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## The Rhetoric of Google Lens: A Postsymbolic Look at Locative Media

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### ABSTRACT

This article examines textual artifacts surrounding Google Lens, an image recognition application, to reveal how it forwards reductive representations of the complex sets of relations constituted through locative media and augmented reality. Working across textual and posthumanist traditions, this article introduces a theoretical approach for investigating the rhetoric of technology, termed the *postsymbolic*. In acknowledging the formative and ontological role discursive rhetoric plays in the spatial operations and user experiences of and through locative media, the postsymbolic asserts the need for an integrated approach in which symbolic artifacts might be examined through the lens of both discursive rhetorical theory and posthumanism.

In *Mobile Interface Theory: Embodied Space and Locative Media*, Jason Farman asserts that spatial ontologies are not encountered when humans interface with locative media (or media linked to a specific geographical location); rather, they are enacted through these interactions as we organize and negotiate the boundaries of bodies, spaces, and technologies.<sup>1</sup> In the same work, Farman also reminds us how our contemporary world is seamlessly inscribed with both digital and analogue spatial relations. It is this inscription that this article is particularly interested in. In agreement with Farman, we assert that it is impossible for locative media to be in a relationship with a singular notion of space; rather, “space and embodiment are intimately and indelibly linked” (4).

We are past the point of locative media’s emergence; we are now caught up in it. Google Lens, an image recognition application with locative media features, and one of the most recent commercial enactments of that media, was officially launched on October 4, 2017. In November of that year, the application was integrated with Google Assistant on Pixel and Pixel 2 smartphones. In March of 2018, Google added Lens to Google Photos on non-Pixel phones (“Google Lens”). At the end of 2018, Google announced that Lens could now recognize over a billion objects, according to Aparna Chennapragada, a Vice President of Google Lens and augmented reality (AR) products. As a leading expert in vision-based products, Chennapragada and her team develop, oversee, and launch new products, such as Google Lens. The main message projected by the VP is that Google products, such as Google Lens, are made to help users interact with the environment, solve problems, and become a useful companion in day-to-day activities (Tiku). Considering Google’s ubiquitous influence, we predict Lens will continue to play a substantial role, at least in Android phones, if not in other applications, especially if it is adapted for wearable

computing technologies. Lens uses image recognition technology to perform visual analysis on objects viewed through a smartphone's camera. Such analysis enables users to “search what you see” and “explore what’s around you in an entirely new way” by linking relevant Internet data to everyday objects (“Google Lens”). Its use of machine learning, computer vision, and Google’s Knowledge Graph let people turn the elements they see in reality into a visual search box, enabling them to identify objects or to copy and paste text from the real world into their phone (Patel). Lens also uses Google Translate’s neural machine translation (NMT) algorithms to translate entire sentences at a time in order to preserve proper grammar and diction (Patel). Google Lens represents both augmented reality media and locative media, enabling the user a new and, arguably, altered set of spatial, gestural, and cognitive relations with their environment by overlaying the network onto the material environment.

Our article explores the implications of this altered set of relations to better understand how locative media might revise everyday users’ interaction and experience with their environment. Employing rhetorical criticism to examine discursive artifacts surrounding the emergence of Google Lens, we argue that the application forwards reductive representations of the complex sets of relations constituted through locative media and augmented reality. While these relations are undoubtedly constituted through complex socio-material, digital, and cognitive flows, we also acknowledge their partial construction through and within discursive rhetorical processes. Ultimately, we attempt to recognize the formative, ontological role discursive rhetoric plays in the spatial operations and user experiences of and through locative media. Using Google Lens as a productive case study, we propose an approach that works alongside both textual and posthuman traditions—what we term the *postsymbolic*.

