

## Ambiguity in Entrepreneurial Pitches: A Semantic Network Approach

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Abstract:	<p>How should entrepreneurs pitch their novel ideas to mobilize audience support? Prevailing wisdom suggests that they should avoid ambiguity, which can obscure how their idea fits into existing categories and create uncertainty for audience members. However, entrepreneurial communication can introduce other forms of ambiguity that may be useful. In this study, we adopt a semantic network approach to investigate the potential benefits of lexical ambiguity, which occurs when the words used to describe an idea have multiple meanings. We theorize that lexical ambiguity opens up more conceptual pockets within the semantic network, thereby expanding the possible interpretations of an entrepreneur's novel idea and making it easier for audience members to understand it in their own familiar terms. Using data from Product Hunt, an online platform entrepreneurs use to pitch technology innovations, we utilize a Word2Vec semantic network to develop an innovative measure of lexical ambiguity. We find that entrepreneurs who use more lexical ambiguity to pitch their ideas mobilize more overall support. We also show that lexical ambiguity is especially useful when trying to reach more diverse audiences and when pitching more novel ideas. Taken together, this study advances our understanding of how entrepreneurs mobilize support for their ideas by reexamining the nature of ambiguity and developing a new measure of lexical ambiguity based on semantic networks.</p>

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## Ambiguity in Entrepreneurial Pitches: A Semantic Network Approach

### ABSTRACT

How should entrepreneurs pitch their novel ideas to mobilize audience support? Prevailing wisdom suggests that they should avoid ambiguity, which can obscure how their idea fits into existing categories and create uncertainty for audience members. However, entrepreneurial communication can introduce other forms of ambiguity that may be useful. In this study, we adopt a semantic network approach to investigate the potential benefits of *lexical ambiguity*, which occurs when the words used to describe an idea have multiple meanings. We theorize that lexical ambiguity opens up more conceptual pockets within the semantic network, thereby expanding the possible interpretations of an entrepreneur's novel idea and making it easier for audience members to understand it in their own familiar terms. Using data from Product Hunt, an online platform entrepreneurs use to pitch technology innovations, we utilize a Word2Vec semantic network to develop an innovative measure of lexical ambiguity. We find that entrepreneurs who use more lexical ambiguity to pitch their ideas mobilize more overall support. We also show that lexical ambiguity is especially useful when trying to reach more diverse audiences and when pitching more novel ideas. Taken together, this study advances our understanding of how entrepreneurs mobilize support for their ideas by reexamining the nature of ambiguity and developing a new measure of lexical ambiguity based on semantic networks.

Review

## 1. INTRODUCTION

Entrepreneurs must mobilize support when they bring their novel ideas to the market (Aldrich and Fiol, 1994; Suchman, 1995). To do so, they pitch to diverse audience members in hopes of attracting attention and establishing legitimacy (Kalvapalle, Phillips, and Cornelissen, 2024; Navis and Glynn, 2011). Of course, the challenge is that these novel ideas are usually unfamiliar and unlike anything seen before, making them difficult to understand and therefore support (Cattani, Deichmann, and Ferriani, 2022; Lounsbury and Glynn, 2019). This gives rise to the well-known “liability of newness” that entrepreneurs must try to overcome to garner early success (Stinchcombe, 1965).

To improve their chances, cultural entrepreneurship scholars recommend that entrepreneurs develop a pitch “that is neither ambiguous nor unfamiliar, but legitimate” (Lounsbury and Glynn, 2001, p. 554). The idea is that because there is already so much ambiguity and uncertainty surrounding who they are and what they do (Navis and Glynn, 2011), conveying more ambiguity will only make it harder for audience members to categorize and make sense of them (Martens, Jennings, and Jennings, 2007). Indeed, when an object does not easily fit into preexisting categories, it can lead to cognitive uncertainty and confusion (Leung and Sharkey, 2014), prompting some audience members to discount it (Hsu, 2006; Hsu, Hannan, and Koçak, 2009; Pontikes, 2012). As a result, entrepreneurs should instead communicate in a way (e.g., using stories, analogies, or metaphors) that situates their ideas within the prevailing categorical system (e.g., Clarke, Cornelissen, and Healey, 2019; Navis and Glynn, 2010), thus making them seem more familiar and legitimate.

This work, however, has primarily focused on the need to avoid *categorical ambiguity*. While avoiding this type of ambiguity may be prudent, not all forms of ambiguity are necessarily

