eveland's MoA approach to better understand the use of "multiple similar (in terms of content and form) news outlets" (p. 364) on the development of political knowledge. The authors refer to their approach as being "synergistic"; they recognize that consumers are exposed to, and seek out, news from a variety of media sources. This approach is revealing but does not go far enough. Focusing on the synergistic information-processing environment (populated with different and discrete media formats) fails to recognize the underlying interconnectedness of that environment and maintains the separateness of media—in this case, television and print newspapers. Similarly, Beaudoin's study (2008), which examines the "comparative and

synergistic influence of the internet on international knowledge" (p. 455) by contrasting the effects of print, TV, and Internet news, continues to maintain boundaries around different media formats in a way that might seem almost arbitrary when compared to the lived experience of a subject's consumption of news. In practice, information is rarely available as discrete or exclusive packages: Print newspapers appear online; user-generated content is routinely spliced into network news on TV; cable TV news is Internet news and vice versa. Beaudoin's and Shen and Eveland's focus on the synergistic effects of media format enables tidy research, but it fails to adequately represent the production, sharing, and consumption of news and other information as it exists within a complex media environment.

In reviewing prior applications of MoA and trying to discern some of the underlying assumptions that drove the combination of attributes, one key missing element that is tied to, but goes far beyond, the notion of synergies is the idea of what we will refer to as "multiplicities." The term *multiplicities* is invoked here to try to account for the somewhat porous and increasingly transparent nature of media boundaries and the ways in which subjects participate in their media cultures (both as consumers and as producers) not in static or fixed positions but rather more fluidly across space and time (and, by inference, across different platforms and containers and in different contexts). The concept of multiplicities differs from the synergistic (consecutive) effects of media, as discussed by Beaudoin (2008) and Shen and Eveland (2010). Beaudoin uses the concept of "media synergy" to suggest that the effect of multiple media use typically includes "gathering initial recognition of an event or issue from one medium and then collecting more in-depth and contextual information from another medium" (p. 464). In other words, synergy relates to a complex strategy of information gathering and processing around a *particular topic or theme*—for example, a subject may hear a news item on the radio, then search for the story online to learn more. Multiplicities are less about synergistic information gathering and knowledge building and typically involve a much less conscious, deliberate, or considered set of processes. With multiplicities, the subject may or may not be seeking related information on, for example, a particular news item. Rather, they are engaging with multiple diverse information sources *concurrentl*y (D'heer et al., 2012)—a step *before* consecutive information acquisition. The concept of multiplicities breaks the idea of linear, structured information acquisition by a subject and speaks more to browsing and grazing consumption patterns—the ambient awareness of information that is a characteristic of, for example, consumption of social media timelines and news feeds. Information acquisition is more likely to be unplanned and unstructured, and the information shared (in either direction) may be unrelated. Although the synergistic (consecutive) effects of different media containers, such as print newspapers or radio, continue to engage the attention of media theorists as discussed, this approach presupposes an information environment that is becoming increasingly difficult to unravel into discrete parts. The idea of multiplicities, on the other hand, acknowledges the interconnectedness of the digital, and, significantly, it prioritizes the messiness of this information environment.

Within the idea of multiplicities is a strong connection to ideas of complexity. The media landscape is a system made up of a dynamic interplay of containers and vehicles for attributes. These are both consecutively and concurrently being wrapped around content, and content is being moved between and across sets of radically different containers. As we know from work on the study of complexity, small changes in complex systems can rapidly amplify to have large flow-on effects (Hughes, 1983; Patten & Odum, 1981). It is worth returning at this point to the question of whether, in a complex system that

enables such amplification of change and that is in dynamic flux, dismissing the processes inside a black box can do justice to the media object, message, or even participant under examination.

The concept of multiplicities brings to the foreground notions of plurality, cross-media convergence, and the importance of the subject within this complex media environment—notions that are implied by, but not explicated in, Eveland's original discussion of a mix-of-attributes approach. This brings us back to one of the fundamental research issues of a MoA approach: how to approach and sample this complex information environment to begin to understand media effects in what can seem to be a complex and even sometimes random sequence of events or interactions.

Reevaluating the Importance of the Subject

The role of the subject is acknowledged only in passing in Eveland's original mix-of-attributes theory (Eveland, 2003), but considering issues of multiplicity, complexity, plurality, and convergence, we argue that the subject should now be foregrounded as a way of understanding and researching the interlaced media environments that are becoming the norm in the digital age. It may be worthwhile to consider the attributes of the subject as a participant within these systems.