## The Postsymbolic and Google Lens

In attending to the discursive rhetoric surrounding Google Lens, we invoke Chris Mays et al.’s introduction to *Kenneth Burke + The Posthuman*, which calls attention to the dissonance between humanist theories of rhetoric and posthumanism. Mays et al. explains the value of the productive tension that results from “articulating ambiguous compatibilities” between the boundaries of Burke and posthumanism. They recognize how boundaries create manageable space as a beginning, allowing us to understand and better manage the complexity that is an inescapable aspect of our engagement with a posthumanist world (Mays et al. 7). Our own pacing of the boundaries between posthumanist and humanist rhetoric, in much the same way, draws attention to the co-existence and co-constitutiveness of the human and posthuman, which do not exist within a linear chronology with one replacing the other, but overlap, and reverse, circling around each other in constant flux. The postsymbolic, we assert, more fully captures this non-linear chronology, in which the symbolic rhetoric of Burke and other modernist rhetoricians is both “past” and “present” alongside posthumanist understandings. By forwarding the postsymbolic as theoretical lens, furthermore, we also acknowledge intersectional critiques of new materialism and object-oriented ontology (OOO) scholarship that call out de-politicized notions of human and non-human relations (Booher and Jung; Clary-Lemon; Weheliye). In particular, we view the postsymbolic’s synthesis of the human and

post-human as opening up new possibilities for examining objects, bodies, and discourses within existing social and material economies of power and oppression.

Rhetoric scholars have historically emphasized the linguistic/textual over the spatial, devaluing the material attributes of everyday life in the portrayal of a rhetorical situation (Barnett, *Rhetorical Realism*). Now that scholars are considering bodies as unstable, fragmented, and spread out across discourses, we require a new critical framework to consider rhetorical force within a given rhetorical context (Harold 865). We recognize this call but also acknowledge the collaborative role of texts as active agents within a larger ecology of human and nonhuman actors. Our theorization of the postsymbolic is inspired by Isabel Pedersen's work, *Ready to Wear: A Rhetoric of Wearable Computers and Reality Shifting Media*, which exposes the rhetorical tension between technologies that strive to augment our reality and the language used to describe this technology, highlighting its humanizing or dehumanizing textual constructions (14). Working primarily in a Burkean tradition, Pedersen tends to value the agency of texts as determining human experience and understanding, without considering posthuman approaches to space, technology, and embodiment. The postsymbolic does not attempt to replace Pedersen's approach, however; rather, it seeks to integrate a textual method for understanding the rhetoric of technology with a posthuman interpretative framework.

We conceptualize symbolic rhetoric in light of Burke's definition, "the use of words by human agents to form attitudes or to induce actions in other human agents" (*A Rhetoric of Motives* 41). Such a positioning emphasizes human and textual agency alongside other environmental agents and agencies. Our use of the term postsymbolic suggests that while Burkean rhetoric conceptualizes human and textual boundaries, it also provides the tools in which we negotiate, question, or even subvert these boundaries. Burke frames a world of order, but he also allows us to widen the "circumferences of a situation" (Mays et al. 4). The postsymbolic does not exclude Burke but utilizes his tools to expand our line of sight within and beyond symbolic and posthumanist conceptions of agency. Synthesis of these frames enables us to balance the theoretical needle, especially as it applies to the rhetorics of technology, between an over-emphasis on the material, on the one hand, or discursive, on the other. Revising our understanding of Burkean symbolic rhetoric in this way enables our use of rhetorical criticism as a method for interrogating rhetorical discourses surrounding Google Lens. In making such a methodological move, we do not neglect the need for and presence of posthumanist reworkings of rhetorical theory toward the explication of object-oriented ontologies (Barnett; Barnett and Boyle; Edbauer; Prior and Shipka; Rice). Rather, we call for an integrated approach in which textual artifacts are examined in conjunction with theories related to both the rhetoric of technology and spatial and posthuman possibilities (Barnett and Boyle; Eyman; Pedersen). Our approach is ultimately inspired by material-semiotic methods such as Latour's actor-network theory (ANT), focusing specifically on the rhetorical modes operating within the rhetorics of technology. In examining the rhetoric of technology, we forward an area of inquiry that develops and catalogs specific rhetorical practices embedded in the persuasive language surrounding technology (Eyman 55). Google Lens, we argue, forwards reductive representations of the complex sets of relations constituted through locative media and augmented reality. Such reductions often rely on and perpetuate a Cartesian relationship between humans and technologies, simplifying our environmental relations.