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3 harmful. In this paper, we explore the possible benefits of using *lexical ambiguity*. Unlike  
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5 categorical ambiguity, which concerns the category to which an idea belongs, lexical ambiguity  
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7 arises when the very words used to describe that idea have multiple meanings (Tuggy, 1993).  
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10 Scholars have suggested that lexical ambiguity might be a useful strategy when trying to connect  
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12 with diverse audience members (Eisenberg, 1984). Indeed, several case studies offer some initial  
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14 evidence of this, finding that leaders who use certain lexically ambiguous words are able to find  
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16 common ground between employees from different departments (Leonardi, 2011) and more  
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18 successfully navigate conflicting interests across their organization (Sillince, Jarzabkowski, and  
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20 Shaw, 2012). Yet it remains unclear how lexical ambiguity in entrepreneurial communication  
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22 shapes audience perception of novel ideas, and under what conditions it might serve as an  
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24 effective tool for mobilizing broad support.  
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29 To explore this, we leverage a semantic network approach (Carley and Kaufer, 1993) to  
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31 conceptualize and evaluate the effects of lexical ambiguity in entrepreneurial pitches. This  
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33 approach enables us to represent all communications in a given setting as a semantic network,  
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35 where words are nodes, links are the relationships between words, and word clusters are  
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37 conceptual pockets where words take on different meanings (e.g., Godart and Claes, 2017). This  
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39 means that the more conceptual pockets a word is connected to, the more lexically ambiguous it  
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41 is because it can take on different meanings depending on the context. With this conceptual  
42  
43 scaffolding, we theorize that entrepreneurs who use more lexical ambiguity in their pitch will  
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45 open up more conceptual pockets in the semantic network, thereby expanding the set of possible  
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47 meanings of their novel idea. This broader set of meanings should, in turn, increase the  
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49 likelihood that audience members will be able to interpret the idea within the context of their  
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51 own background and experience. In this way, lexical ambiguity provides greater interpretive  
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3 flexibility, making it easier for the entrepreneur to resonate with a diverse audience and mobilize  
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5 widespread support.  
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8 We test our theory using rich textual data on Product Hunt, an online community where  
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10 entrepreneurs pitch their novel product ideas to a diverse set of audience members interested in  
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12 early-stage technology innovations. We start by developing an innovative measure of lexical  
13  
14 ambiguity using a semantic network approach. To do so, we leverage a neural network  
15  
16 Word2vec word embedding model to map the relationships among all the words on the Product  
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18 Hunt platform onto a semantic network. We then use the inverse of Burt's (1992) network  
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20 constraint measure to measure the degree to which the words in an entrepreneur's pitch are  
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22 connected to unique conceptual pockets of meaning in the semantic network and are, therefore,  
23  
24 more lexically ambiguous. We show that entrepreneurs who use more lexical ambiguity to pitch  
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26 their novel ideas mobilize more overall support. We also find that lexical ambiguity is more  
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28 beneficial when audience members have more diverse interpretive lenses (i.e., differing more in  
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30 how they see the world) and when ideas are more novel. We also report supplemental evidence  
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32 in support of our mechanism, which shows that lexical ambiguity mobilizes support by opening  
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34 up more conceptual pockets to which audience members already have cognitive access.  
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40 This study makes several contributions. First, we extend research on cultural  
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42 entrepreneurship by demonstrating the benefits of lexical ambiguity when pitching novel ideas.  
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44 Prior research, grounded primarily in categorical thinking, has cautioned against ambiguity  
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46 because it can obscure how an idea fits into existing categories (Lounsbury and Glynn, 2001;  
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48 Martens *et al.*, 2007), whereas aligning ideas with established categories fosters familiarity and  
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50 thus legitimacy (Clarke *et al.*, 2019; Navis and Glynn, 2010; Zott and Huy, 2007). We argue,  
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52 however, that this logic does not apply to all forms of ambiguity that arise in communication. By  
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3 introducing lexical ambiguity, we expand our understanding of the role ambiguity plays for  
4 entrepreneurs in mobilizing support for novel ideas.  
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8         Second, we also expand our understanding of how legitimacy is built for novel ideas.  
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10 Prior work has typically focused on how *entrepreneurs* draw associations between their activities  
11 and prevailing categories in order to build legitimacy (e.g., Khaire and Wadhvani, 2010;  
12 Martens *et al.*, 2007; Navis and Glynn, 2010). By taking a semantic network approach, we  
13 extend this line of thinking by exploring how a pitch that opens up more conceptual pockets  
14 within a semantic network enables *audience members* to draw associations themselves and  
15 interpret the entrepreneur's idea in a manner that makes sense and is familiar to them (e.g.,  
16 Cattani, Falchetti, and Ferriani, 2020). In this way, our theory and findings explain how lexical  
17 ambiguity allows entrepreneurs to connect with diverse audience members without having to  
18 resonate with each of them individually (Falchetti, Cattani, and Ferriani, 2022; König *et al.*,  
19 2018) or even know all the possible interpretations of their ideas beforehand.  
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33         Finally, this paper also develops an innovative measure of lexical ambiguity based on  
34 semantic network analysis. The several studies that have explored lexical ambiguity in  
35 management and organization theory have largely been qualitative in nature, typically focusing  
36 on just a few words that have multiple interpretations (e.g., Granqvist, Grodal, and Woolley,  
37 2013; Jarzabkowski, Sillince, and Shaw, 2010; Leonardi, 2011; Sillince *et al.*, 2012). By  
38 adopting a semantic network approach, we develop a new measure of lexical ambiguity that is  
39 based on a mapping of the relationships between all words in a given context. This approach  
40 offers not only a more precise measurement of lexical ambiguity, but it also allows us to apply  
41 this measure at scale to capture the degree of lexical ambiguity in any type of communication.  
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54 We discuss how this new measure of lexical ambiguity, as well as the use of semantic network  
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3 analysis more generally, reveals exciting opportunities for scholars interested in research on  
4 language or communication.  
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## 8 9 **2. THEORY AND HYPOTHESES**