Although much has been written on the notion of the subject from multiple theoretical positions (such as structuralist and feminist, for example), for this article, we wish to consider the subject as an agent who is active in the meaning exchange. Though this might be thought of as overly simplistic, we posit that this shift in focus moves attention away from the platforms and containers of media (the newspapers and radios) that have been the unintentional default focus of more recent research claiming a mix-of-attributes approach and that are becoming increasingly meaningless in a converged digital space. Instead, this prioritizes the needs, wants, and desires of the *subject*—whether that be user, audience, participant, producer, or, as the digital age increasingly encourages, all of the above—in relation to information flows as the point from which meaning exchange then occurs through a medium or media or platform(s) that best suit that subject position.

It is important to note here that subjects themselves come with their own abilities ("literacies") and also economic, social, and other constraints to their activities and behaviors; they also operate within particular environments and institutions. These subjects are pluralistic, heterogeneous, complex, and diverse in background, need (as would be highlighted in a uses and gratifications approach, for instance), emphasis, skill, and a host of other factors that shape their engagement and behavior. It is also still difficult in all audience- or subject-centric media research to isolate and account for all these diverse variables that shape a subject's media use and experience. For example, our hypothetical subject in the "second-screen scenario" (outlined below) might function differently with regard to their information consumption and media choices in their own space—with its known screens, channels, and content choices—as opposed to in a much more constrained or content-sparse environment (such as in a classroom, at a friend's house, or driving a car).

It is vital to emphasize that, in the example below, we describe early-adopter behaviors within ideal or optimum settings rather than behaviors that are more established or normalized. Attending to this

early-adopter group—those users who are already demonstrating new ways of engaging with media—is an important first step toward theorizing around changing media behaviors in the multimodal, digital environment.

Reflecting on and evaluating the role of the subject, as a precursor to exploring media effects, reorients the focus and assumptions brought to the research away from particular *types* of media (say, newspapers) and toward the *processes* and *intents* of media message production, exchange, and consumption—in other words, toward the original (and still valid) intents of a mix-of-attributes approach. Furthermore, this revised MoA approach is more inclusive of pluralism and the synergy between media texts, which allows scope for transmedia messages, convergences, and cross-platform synchrony, as is emerging in the digital media landscape. For example, the intersections between a core traditional television text (such as the evening news), webisodes (TV episodes on the Web), and user-generated content (tweeting, Facebook "likes," or blogposts) can be more easily uncovered by including the subject as an active agent who consumes a media message (evening news on TV), engages with synchronic or parallel messages (webisodes), and then engages with, and becomes a producer of, new messages and content (user-generated content). Approaching the same situation with the platform foregrounded may exclude some or all of these parallel activities from the research and obscure the intersectionality driving digital media effects. This evokes the popular metaphor of "media ecologies" (Strate, 2004)—the concept popularized by Postman (1974) and others that "every communication system and process is connected with every other communication system and process in a complex network, and that the study of communication processes is the study, not of elements, but of elements in relationships" (p. 4).

While acknowledging these ideas, we want to take these macro-ideas of interconnectivity evoked by the metaphor of ecology and bring them to the level of the user as subject in relation to actual lived habits of media engagement. In doing so, we will begin to consider how we might practically approach researching and theorizing their media activities within this complex network of interconnectivity. Importantly, MoA is now applied at the point where the information is received and distributed by the subject rather than used to assess the qualities of any particular media channel or platform.

A Revised Mix-of-Attributes Approach

As noted earlier, one of the likely reasons for the ongoing format-centric approach to a mix-of-attributes analysis is that format is a convenient knife with which to cut through the complexity of the media ecology. However, a revised MoA approach (which foregrounds the subject) accounts for multiplicities and complexities more thoroughly than a format-centric approach, and by shifting the emphasis—from format to subject—MoA continues to be a practical tool for research.

A useful example of a situation in which this revised MoA approach might deal better with these interlinked complexities is the rising concept of "second screens" (Courtois & D'heer, 2012; Leroy, Rocca, Mancas, & Gosselin, 2013; Lochrie & Coulton, 2011). Second screens is a phenomenon in which the viewer of screened content (such as TV programs or video games) uses a second screen (possibly a mobile device, such as a smart phone) to interact with the first screened text and with other individuals who are also

consuming that text. A format-specific mix-of-attributes analysis would first have to choose which device, and which textual engagement to focus on—the individual-as-viewer (first screen) or the individual-as-user (second screen). Even considering interactivity as one of the attributes and trying to engage with both *formats* in the same analysis, it is obvious that the analysis would quickly get bogged down in the affordances of each specific device. This obscures and deflects the analysis away from the processes of media use and media effects and toward the specificities of the media device(s) being used.