The postsymbolic allows us to critique and react to simplistic, binary representations seen in the discursive artifacts regarding Google Lens, most notably the technology/human relationship. How are technologies represented symbolically, both by Google marketing teams and outside reviewers? And what are the possible impacts of those discursive flows, especially in terms of humans' interactions with and understandings of locative media? Despite the theoretical tensions regarding agency and ontology between posthumanists such as Boyle and those devoted to a textual or symbolic rhetoric, such as [Burke](#) or [Foss](#), we find a blending of these traditions to be a useful heuristic in studying the rhetoric of technology, as well as a means for interrogating material rhetorics' movement away from the discursive.

In what follows, we offer a review of recent scholarship organized in two categories: research that is (1) optimistic about locative media's capacity to actualize posthuman understandings of spatial relationships and, (2) cautiously critical of a number of more negative outcomes related to spatial reduction, access, surveillance, and politics. Following this review, we briefly outline our method of criticism for studying the rhetorics of technology surrounding Google Lens, situating that method within a transparent discussion and rationale. Next, we explicate salient rhetorical motives of Google Lens, as identified through the collection and analysis of multiple discursive artifacts surrounding the software's emergence. Finally, we conclude with a discussion in which we summarize the implications of this work, acknowledge alternative uptakes of locative media and augmented reality, and offer future critical and creative appropriations.

## Reviewing Research Approaches to Locative Media

Locative media pose both challenges and opportunities for research and practice in the humanities and social sciences. Researchers in new media and media geography, composition, rhetoric, and art criticism have approached these technological advances from two distinct perspectives, emphasizing a kind of techno-optimistic excitement as well as a concerned criticality. These binaries are often informed by production and function of the media. Academics are much more likely to be optimistic when reviewing artistic applications of the media, as opposed to commercial applications. A review of both categories of response also yields an important realization regarding scholars' attention to the material and ontological. In their attention to locative media's capacity to either build potential understandings and enactments of spatial rhetoric, as well as arguments concerning the reduction of the spatial, scholars have neglected to consider the symbolic rhetoric of technology. It is this neglect that the postsymbolic approach attempts to resolve.

Optimistic responses have highlighted the media's capacity for enacting more explicitly visible object-oriented or posthumanist ontologies in terms of spatial relations ([De Souza e Silva and Frith](#); [Galloway and Ward](#); [Tinnell](#)). Anne Galloway and Matthew Ward, while critiquing the ways in which locative media may commodify urban and public space and distance the user from their immediate environment by creating a "totalizing system of meaning and relations," ultimately attempt to showcase game designers' and artists' engagement with locative media in order to create "decentralized performativities" which open up possibilities for new "social/spatial relations" ("Locative Media"). Such an approach sees locative media as enabling posthuman explorations and understandings

of spatial relationships. John Tinnell makes a similar move, arguing that locative media “will do more to transform subjectivity toward the posthuman than it will, as many designers hope, once and for all restore humans to their rightful status above machines” (“All the World’s a Link”). Extending McLuhan’s notion of the global theater, Tinnell asks us to consider augmented reality and locative media as encouraging object-oriented ontologies in which “the object becomes a platform for writing and in some ways performs like a writing agent, in the absence of the human writing subject.” While Tinnell is critical of the ways locative media presents ethical issues related to surveillance and privacy, De Souza e Silva and Frith further this line of thinking by arguing that locative media allow for new aesthetic and affective experiences of spatial relations. Locative media affect not only how we understand urban spaces but how we connect with people in those spaces by allowing individuals to deploy community-based knowledge in order to change the perception of a given location. De Souza e Silva and Frith focus much of their theorizing on the ways that locative media shift attention and emphasis to the path (or physical space) of a network, rather than its nodes (or users). According to these authors, this shift is changing our spatial experience as it accentuates the experience of travel rather than the destination.

Efforts to provide a more optimistic understanding of locative media have emerged within the field of composition and rhetoric as well. In asking whether wearables have occluded the spatializing of our cities, [Kalin and Frith](#) argue that this is not necessarily the case since these wearable devices work as “integral to the production of embodied spatial memories” (223). For [Boyle and Rivers](#), locative media can become a “particular selection of public circulation,” allowing users to create a qualitative addition to a public. Thus, locative media does not operate as a reductive lens to our public spaces but attunes a user toward a particular element of a public (99).