### 10 11 **2.1. Ambiguity in Entrepreneurial Communication**

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13 Cultural entrepreneurship research is about how entrepreneurs use communication to help  
14 build legitimacy and improve their chances of acquiring resources (Lounsbury and Glynn, 2001,  
15 2019). The central idea in this literature is that despite the uncertainty and ambiguity surrounding  
16 who they are and what they are doing (Navis and Glynn, 2011), there are always established  
17 cultural categories available that audience members are already familiar with and that  
18 entrepreneurs can utilize (Lounsbury and Glynn, 2001, p. 546). Communication is thus an  
19 important tool that entrepreneurs can use to situate themselves within these preexisting  
20 categories of meaning (e.g., Anthony, Nelson, and Tripsas, 2016; Clarke *et al.*, 2019; Hargadon  
21 and Douglas, 2001; Navis and Glynn, 2010; Rosa *et al.*, 1999), thus helping them build  
22 legitimacy with audience members (Lounsbury and Glynn, 2019).  
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36 An extension of this argument, of course, is that entrepreneurs should also avoid  
37 communicating in a way that makes their idea seem more ambiguous within that categorical  
38 meaning system (Lounsbury and Glynn, 2001, p. 554). Indeed, ideas that straddle categories or  
39 fail to fit into any category often suffer from perceived illegitimacy, leading to cognitive  
40 uncertainty and confusion (Leung and Sharkey, 2014). Such ambiguity can make it harder for  
41 audience members to place, evaluate, or support these ideas (Hsu, 2006; Hsu *et al.*, 2009;  
42 Pontikes, 2012) and, as a result, entrepreneurs are often penalized when they communicate in a  
43 way that leads them to be ambiguously categorized (Martens *et al.*, 2007). Taken together, since  
44 categories help audience members understand and make sense of entrepreneurs and their ideas,  
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3 communicating in a way that undermines this and creates more ambiguity should be avoided  
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5 (Lounsbury and Glynn, 2001, 2019).  
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8         However, we argue that communication can convey more than one type of ambiguity.  
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10 While prior work has focused primarily on what we might call *categorical ambiguity*, which is  
11 when an object (e.g., a firm, product, or idea) does not easily fit into existing categories, we  
12 investigate what is called *lexical ambiguity*, which is when the specific words used to describe an  
13 idea have multiple meanings (Tuggy, 1993). In this way, lexical ambiguity is not about  
14 classifying an idea, but instead, making sense of an idea by interpreting the words describing it.  
15 Consider the word “run,” which is one of the most lexically ambiguous words in the English  
16 language. This word can mean different things depending on whether one is talking about “trying  
17 to run a mile,” “scoring a run,” or “the fuel cars run on.” Which interpretation comes to mind  
18 depends on the context (Sennet, 2023), which can include the other words used alongside it (e.g.,  
19 batter), the location where it is used (e.g., in a baseball park), or the speaker who uses it (e.g., an  
20 umpire).  
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35         Importantly, a lexically ambiguous word uttered in the exact same context can still be  
36 interpreted differently by different people. Indeed, another key contextual factor that shapes  
37 interpretation is oneself—that is, one’s own background, experiences, and beliefs that make up  
38 one’s own interpretive context from which we see the world. Several scholars have shown this in  
39 action. Jarzabkowski, Sillince, and Shaw’s (2010) case study of a UK business school found that  
40 a lexically ambiguous goal of “internationalization” was interpreted differently by actors with  
41 different interests. Similarly, Leonardi’s (2011) case study of an automobile manufacturer found  
42 that the lexically ambiguous word “standardization” used to describe a new technology allowed  
43 people in different departments to interpret that technology in a way that made sense to them.  
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3 Importantly, these studies also suggest that lexically ambiguous words, when they are seen  
4 through one's own interpretive context or lens, are often perceived unambiguously and, instead,  
5 are seen as simply familiar to them. This is one reason communication scholar Eisenberg (1984)  
6 suggested that lexical ambiguity might be “essential to organizing because it allows for multiple  
7 interpretations to exist among people who contend that they are attending to the same message”  
8 (p. 233).  
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17 Given this, it seems possible that entrepreneurs—who are often trying to mobilize  
18 support from audience members with diverse backgrounds and interests—might benefit from  
19 using lexically ambiguous words in their pitch. Indeed, if entrepreneurs could resonate with  
20 diverse audience members without having to figure out how to tailor their communications to  
21 each of them (Falchetti *et al.*, 2022), that could be a powerful legitimation strategy. At the same  
22 time, existing approaches to theorizing lexical ambiguity and its effects are limited. Most studies  
23 identify and explore the effects of a single lexically ambiguous word (e.g., “internationalization”  
24 or “standardization”) in just one empirical setting (e.g., Jarzabkowski *et al.*, 2010; Leonardi,  
25 2011; Sillince *et al.*, 2012). In this paper, we aim to develop a more general approach that can  
26 help us identify the degree of lexical ambiguity in *any* communication as well as offer a  
27 theoretical basis for why lexical ambiguity might help entrepreneurs mobilize more support. To  
28 do so, we adopt a semantic network approach.  
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## 47 **2.2. Lexical Ambiguity: A Semantic Network Approach**

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49 A semantic network approach is based on the longstanding idea that language—and the  
50 way we interpret it—is fundamentally relational and network-based (De Saussure, 1916; Quine,  
51 1960; Wittgenstein, 1953). That is, the meaning of a word cannot be understood in isolation but,  
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3 instead, “can be deciphered only in terms of their ‘place’ in relation to other [words] in their  
4 web” of meaning (Emirbayer, 1997: 300). The semantic network approach builds upon this  
5 intuition by representing this “web of meaning” as a semantic network (Carley and Kaufer, 1993;  
6 Danowski, 1993). According to this approach, words are nodes and the relationships between  
7 words are the links (Godart and Claes, 2017). Plotting the links for all words in a particular  
8 corpus (e.g., emails in an organization, messages on an online platform, conversations during a  
9 quarterly earnings call) thus creates the semantic network.

19 This approach helps us conceptualize and represent what words mean in that setting. For  
20 example, when plotting words and their relationships, words will naturally cluster in particular  
21 ways. These clusters represent conceptual pockets where words connected to that cluster take on  
22 a particular meaning given the other words surrounding it (Aceves and Evans, 2024; Sennet,  
23 2023). If we return to our example of the word “run,” imagine we created a semantic network of  
24 all the communication from ESPN reporters. We would expect “run” to be connected to at least  
25 two distinct conceptual pockets: 1) one that coalesces around track and field and includes words  
26 like hurdles, race, and sprint, and 2) another that coalesces around baseball and includes words  
27 like batter, inning, and umpire. The semantic network approach thus allows us to both identify  
28 and represent the conceptual pockets to which every single word is connected.