By comparison, a revised mix-of-attributes approach that addresses the role of the subject does a number of things. First, it foregrounds the agency of subjects moving through a sea of media messages, information, and attention demands. Second, it acknowledges that these messages and texts can come and go through a number of different channels and that these channels are *selected* by users based on need, suitability, and availability. Agency, choice, and engagement are key drivers in many of the attributes considered in an MoA approach and can get lost if the primary point of entry is the media device rather than the decision processes and demands that lead a user to a channel or channels. And, finally, a revised MoA approach is more technologically agnostic in that the type of container or device the messages come and go in is not the dominant marker of likely effect on the behaviors generated.

To illustrate this argument, we build on a scenario recently sketched by Mukherjee, Wong, and Bernard (2014). They examine the relationship between first-screen activity (the individual-as-viewer) and second-screen activity (tweet interactions). The tweets, the authors suggest, are the "social soundtrack" to first-screen activity.

What might a revised mix-of-attributes analysis of a second-screen scenario look like? In the first instance, such an analysis would account for the shifting nature of viewership in a digital environment. The first screen (let's assume our hypothetical subject is watching an hour-long drama) might be a traditional broadcast program situation, be time-shifted (such as with DVR or on-demand services), utilize a commercial-skipping function (Ha et al., 2013), or be delivered via a different format, such as with downloading or DVD. For the purposes of our revised mix-of-attributes analysis, the channel through which our subject sources her first text is only of interest in terms of how it aligns with other subjective experiences of that text, including that of the second screen(s), which (in the current scenario) provide the social soundtrack. For example, a time-shifted sourcing of the material engaged simultaneously with social media through the second screen (say, Twitter or a fan message space) will raise the question of spoilers for our subject and may change the way she engages with these messages. The important point is that the affordances of platforms or devices are not erased but are secondary in emphasis to the message, interacting with other messages, around an active and engaged subject. The key interest and point of intersection is the messages and texts and their relationship to the subject. A different subject may engage with the same messages in different ways through different screens and yet have a parallel experience of the *messages* and be subject to similar effects. A revised mix-of-attributes approach, leveraging the multiplicities inherent in a subject moving through and making choices in a message-dense digital environment and evaluating the fluid and dynamic nature of both subject and message *before* they are brought to bear on Eveland's attributes, can best be leveraged to explore issues of media effects on that subject.

So our subject is engaged in our hypothetical example with multiple messages. There are the messages from the drama she is watching. There are the messages she is producing in response to that text, and she is also engaging with other subjects through their second screen to both produce and consume other media messages—in short, she is a co-participant in the social soundtrack as well as a consumer of the primary text.

So far, we have argued that, although useful, the mix-of-attributes approach as applied in research to date has paid insufficient attention to the role of an active, engaged subject moving through a complex and multiscreen media environment. By invoking multiplicities as a way of accounting for the porous and dynamic nature of the media environment and of accounting for the active and pluralistic approach a subject has to her ambient and direct media consumption, mix-of-attributes approaches may better account for the effects of media consumption in a multiscreen, dynamic, and interactive digital media environment.

It is important to emphasize here that the subject we are describing is not the typical, mainstream media user who is active at this time. Instead, our subject demonstrates early-adopter behaviors that are indicative of likely changes around media-enabled user behavior. As recent Pew research (Smith & Boyles, 2012) and other studies have indicated (Courtois & D'heer, 2012; D'heer et al., 2012; Leroy et al., 2013), this multimodal, multiscreen, split-attention user represents a trend on the rise. As plural screens become more commonly available, early-adopter group behaviors will (as they have done in the past) filter down to the larger population—plurality, multimodal, and split attentions will become a more common feature of media consumption and mediated exchange and will need to take a more prominent place in the accounting of media consumption.

To return to Eveland's original mix-of-attributes approach, it is worth considering how, in applying some of those attributes to a research problem, questions of the subject, media complexity, and multiplicities could be better foregrounded and accounted for as part of both the presumptions and the practice of a mix-of-attributes approach. Few MoA approaches attempt to invoke all attributes, so for this example we will invoke only two—interactivity and content—as a way of exploring how the subject, complexity, and multiplicities could be accounted for in the practice of research.