In contrast to research forwarding optimistic narratives about the capacity of locative media to enact new and/or more complex spatial realizations, arts-based researchers focusing on locative media and augmented reality have called for an analysis of the ways these technologies create new problems of access and able-bodiedness and often neglect political or social commentary ([Slentz](#); [Tuters and Vernelis](#)). Unlike its commercial trajectory, artistic visions of augmented reality often consider it a technology for spatial interventions ([Greene](#)). For example, in the 2017 volume of *Enculturation*, Greene noticed that digital artists are exploring alternative trajectories for augmented reality by presenting new relationships among the rhetorical elements of private and public spaces.

Research has also called for criticality of locative media’s reduction of the material-spatial ([Euteneuer](#); [Hemment](#); [Thielmann](#)). In 2006, Drew Hemment reviews the early “embryonic state of locative media (2003–2004)” in order to demonstrate how, despite “opening up new ways of engaging in the world,” locative media “often assumes a reductive understanding of spatiality” where location is “reduced to a set of geographic coordinates or a wireless cell” (351). Thielmann makes a similar move in 2010 in that he recognizes how locative media, in its dependence on networked maps created by GPS and other digital mapping procedures, mediates localities “as if there were nothing more in the territory than what is on the map” (1). More recently, Jacob Euteneuer emphasizes the term “conspicuous computing” which denotes the way wearable devices focus on the device themselves and proudly “advertise, share and display their ubiquitous computing” instead of their potential as a new and productive medium (55). He claims that wearable

technologies that help augment reality have “untethered users from their environment,” helping to create a regressive cycle of dependence for such technology (55). In each of these discussions, spatial ontologies are detached or are reduced to coordinates (Euteneuer; Hemment; Thielmann). Our project forwards a similar critical treatment of locative media but locates that critique in both symbolic and material artifacts. While we acknowledge locative media’s potential for expanding understandings of materiality and the human/environment relationship, we see commercial applications of locative media like Google Lens as ultimately forwarding reductive representations of these relations. While these representations may be positioned as simple selections of “public circulation,” digging into the language suggests otherwise.

In thinking through these motives, we articulate how the language describes the relationship between humans and augmented/ing technologies in a reductive way, failing to consider the dynamic interplay between humans, materiality, and their spatial depictions. The postsymbolic approach seeks to capture this interplay, locating the reciprocal relationship between the symbolic animal and their material surroundings.

### **Examining Textual Artifacts Surrounding Google Lens: A Postsymbolic Analysis**

To explore how the textual rhetoric of Google Lens might inform our understanding of this application, we analyzed 26 discursive artifacts, primarily promotional or marketing articles from Google or product reviews, describing its emergence. We then compiled a master document that included numbered citations and texts from each artifact. Coauthors performed an open read and formulation of research questions to guide analysis. In developing these questions, we were broadly interested in how discourses surrounding Google Lens compel and push forward specific types of rhetorical motives that might guide the application’s adoption. We were interested in the following questions: (1) How does the discourse surrounding locative media such as Google Lens make assumptions and forward motives regarding (a) the human subject, (b) the human subject’s relationship with their environment, (c) the human subject’s relationship with technology? (2) How should we understand the rhetorical motives surrounding commercial locative media such as Google Lens? And (3) how does locative technology like Google Lens affect the rhetorical construction of a place?

With these questions in mind, we selected and defined our unit of analysis, “rhetorical motive,” looking especially for phrases and terms that implicate the uses, possibilities, and need for a technology such as Google Lens. We were attentive to the possibility that these motives act and contribute to particular “terministic screens”—Burke’s term for ontological filters “through which humans perceive the world, and that direct attention away from some interpretations and towards others” (46). We were particularly interested in “challeng[ing] rhetorical motives embedded in technical terms [in order to] make salient their social and political assumptions as well as the kinds of rhetoric that linger in their evocations” (Pedersen 12). Our process divided the 26 articles between three coauthors to analyze the textual artifacts looking for primary, secondary, and tertiary rhetorical motives of each. In establishing the motives for each artifact, coauthors also selected passages that served as evidence for that motive and contributed to a shared dataset spreadsheet. Our analysis uncovered six distinct motives at work in these textual artifacts, discussed below.