42 Using this approach, we develop a new and innovative way to conceptualize lexical  
43 ambiguity. More specifically, within any semantic network, lexical ambiguity arises when a  
44 word (node) is connected to multiple conceptual pockets that carry different contextual  
45 meanings. As depicted in Figure 1, the more conceptual pockets a word is connected to, the more  
46 meanings it has and, thus, the more lexically ambiguous it is. Applying this logic to every word  
47 in the semantic network, we can identify the degree to which each and every word in that corpus

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3 is lexically ambiguous. In doing so, we now have a way to conceptualize the degree of lexical  
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5 ambiguity in any communication conveyed in a given setting.  
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8 [INSERT FIGURE 1 HERE]  
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### 10 11 12 **2.3.Lexical Ambiguity in Entrepreneurial Pitches** 13

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15 With this as our theoretical scaffolding, we argue that an entrepreneurial pitch that uses  
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17 more lexical ambiguity will mobilize more audience support. Our central argument is that  
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19 because lexical ambiguity opens up more conceptual pockets through which their novel idea  
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21 might be interpreted, it increases the likelihood that audience members will be able to make  
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23 sense of it and interpret it as something familiar. We first outline this theoretical argument and  
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25 then explore two boundary conditions.  
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29 We begin with the observation that entrepreneurs who use more lexical ambiguity in their  
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31 pitch will, by definition, open up more conceptual pockets in the semantic network through  
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33 which their idea might be interpreted or understood. This has the potential to be useful since  
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35 entrepreneurs cannot always communicate or even know all the creative uses or applications of  
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37 their own ideas (Lounsbury and Glynn, 2001). Indeed, a lexically ambiguous pitch expands the  
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39 set of possible ways audience members might make sense of and interpret this novel idea beyond  
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41 what the entrepreneur could articulate within the confines of a single pitch. In contrast, a pitch  
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43 with low lexical ambiguity inherently remains more constrained to the singular interpretation  
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45 conveyed by the entrepreneur.  
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49 This opening up of more conceptual pockets should, in turn, increase the likelihood that  
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51 the entrepreneur's pitch will reach a conceptual pocket that audience members are already  
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53 familiar with, thus enabling them to interpret the idea in a way that is familiar to *them* (e.g.,  
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3 Jalonen, Schildt, and Vaara, 2018; Jarzabkowski *et al.*, 2010; Leonardi, 2011). Consider a pitch  
4 that describes a novel technology product having a simple “interface,” which is a lexically  
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6 ambiguous word that opens up conceptual pockets of meaning related to both technical  
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8 capabilities and design. By opening up these conceptual pockets, audience members experienced  
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10 in technical software capabilities will be more likely to see a product that integrates seamlessly  
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12 with other systems, while audience members coming from a design perspective will be more  
13  
14 likely to see a user-friendly product that is enjoyable to use. In this way, a lexically ambiguous  
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16 pitch offers more interpretive possibilities, thereby increasing the chances that individual  
17  
18 audience members with different backgrounds and experiences can bring in their own unique  
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20 understanding in as an interpretive lens (Kalvapalle *et al.*, 2024; Weick, 1993), allowing them to  
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22 understand the idea in a way that is familiar to them (Eisenberg, 1984).  
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29 Finally, this increased familiarity with an entrepreneur’s idea should, in turn, increase  
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31 legitimacy and overall support for it. A core tenet of cultural entrepreneurship research is that  
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33 familiarity with a novel idea increases its legitimacy and support (Lounsbury and Glynn, 2019).  
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35 Prior work has shown that *entrepreneurs* can use stories, analogies, or metaphors to establish this  
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37 familiarity for audience members by locating their ideas within the prevailing categorical system  
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39 (Clarke *et al.*, 2019; König *et al.*, 2018; Martens *et al.*, 2007). Our argument extends this idea by  
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41 arguing that an entrepreneur’s use of lexical ambiguity, which opens up more interpretive  
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43 possibilities, enables audience members to find this familiarity for *themselves* based on their own  
44  
45 background and understanding (Eisenberg, 1984). In this way, lexical ambiguity is a tool that  
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47 enables entrepreneurs to build legitimacy for their novel ideas by enabling audience members to  
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49 interpret the pitch on terms most familiar to them. This leads to our first hypothesis:  
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3       **Hypothesis 1:** An entrepreneurial pitch with more lexical ambiguity will mobilize more  
4 audience support.  
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9       Next, we argue that lexical ambiguity is most effective in mobilizing audience support  
10 when audience members' interpretive lenses are more diverse and dispersed across the semantic  
11 network. When the interpretative lenses of audience members are highly diverse (i.e., they have  
12 very different backgrounds, experiences, or beliefs), their starting points for interpreting a novel  
13 idea will be more spread out across conceptual space (Cattani *et al.*, 2020; Fisher *et al.*, 2017;  
14 Soublière and Lockwood, 2022). Under these conditions, entrepreneurs will benefit more from a  
15 pitch that opens up more interpretive possibilities across this conceptual space, as this will  
16 increase the likelihood that audience members will find something familiar in the idea. In  
17 contrast, when the interpretative lenses of audience members are homogeneous and clustered  
18 around a singular cognitive starting point, the benefits of a pitch that opens up more interpretive  
19 possibilities across the conceptual space will be more limited. This leads to our next hypothesis:  
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35       **Hypothesis 2:** The positive main effect of lexical ambiguity on audience support is  
36 stronger when audience members exhibit greater diversity of interpretive lenses.  
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41       While different backgrounds or experiences can lead audience members to have more  
42 diverse interpretative lenses, so too can increasingly novel ideas that do not have a common or  
43 collectively agreed-upon interpretation. Indeed, when an idea is particularly novel, it lacks an  
44 established interpretive template that audience members can collectively draw upon, leaving  
45 them to fall back upon their own diverse interpretive lenses to make sense of the idea (Kalvapalle  
46 *et al.*, 2024; Weick, 1993). Under these conditions, entrepreneurs once again will benefit most  
47 from a pitch that opens up more interpretive possibilities across this conceptual space, as this will  
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3 increase the likelihood that audience members will find something familiar in the idea. In  
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5 contrast, when the idea pitched is less novel, audience members will likely draw on the already  
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7 established interpretative template, leading to a more homogeneous starting point when making  
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9 sense of this idea. In these circumstances, the benefits of a pitch that opens up more interpretive  
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11 possibilities will once again be more limited. This leads to our final hypothesis:  
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15 **Hypothesis 3:** The positive main effect of lexical ambiguity on audience support is  
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17 stronger when the idea being pitched is more novel.  
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### 20 21 **3. METHODS**