Interactivity previously focused specifically on technologies, including interaction design issues. A subject-centric mix-of-attributes approach would account for not only these platform-specific interaction issues but the choices subjects make to match interaction with intended outcomes. For our hypothetical subject, interaction attributes might include not only platform issues but decisions around selecting platforms and channels to meet needs; our subject might choose to watch her program time-shifted via a recording device but to *not* engage with available social media, so as to *exclude* certain media messages from her environment until such time as she had consumed the first text. The subject-led approach to interactivity takes account of not only synergistic but also multiple and ongoing interaction with media. An interaction approach would, therefore, not only be concerned with this time-shifting behavior but (for example) attend to how the consumption process and management of inputs are structured and ordered so as to prevent spoilers or aim to account for how and why a subject selects one platform for interacting with a text over another.

Regarding *content*, Eveland spoke of content conveyed by medium, but we argue that content can come in via singular, parallel, or sequential channels, and it is up to the subject to choose both the content she engages with and how to manage the plurality of content within the wider context of the surrounding media messages. This multiplicity of content or message occurs, as noted previously, both concurrently and consequently in an uncalculated but subject-led manner that privileges meaning and experience over media vehicle, platform, or device. Content can no longer be considered in isolation, but instead must be understood as an experience that happens within a subjective media space as the subject pulls in content based on her own criteria. For example, our second screen–using subject might have different motivations, understandings, and interpretations than someone engaging only with televisual text and ignoring other media messages until that act of content consumption is complete (for one, she probably won't get spoiled as to the ending). This approach does what other approaches do not. For example, although those studying media content routinely attend to both content and the viewer or viewer experience(s), in practice the two are handled separately and remain distinct. We deny this assumed division in terms of its effects; the user, we argue, is complicit in the experience, not an afterthought. So in any content studies, content must be framed as an attribute not associated with a format or device (explicitly or implicitly, such as TV content). Rather, content must integrate the subject's experiences as a co-participant of content regardless of source; the subject is an active shaper of that content.

Conclusions and Future Research

The mix-of-attributes approach, though a useful and significant tool, is overdue for a rethinking. Leading scholars such as Dylko have already begun to question some of the patterns of use associated with this approach. However, although Dylko's (2012, 2013) theoretical and empirical testing of MoA (within the world of blogs, wikis, and other online user-generated content platforms is undoubtedly revealing, the political UGC environment in which his research is conducted is so specific, so nuanced, that the challenges associated with message production, exchange, and consumption within the wider media ecology (particularly related to media *format*), are effectively sidestepped. So while MoA continues to be used—and to be useful—within specific areas of research (such as political blogs), it seems unlikely that this approach, as it is currently applied, can be usefully and meaningfully applied within the more complex, multimodal media environment that is emerging: the world of multiplicities.

This nuanced approach to media research has also facilitated the ongoing bounding of format, which inadvertently creates a black box around the medium, despite the intention of a mix-of-attributes approach. This black-boxing (intentional or not) is due, in part, to the underlying assumptions that have underpinned approaches to MoA research, particularly related to questions around both the social and the subject. We have therefore suggested that attention be paid more to the assumptions brought to bear *before* invoking these attributes, especially those relating to the dynamic social subject and the complex digital media environment. The mix-of-attributes approach, although still useful, could be strengthened by accounting for ways in which subjects use the complexity of their media environments to construct their social soundtrack, their interlaced and interacting (and diverging) message consumption. These behaviors have presented a disruption to old assumptions that have been used in applications of mix-of-attributes approaches.

Recent research has tried to account for these disruptions using concepts such as synergies bolted onto the existing, media-centric, black-boxed applications of MoA. We propose that, rather than focusing on such synergies (which, as we noted earlier, tend to reinforce a singular, sequential, media-specific focus), the idea of multiplicities, with its implications of complexity and interconnectedness and consecutive and concurrent interplay between messages and meanings, be adopted instead. The idea of multiplicities, used in this way, reinforces the importance of the subject and his or her agency in an MoA study and also draws attention to the *message* rather than just the device.

Overall, although MoA is still a useful research approach, changes in the media ecology necessitate a rethinking of some of the assumptions behind, and structuring of, such an approach. Despite efforts of researchers already working with these tools, MoA has tended to lapse into a techno-centric, black-boxed framing of the area under study to better focus and constrain the research. By rethinking the assumptions underlying MoA and considering multiplicities, dynamic environments, notions of a social soundtrack, and an active subject as key elements, a mix-of-attributes approach will better account itself in a complex, multimodal media ecology and remain a valuable research approach well into the future.

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