## The Rhetorical Motives of Google Lens

### *Informative*

A particularly dominant motive of the discourse surrounding Google Lens is its capacity to be informative, providing information to the user to be able to interact with their environment. The informative motive is prevailing in many artifacts since one of Google's main goals is to provide users with useful information that leads to action, so they might "browse the world around [them] and get things done" (Chennapragada). This discourse also positions Google Lens as an application capable of giving the "right information" (Nieva). Users are motivated to create space based on the reductive interpretation of what Google has deemed the "right information." The right information, in turn, depends on geographical position and chronological context, providing a rather limiting understanding of our spatial constructions.

Much of the language describing Google Lens aims to provoke users' interest by providing information on using the application. This language presents a limited understanding of one's spatial features, reducing human/object relationships. For example, assuming that you are a tourist, Lens "can identify a monument and provide details such as how to get there, timings and so on" ("Google Lens Explained"). Lens can also save you some time when you have to find information about a particular object since the product "recognizes it and spits out information telling you more details about the object" (Ong). Indeed, Lens seeks to be both efficient and informative, working as a "computer vision software that collects information from a photograph to ... save some time by skipping the typing" (Grigonis). Thanks to Lens, we can now "put the answers right where the questions are" (Chennapragada). Assuming one needs an efficient medium to provide us with the "right information," Lens is articulated as a perfect tool for bodies that operate in the spaces of a capitalistic and instrumentalist society, focusing on efficient and effective information that can be usefully applied.

The discourse regarding Lens' informative abilities articulates its meaningful nature while limiting users' resources to independently create and interpret this information. Google Lens is an app that provides "a way to understand more about the world just by looking at it" (Pierce). Lens can "understand the context of the subject" (Winkelman). Lens is also able to provide and determine "meaningful" information for the user, as articulated by Wilson: "Google Lens can recognize what's in your camera's view, and actually do something meaningful with that information." Information is not only outsourced through Google Lens but filtered to provide something "understandable" and "meaningful" for the user. The rhetorical motive of informing positions the human as an agent that cannot perform this filtering process on their own. The user then becomes a conduit for Google's interpretation of what is "meaningful" in the world, potentially universalizing how we socially construct our spaces.

### *Recognition*

Recognition represents another central motive to Google Lens, providing the user with the ability to select a single object out of many. Lens combines visual recognition capabilities with data points such as the user's personal algorithms and spatial data, suggesting a strong relationship between each other. Through machine learning, Lens recognizes



an object within an image and provides bits of information on it. By building a database of images, Google “can identify clothes, books, buildings, plants, animals, and works of art” (Liao). Recognition—the act of identifying an object or person from previous encounters—is a function for and of the human mind; however, according to the discourse surrounding its emergence, Google Lens provides this capability for you. What we recognize about an object or person depends on our material, historical, or social realities; yet Lens presents its own definition based on its aggregated set of images. As noted, Lens can “recognize the context of what you are doing” and “identif[y] an item” (Villas-Boas; Winkelman). Yet such recognition becomes a function built out of a machine database rather than experienced by the user. For example, “with enough photos, the program can learn to recognize what the Eiffel Tower looks like on a cloudy day” (Grigonis). Lens provides what it calls “useful info” based on its collection of information, removing the need to define “useful” by the user and pointing them toward a particular set of data used to define and articulate the social constructions of a space.

Google Lens’ capacity to recognize objects is also (at times) presented as a type of augmented memory agent that assists users in both identifying and remembering objects in their environment. Alex Wilkins, in a review entitled “With Google Lens, You Might Not Need to Remember the Name of Anything Ever Again,” emphasizes memory as a type of recognition, asking: “Why remember the name of anything if Google can just do it for you?” Such rhetoric, in enabling Google Lens with the capacity of memory, reduces the notion of memory to a set of algorithms and networks. If we understand memory as an embodied and cognitive function, which itself can be triggered by and respond to spatial relations and sensory experiences, the function of Lens to remember is inherently disembodied and disconnected from its material surroundings, within which any object might play a role in the functioning of human memory. Such discourse, in its role as symbolic action toward the rhetoric of technology, downplays and reduces the complex materiality of memory by implying that it can be achieved by artificial intelligence.