#### 22 23 **3.1.Data**

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25 We test our hypotheses using data from Product Hunt, a global community where  
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27 entrepreneurs and technology enthusiasts share and discover the latest technology innovations.  
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29 Launched in November 2013, Product Hunt has become a key venue for entrepreneurs to  
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31 showcase their latest post-beta, commercial products and to connect with early adopters. As a  
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33 result, prior research has used the platform to study the characteristics of new technology  
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35 products and their early success (Cao, Koning, and Nanda, 2023). By 2017, Product Hunt had  
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37 featured 106,334 new products from 41,797 entrepreneurs, with around 1.35 million users who  
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39 engaged by rating and commenting on products. These users represent a diverse pool of early  
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41 adopters, including other entrepreneurs, engineers, business managers, designers, investors, and  
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43 students. Their diversity reflects a wide range of backgrounds, experiences, and interpretive  
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45 lenses that early consumers bring when assessing the value of new products.  
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51 Product Hunt provides a unique opportunity to examine how an entrepreneur's product  
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53 pitch mobilizes audience support for their products. Entrepreneurs pitch their latest technology  
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55 innovations with the goal of gaining user-generated "upvotes." This voting mechanism carries  
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3 implications for the downstream success of an entrepreneurial product. Russell Barnard, CEO of  
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5 Webfolio, attests to the importance of receiving upvotes on Product Hunt:  
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8 *200 upvotes brought us 3,600 visitors and 450 new signups over 48 hours. Since being featured,*  
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10 *the number of signups has continued to grow consistently...Due to Product Hunt's popularity and*  
11  
12 *undeniable authority in the startup world, Webfolio was also featured on other sites and went*  
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14 *viral on Twitter. It is crazy the snowball effect that Product Hunt can have.*

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16 Entrepreneurs thus state that gaining upvotes on Product Hunt is critical for increasing the usage  
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18 and adoption of their innovations (Willis, 2016).  
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21 Our dataset encompasses all user characteristics, product pitches, and time-stamped  
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23 comments on Product Hunt between November 2013 and October 2017. We used several criteria  
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25 to sample product launches. First, since Product Hunt is primarily a platform for launching novel  
26  
27 technology products, we remove non-technical products (i.e., books, games, podcasts,  
28  
29 newsletters, collections, or courses) in order to minimize potential sampling bias (Cao *et al.*,  
30  
31 2023). Second, we also drop products launched without an entrepreneur, since we would be  
32  
33 unable to control for entrepreneur-level characteristics, as well as products launched by  
34  
35 entrepreneurs with no followers, since we would be unable to evaluate our moderating prediction  
36  
37 of the diversity of audience members' interpretive lenses. Finally, we exclude products with  
38  
39 extremely short pitches (those with five or fewer words), since these do not offer enough  
40  
41 substantive entrepreneurial communication we wish to explore. The final dataset consists of a  
42  
43 total of 21,085 product launches from 15,843 different entrepreneurial teams.  
44  
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### 48 49 **3.2. Dependent Variable**

50  
51 We measure *audience support* for a novel idea by counting the total number of upvotes a  
52  
53 product launch received. Because each audience member can cast only one upvote and cannot  
54  
55 downvote, the upvote count reflects the breadth of support for a product. To account for the  
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3 different durations that product launches were on the platform, we only focused on the upvotes a  
4 product received during the first week of the launch. The first week of a launch is the most  
5 relevant period for audience evaluation as it accounts for, on average, 76.88 percent of the total  
6 number of upvotes for a given product launch.  
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### 13 **3.3.Independent Variable**

14  
15 We construct our measure of *lexical ambiguity* in three steps: 1) we use the Word2Vec  
16 word embedding model to generate vectors for all words used on the Product Hunt platform, 2)  
17 we transform these vectors into a semantic network, and then, using this semantic network, 3) we  
18 calculate the lexical ambiguity of each entrepreneur's pitches. We walk through these steps  
19 below.  
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#### 28 ***Step 1—Generate Vectors***

29  
30 We start by generating vectors for all words used on the Product Hunt platform. To do so,  
31 we use one of the most popular word embedding natural language processing models—  
32 Word2Vec (Kozlowski, Taddy, and Evans, 2019; Mikolov *et al.*, 2013)—to capture the semantic  
33 relationships among words used on the Product Hunt platform. Word embedding models use  
34 heuristic optimization of a neural network to represent each unique word as a point in a shared  
35 multi-dimensional vector space based on its contextual meaning (Mikolov *et al.*, 2013;  
36 Pennington, Socher, and Manning, 2014). Words that occur in similar contexts within the text are  
37 mapped closer together in this space, while words appearing in unrelated contexts are positioned  
38 further apart.  
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50  
51 To train the word embedding model, we preprocessed the entire corpus of approximately  
52 542K comments posted by users on Product Hunt. We trained our model on comments made by  
53 both entrepreneurs and audience members, since our goal is to develop a measure of lexical  
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3 ambiguity based on the meanings expressed within the Product Hunt community as a whole,  
4 which includes both entrepreneurs and audience members. This ensures that the resulting  
5 semantic network captures the latent meanings of both parties on the platform.  
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7

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9  
10 We preprocessed the text by removing special characters, stop words, and numbers. We  
11 then transformed the cleaned text into a bag-of-words representation and stemmed each word to  
12 its root form. Using the preprocessed text, we trained a Word2Vec word embedding model  
13 (Kozlowski *et al.*, 2019; Lix *et al.*, 2022), setting the vector dimensionality to 300 to minimize  
14 the error of the word-context matrix (Mikolov *et al.*, 2013). Rare words under the minimum  
15 occurrence threshold of 30 in the sample are excluded when training the word embedding model.  
16  
17 This procedure generates a vector  $p$  for each word used on the platform, representing its position  
18 in conceptual space.  
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### 29 ***Step 2— Constructing Semantic Network***

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31 While Word2Vec is a powerful tool for comparing pairwise semantic relationships  
32 between words, it presents challenges in capturing broader network relationships among multiple  
33 words due to the multi-dimensionality of the vector space. To address this, we take these  
34 Word2Vec results and construct a semantic network. This approach offers several key  
35 advantages for the purposes of our study.  
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43 First, semantic networks allow us to capture how all words on Product Hunt relate to one  
44 another, whereas traditional word embedding models primarily focus on pairwise semantic  
45 similarities between words. By representing the network of *all* words in this conceptual space,  
46 we can capture complex relationships across clusters of words. Second, the network  
47 representation of the conceptual space enables the analysis of relationships amongst words that  
48 go beyond direct relationships. While direct relationships (e.g., how word A is connected to  
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3 words B, C, and D) illustrate a focal word's connection with other words, indirect relationships  
4 (how word A is connected to words E, F, and G *through* words B, C, and D) allow us to capture  
5 broader patterns that are more consistent with how meanings are interpreted in context (Aceves  
6 and Evans, 2024). Third, this network representation also enhances the interpretability of  
7 semantic relationships by allowing us to examine the structural properties of networks. Instead of  
8 only assessing the cosine similarity or distance between two words, global semantic networks  
9 enable us to analyze how words are positioned within clusters of meaning.  
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19 To construct the semantic network out of our Word2Vec results, we follow recent work  
20 that treats words as nodes. Following prior work (Veremyev *et al.*, 2019), we create an edge  
21 between nodes if the cosine similarity between two words is greater than 0.5 on a scale from 0 to  
22 1. The results are robust to alternative thresholds (0.4 and 0.6). The result is a semantic network  
23 of all words used in Product Hunt comments, where words with similar contextual meanings are  
24 more connected, and where more dense pockets of words capture conceptual pockets of  
25 meaning. Figure 2 plots the entire semantic network of words used on the Product Hunt platform.  
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35 [INSERT FIGURE 2 HERE]  
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### 38 ***Step 3—Measuring Lexical Ambiguity***

39  
40  
41 Finally, we construct our measure of *lexical ambiguity* in an entrepreneur's pitch by  
42 examining how the words they use are connected to other conceptual pockets within the Product  
43 Hunt semantic network. Lexically ambiguous words are words that are connected to more  
44 distinct conceptual pockets and thus have more meanings depending upon the context in which  
45 that word is used (see Figure 1). In contrast, unambiguous words are those that are more  
46 constrained within semantic space and are thus connected to just a single conceptual pocket,  
47 thereby implying that this word has only one meaning. In network terms then, lexically  
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3 ambiguous words are in a stronger brokerage position within the overall semantic network. Just  
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5 as nodes that connect distinct clusters in traditional networks are considered to be in high  
6  
7 brokerage positions, lexically ambiguous words that connect distinct conceptual semantic  
8  
9 pockets are similarly in high brokerage positions.  
10

11  
12 To measure lexical ambiguity, we thus follow prior work that has operationalized  
13  
14 network brokerage using the inverse of Burt's (1992) constraint measure, which captures how  
15  
16 structurally limited a node is in its access to several non-redundant others. A lower constraint  
17  
18 score indicates greater access to structural holes and thus more brokerage opportunities, making  
19  
20 it particularly well-suited for capturing the potential for connecting otherwise disconnected  
21  
22 actors (e.g. Kwon *et al.*, 2020; Quintane and Carnabuci, 2016; Zhang, Aven, and Kleinbaum,  
23  
24 2024)  
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27  
28 We apply this measure to each word in an entrepreneur's full product pitch (i.e., the  
29  
30 product's name, tagline, description, and introductory comment posted by the entrepreneur),  
31  
32 which have all been cleaned according to the same steps taken for constructing the semantic  
33  
34 network. For each word in the pitch, we identify it in the trained semantic network and calculate  
35  
36 *lexical ambiguity* using the following equation:  
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38

$$39 \quad \text{Lexical Ambiguity} = 1 - \sum_j (p_{ij} + \sum_q p_{iq}p_{qj})^2$$

40  
41 where  $p_{ij}$  is the proportional strength of the direct tie between  $i$  and  $j$ , represented as the  
42  
43 proportion of the tie between  $i$  and  $j$  relative to node  $i$ 's total connections in the undirected binary  
44  
45 network.  $p_{iq}p_{qj}$  represents the proportional strength of the indirect tie. The equation enables us  
46  
47 to identify the ambiguity of each word in the semantic network mapping of the relationship  
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49 among all words used on Product Hunt. To calculate our final measure, we average the lexical  
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3 ambiguity scores for all words in an entrepreneur's pitch, which results in a measure that  
4 captures the degree to which the pitch is lexically ambiguous. Figure 3 provides examples of  
5 product descriptions with high and low degrees of lexical ambiguity, highlighting sample words  
6 for which lexical ambiguity is measured.  
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11 [INSERT FIGURE 3 HERE]  
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### 15 **3.4. Moderating Variables**

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17  
18 *Audience interpretive diversity* refers to the diversity of interpretive lenses within the  
19 pool of potential supporters for an entrepreneur's product. To measure this construct, we analyze  
20 the language used by potential supporters prior to the focal product's launch to infer their  
21 underlying interpretive frameworks. This approach departs from prior research that relies on  
22 demographic or role-based proxies for cognitive diversity (Carpenter, 2002; Gibson and  
23 Vermeulen, 2003), offering instead a fine-grained indicator of how these individuals tend to  
24 perceive novel ideas.  
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34 We focus specifically on potential supporters, rather than all audience members on  
35 Product Hunt, to capture the set of individuals at risk of supporting the product at hand. We  
36 identify potential supporters as individuals who follow the entrepreneur up to the end of the  
37 launch week, as these individuals receive information about the product through the Product  
38 Hunt platform. We exclude from this measure individuals who started following the entrepreneur  
39 after they had upvoted, although our results are robust with their inclusion.  
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48 To measure the diversity of interpretive lenses among this pool of audience members, we  
49 analyze comments made by these followers on any products on Product Hunt in the three months  
50 prior to the focal product launch. Our results are also robust to time windows of one and two  
51 months. This approach captures what these potential supporters were thinking and talking about  
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prior to focal product's launch, thus representing a proxy for their interpretive frameworks at that time.