### **Integration**

The rhetoric of Google Lens promises that it will integrate not only the digital and material, by allowing us to overlay or augment the “search box” into our everyday environments but also by collapsing the distance between multiple digital applications. In the Pixel 2 and Pixel 3 Smartphones, Google Lens is included or integrated directly into the phone’s camera, reducing the number of apps that create distance between us, our environments, and the network. In some artifacts, this is described as “revolutionary ... in that it may reduce our need for more apps as it adds AI intelligence to camera features” (Greig).

Google Lens, and perhaps Google itself, motivates a particular metric of relations between the user, the network (especially Google search), and the user’s environment. Google Lens wants to (and wants us to) close the gap between ourselves as we interact with our environment and our interaction with and access to the network. Put another way, Google Lens motivates the user to begin interfacing with Google Search in ways that more fully integrate the user and the network. This is sometimes described as a type of freedom, as in the claim that “Google is imagining breaking free of the Search box to be even more integrated with our lives, living intimately in front of our retinas” (Wilson). In

other discourse, the emphasis is placed on the integration between the network and the “real world”: “It’s a new frontier in search, creating an Internet search box that hovers over the real world” (Gyynn). Lens’ capability for “smart text selection,” furthermore, “lets you copy and paste words from the real world into your phone” (Solsman). The construction of this set of relations serves to both reinforce the binary relationship of the virtual/real while also shortening the distance between the two.

### **Power**

The description of Google Lens as a powerful enhancement is misleading, illogical, and reductive. The application has been described as a tool to empower its users, enhancing their abilities by making action quicker and more efficient. For example, Ashley Carman writes that Google Lens is “giving users the power to identify objects and text in real time.” Such commentary positions the human ability to identify “objects in text in real time” as a capability or power outside of the human scope, despite the fact the technology is simply enhancing this ability. In another review, Google Lens is said to “represent a way to interact with the real world that we really haven’t had a chance to do before from a search perspective” (Gyynn). Here we are told about new opportunities, new “chances” to “interact with the real world” that do not currently exist and that we apparently need in order to more fully engage the material. Such a claim reduces not only the agency of the human to interact with their material surroundings but also the agency of the surroundings as well—as they must be experienced through the technology to be made real.

In other artifacts, the power rests within the technology itself, rather than the user. “Google Lens isn’t just reading the words,” writes Sarah Perez, “it’s understanding the meaning and context behind the words, which is what makes the feature so powerful.” Similarly, Steven Winkelman claims that “every Android user will have some of the world’s most powerful image recognition software right in their pocket; Google is seeking to dominate the world’s visual space.” Both examples showcase the improved abilities of this particular technology, inspiring its users to purchase the product but also promoting a reductive and Cartesian ontology that insists on a separation between subject/object. The language in these two examples suggests that users are not intertwined with these powerful, new features—that somehow, they operate separately from the human body.

### **Utility and Action**

Google Lens has been described as a tool that users need in order to perform certain objectives. Accordingly, our identification of the motives of utility and action calls attention to the discursive construction of Google Lens as augmenting the human capability to act on their surroundings. Marketing copy published by Google itself commands us to “Take action on text” (“Google Lens”). Google’s own VP of AR argues that “we’ve given Lens the ability to read and let you take action with the words you see” (Chennapragada). In an attempt to distance itself from the more playful uses of augmented reality (for example, Snapchat), Google has described Lens as a technology that will provide meaningful action for its user. This positioning of the technology has spiraled out into other discourses as well. Lens is “a set of vision-based computing abilities that can understand what you’re looking at and help you take action based upon that information” (Wilson).