We again use the previously trained word embedding model to capture the meanings embedded in the language. Let  $I$  be a group of  $N$  active potential supporters for an entrepreneur's product, previously defined by entrepreneurs' followers who made at least one comment on Product Hunt within three months before a focal product launch. We first process these comments by excluding short comments that are unlikely to convey significant meaning.<sup>1</sup> We then calculate the mean vectors  $\bar{p}^i$  and  $\bar{p}^j$ , which represent the average vectors of all comments made by these followers in the past three months. We then determine the semantic distance  $d(i, j)$  between each pair of individuals  $(i, j)$  by calculating the cosine distance between their mean vectors  $\bar{p}^i$  and  $\bar{p}^j$  (Lix et al., 2022):

$$d(i, j) = 1 - \frac{\sum_{k=1}^K \bar{p}_k^i \bar{p}_k^j}{\sqrt{\sum_{k=1}^K (\bar{p}_k^i)^2} \sqrt{\sum_{k=1}^K (\bar{p}_k^j)^2}}$$

Using this distance metric, we define audience diversity as the average pairwise embedding distance across the mean vectors for comments left by each pair of entrepreneurs' followers:

$$\text{Audience Interpretive Diversity} = \frac{1}{N^2} \sum_{i \in I} \sum_{j \in I} d(i, j)$$

*Novelty* of an entrepreneur's product idea reflects the extent to which it recombines existing elements that are rarely used together. We measure this by assessing how rare the combinations of labels entrepreneurs use to describe their products are on Product Hunt (e.g.,

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<sup>1</sup> Comments with five or fewer words that are meaningfully represented in the word embedding vector space, which exclude stop words, numbers, special characters, and rare words under the minimum occurrence threshold of 30.

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2  
3 “Developer Tools,” “Education,” “Task Management,” “Home”). These labels, visible to all  
4  
5 users, signal how entrepreneurs envision their products being used. When combined in  
6  
7 uncommon or rare ways, they signal a novel idea (Zunino, Suarez, and Grodal, 2019) that lacks  
8  
9 common or already established interpretive templates that audience members can easily draw  
10  
11 upon (Lounsbury and Glynn, 2001; Von Hippel, 2005).  
12  
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14  
15 For each pair of labels entrepreneurs assign to a product, we calculate the frequency with  
16  
17 which the same pair has been used by other entrepreneurs on Product Hunt. We then take the  
18  
19 inverse of these frequencies and sum them across all label pairs for a product. This procedure  
20  
21 yields higher novelty scores for products with rarer label combinations (e.g. “Education” and  
22  
23 “Augmented Reality”) compared to more common pairings (e.g. “Education” and “Learn a  
24  
25 Language”). Summing across pairs also ensures that products with more labels—if they are  
26  
27 combined in uncommon ways—receive higher novelty scores, thereby incorporating both  
28  
29 combination rarity and number of labels in the calculation of the novelty measure.  
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### 34 **3.5. Control Variables**

35  
36 We control for several entrepreneur- and product-level factors that may confound the  
37  
38 relationship between the level of lexical ambiguity in entrepreneurs’ product descriptions and  
39  
40 audience support for novel ideas. At the entrepreneur level, we first capture the characteristics and  
41  
42 the social positioning of the launch team. We control for *team size* as the number of members in  
43  
44 an entrepreneurial launch team may influence both how entrepreneurs pitch their product and the  
45  
46 amount of support a product receives. We also account for entrepreneurs’ *past success*, measured  
47  
48 as the total number of upvotes previously received by all team members on Product Hunt, since  
49  
50 prior success may correlate with entrepreneur quality (Soublière and Gehman, 2020) as well as the  
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52 strategic use of lexical ambiguity.  
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3 As for the social positioning of the launch team, we account for *follower count*, as larger  
4 networks, which increase endorsements of product quality (Mollick, 2014; Shane and Cable,  
5 2002), may correlate with both the use of lexical ambiguity and audience support. We measure  
6 follower count by calculating the average number of followers for each member of an  
7 entrepreneurial team at the end of the launch week. Finally, we control for *network constraint*, as  
8 individuals embedded in dense ego networks may be less able to use lexically ambiguous  
9 language to appeal to audiences (Padgett and Ansell, 1993). We identify network ties based on  
10 the followership network on Product Hunt, since following represents the primary form of  
11 relationship on the platform based on recognition and endorsement. We operationalize network  
12 constraint using the constraint measure defined by Burt (1992). A higher score suggests that an  
13 entrepreneur has fewer connections between different groups and is more closely connected to a  
14 dense network of relationships. We calculate the average network constraint score for each  
15 member of an entrepreneurial team at the end of the launch week.  
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33 At the product level, we account for factors that may be correlated with both the use of  
34 lexical ambiguity and audience support. To account for unobserved quality, we follow prior  
35 work on platforms like Kickstarter, which identifies product curation by platform owners (e.g.  
36 “Projects we love”) as signals of quality strongly associated with audience support (Mollick,  
37 2014; Soublière and Gehman, 2020; Tauscher, Bouncken, and Pesch, 2021). We control for  
38 whether the product was featured on Product Hunt’s landing page—a curated selection of  
39 approximately 20 new products each day chosen for appropriateness and quality by Product Hunt  
40 platform owners before they are released to the broader audience (Cao et al., 2023). We also  
41 control for *label count* since entrepreneurs may use lexically ambiguous words for products  
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3 intended for a wider audience. We define *label count* as the number of tags an entrepreneur  
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5 claims for their product at the time of submission.  
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8 Finally, we account for the linguistic characteristics of the pitch. We control for the  
9  
10 average *word popularity* in their pitch, as ambiguous words that connect to multiple conceptual  
11  
12 pockets are likely to be those that are commonly used on the platforms.<sup>2</sup> We calculate this by  
13  
14 averaging the number of times each word in the product description appears in descriptions of  
15  
16 other products. Additionally, we control for the *pitch length*, measured as the total word count, as  
17  
18 longer descriptions as a proxy for preparedness can signal higher quality (Calic and Mosakowski,  
19  
20 2016; Tauscher *et al.*, 2021). Finally, we control for the *tone* of the pitch using the Linguistic  
21  
22 Inquiry and Word Count dictionary (Pennebaker *et al.*, 2015) and the *uncertainty* of words used  
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24 (Loughran and McDonald, 2011, 2013).  
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### 29 **3.6. Estimation**