These actions have also been described in more specific and pragmatic terms. For instance: “Google Lens will be ideal for business professionals seeking to get a quick summary of a document or speedy style suggestions” (Greig). Such actions have also been described in more abstract language describing the application’s artificial intelligence as a “set of vision-based computing capabilities that allows your smartphone to understand what’s going on in a photo, video, or live feed” (Conditt).

At times, the usefulness of Lens seems to simply reimage the function of our typical human experience without providing much detail, “giving readers the power to identify objects and text in real time” (Greig). The value of Lens is framed as an enhancement tool, one that seamlessly integrates with the human experience and improves our ability to identify, understand, and act. However, the value in this is left up to the reader’s imagination since the language deployed is rather limiting. Richard Nieva argues that “with Lens, Google can understand what you’re looking at and help you take action,” a seemingly human activity one engages with on a daily basis. Descriptions of these enhancements seem to be responding to a particular environment and claim to reinforce human potential. For instance, Perez writes that “the camera is not just answering questions, but putting the answers right where the questions are.” What such language occludes, however, is that humans, in their interaction and movement through material space, already accomplish this without augmenting technologies.

While this language seems to infer claims about Google Lens’ effects on its users, many of the more specific examples emphasize more mundane occurrences. For example, “Google’s algorithms could more generally clean up and enhance photos—like when you’re taking a picture of your child’s baseball game through a chain-link fence, Google could remove the fence from the photo automatically,” and “users can point the camera at a particular restaurant or movie theatre and get options to check reviews, make reservations, and check out timings” (Chawla; Perez). While Lens is noted to “make our apps more essential” or “uniquely useful,” the actual description of user experience often exemplifies a more playful tool (Townsend). Ultimately, the discourse surrounding the motives of utility and action describe a notion of space limited to a user’s interaction with the network. The human is incapable of action or utility without the resources of the network (such as Google Search and other internet databases). Such a positioning neglects our continuous embodiment, which is asserted by Farman, within and through material space by displacing it with the network, as Pierce explains: “[Lens] is a full-fledged search engine, starting with your camera instead of a text box.”

## Conclusion

As Farman asserts, we are not simply influenced by technologies such as Google Lens; we are co-creators in an ecological environment. Describing mobile media in relationship to a single notion of space seems limiting since the use of these technologies demonstrates an intricate relationship between the production of space and the bodies inhabiting these spaces. Embodiment should not be described within isolation but emerging from these ecological locations and linked to the production of spaces.

Our language practices should reflect this complex dynamic between bodies and spaces. When we depict our spaces, other forces, emotions, memories, bodily experiences, and material elements are affecting their rhetorical construction. Technologies such as Google

Lens, equipped to “enhance,” “act,” or “improve” our bodies, are therefore an affective component in how we socially construct our spaces: both in terms of their material operations as well as the discursive networks surrounding their emergence. However, discussions in current popular media tend to focus on the devices themselves rather than the embodied actions to which these devices contribute, as Farman notes (2). Lens may be marketed or reviewed as a technology that can “give you the right information” and recognize “the context of what you are doing” as you move through a space, but these descriptions construct a limited understanding of how Lens contributes to the arrangement of space (Nieva; Villas-Boas). Arrangements of space are not fixed orderings, but are interactions, and invention serves to generate these interactions in a particular way (Rice *Digital Detroit* 36). The language that is used to define Google Lens in action centers human agency and the technology’s ability to improve our human experience while ignoring its influence on how we develop and maintain rhetorical constructs of space. According to the discursive network surrounding its emergence, Google Lens informs the user by recognizing our surroundings and aiding our memories. It seeks to integrate the user with online networks (especially proprietary networks built by Google itself) and in moving and motivating us by way of these capabilities, ultimately claims to empower the human user of its technology.

Such rhetoric occludes the ways in which the discourses of Lens exceptionalize human agency while downplaying (or failing) to describe its own agentive force within a space. The rhetoric of Google Lens fails to consider that it has a hand in the production of space alongside other human and non-human elements within a more complex rhetorical ontology. Its capacity, as described by rhetorical artifacts, to provide “meaningful” and “understandable” information universalizes the socio-material construction of space around its own networks and data metrics. Lens’ ability to recognize can only take place within a predetermined and aggregated set of images and related metadata, without taking into consideration how we identify and re-think an object or person within our own set of material, historical, and social realities. Such discourse, in its role as symbolic action, also downplays and reduces the complex and sensory materiality of memory by implying that it can be achieved by AI. Furthermore, by applauding its integrative capacity, the rhetorical discourse of Google Lens invites, or demands, the user to interface with Google Lens and Google Search beyond the computer or smartphone, and more frequently in their everyday surroundings. This rhetoric attempts to more fully integrate the user with the (online) network, and in doing so, reinforces the binary relationship of the virtual/real while also shortening the distance between the two. In short, Lens asks that we spend more time in/with Google, pulling our bodies away from their immediate materialities and toward the digital network. This is the real power of Google Lens: to pull us toward its own data (collection), its own network, its own capabilities. Such a condition of empowerment forwards an inherently limited notion of human agency to interact with their material surroundings and a limited notion of the agency of those surroundings as well. Finally, the rhetoric engaging the motives of utility and action further illustrates a reductive notion of space limited to the user’s interaction with online networks, one in which the user is incapable of action or utility without the resources of the Internet.

As we have attempted to demonstrate in this article, it is impossible for locative media to be in a relationship with a singular notion of space and materiality. The discursive rhetoric of Google Lens, as it emerges from the textual artifacts of marketing and

technology reviews, forwards a reductive set of spatial relations regarding Google Lens, its users, and its users' environments. In many ways, this reduction seeks to empower Google itself. As Lens is taken up by more users, Google, along with its proprietary databases of images and spatial metadata, wields a more significant influence on its user's interaction with their environment. Our critique of the discursive rhetoric of technology (Eyman; Pedersen) surrounding Google Lens, through a theoretical engagement with advances in posthumanist rhetoric (Barnett; Barnett and Boyle; Edbauer; Prior and Shipka; Rice), invites scholars in new media to perform an integrated approach to the textual/material. Our work also extends approaches to locative media that are critical of its reduction of the material-spatial (Euteneuer; Hemment; Thielmann). Locative media, as a human and technological abstraction, is always "accompanied by a distancing from embodiment, physicality, and context" (Thielmann 352). It is our contention that such distancing occurs through the discursive rhetoric that surrounds Google Lens, thus requiring a postsymbolic approach. The postsymbolic enables rhetorical analysis highlighting the discursive while acknowledging its impact on our material conditions, suggesting that the discursive plays a role in priming our production of space. We do not see the postsymbolic as an alternative nor as a corrective to the recent movements away from the discursive, but as an attunement to the reciprocal relationship between language and our material conditions.

Our postsymbolic approach imagines Burke's body of work and posthumanism as generative, providing opportunities for invention that reach in and outside the human (Rivers 4). The postsymbolic also allows for explicit recognition of how the discursive rhetoric of technology continues to play a significant role in users' uptake and adaptation of emergent augmented reality and locative media technologies. To continue to value symbolic rhetoric is also to acknowledge its agency within mainstream and dominant ecologies of uptake and practice. Bridging posthumanist and textual rhetorics provides insight into common understandings of emergent technology outside the intellectual circles of the academy.

In conclusion, we call on scholars in rhetoric to further the use of the postsymbolic as a framework for examining conditions of power and oppression among human and non-human relations, especially as those relations are implicated in the textual rhetorics of augmented reality (AR) and locative media (LM) technologies. Building on feminist, indigenous, and critical race approaches to posthumanism (Booher and Jung; Clary-Lemon; Weheliye), postsymbolic scholars might consider the following paired questions to juxtapose the textual and material.

- (1) (a) How does the textual rhetoric surrounding [AR or LM technology] position and/or perpetuate dominant narratives of marginalization related to identity or social category? (b) How does this textual rhetoric relate to the embodied experience(s) of diverse users of [AR or VR technology]?
- (2) (a) Do location-based [AR or LM] technologies enact erasure of indigenous environments and/or geographies? (b) Is this erasure made evident in marketing material or other textual artifacts accompanying these technologies?
- (3) (a) What types of intersectional activism might independent [AR or LM] technologies afford? (b) How can such activism be extended through textual rhetorics?

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