30  
31 To estimate the relationship between an entrepreneur's use of lexical ambiguity and  
32  
33 audience support for novel ideas, we use the negative binomial regression because our dependent  
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35 variable is an over-dispersed count variable. In the supplementary analyses, we also present  
36  
37 alternative models using Poisson and OLS estimating the logged number of upvotes. All models  
38  
39 include fixed effects for labels claimed by entrepreneurs to account for unobserved heterogeneity  
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41 related to product positioning, as well as year-level fixed effects to account for temporal trends,  
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43 such as changes in platform dynamics, norms, or audience preferences. We cluster the standard  
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45 errors by entrepreneurial teams to account for potential correlation of observations within the  
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47 same entrepreneurial team, such as shared strategies or communication styles, which might  
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55 <sup>2</sup> We thank Ronald Burt for pointing out that the high frequency of word usage may confound the extent to which  
56 we capture ambiguity in the current measure.  
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3 otherwise lead to underestimated standard errors (Abadie *et al.*, 2022). We also conduct  
4 robustness tests to explore alternative specifications for standard errors and fixed effects,  
5 including models with entrepreneurial team-level fixed effects to control for time-invariant  
6 characteristics specific to each team.  
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## 13 4. RESULTS

### 14 4.1. Descriptive Results

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17 Table 1 displays descriptive statistics and Table 2 provides correlations between the  
18 variables in this study. When looking at our dependent variable of audience support, the total  
19 number of upvotes that a product receives in a given week is left-skewed. The 50th percentile is  
20 61 upvotes, the 90th percentile is 413 upvotes, and the maximum is 3446 upvotes. This is  
21 consistent with the winner-take-all nature of audience attention in the online platform setting.  
22 The number of upvotes is positively correlated with *lexical ambiguity* ( $r=0.06$ ).  
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31 [INSERT TABLES 1 AND 2 HERE]  
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### 35 4.2. Main Results

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37 We present the results for Hypothesis 1 in Table 3. Model 1 shows the baseline model  
38 with only our independent variable and the year- and label-level fixed effects. Model 2  
39 incorporates all control variables along with the fixed effects, while Model 3 adds the moderator  
40 alongside the control variables and fixed effects. The coefficient for *lexical ambiguity* is  
41 significantly positive across all models ( $\beta = 1.545, p = 0.000$ ;  $\beta = 0.513, p = 0.002$ ;  $\beta = 0.498, p$   
42  $= 0.003$ ), suggesting that entrepreneurs who use more lexical ambiguity to pitch their novel idea  
43 will garner more audience support. This strongly supports Hypothesis 1. In practical terms, when  
44 the lexical ambiguity of an entrepreneur's pitch increases by one standard deviation, the number  
45 of upvotes for their product increases by 4.06 percent ( $e^{0.498*0.08}$ ).  
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[INSERT TABLE 3 HERE]

In Model 4, we examine Hypothesis 2, which predicts that the positive main effect of lexical ambiguity on audience support is stronger when audience members exhibit greater diversity of interpretive lenses. Model 4 shows that the interaction between *lexical ambiguity* and *audience interpretive diversity* is positive and statistically significant ( $\beta = 2.647, p = 0.003$ ), indicating that increased diversity in audience members' interpretive lenses amplifies the benefit of using lexical ambiguity. These results support Hypothesis 2. Figure 4 shows the graphical illustration of the interaction terms.

In Model 5, we examine Hypothesis 3, which predicts that the positive effect of lexical ambiguity on audience support is stronger for more novel ideas. We find that the interaction between *lexical ambiguity* and *novelty* is positive and statistically significant ( $\beta = 0.775, p = 0.041$ ), suggesting that the relationship between lexical ambiguity and audience support strengthens as novelty increases. Given that products launched on Product Hunt tend to be novel on average, however, the positive main effect of lexical ambiguity persists even at lower levels of novelty. These results support Hypothesis 3. Figure 5 illustrates this interaction. Lastly, in Model 6, which includes both interaction terms, evidence for Hypotheses 2 and 3 remains robust.

[INSERT FIGURES 4 & 5 HERE]

#### 4.3. Mechanism Test

Our theory posits that lexical ambiguity mobilizes audience support for novel ideas because it opens up more conceptual pockets through which their idea might be interpreted or understood, enabling audience members to more easily make sense of the novel idea and understand it as something familiar. An assumption of this argument, therefore, is that the conceptual pockets opened up by the lexically ambiguous pitch actually connect to conceptual

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3 pockets that audience members are already familiar with, thus allowing them to make sense of  
4 the novel idea. Indeed, if an entrepreneur uses lexical ambiguity to open up more conceptual  
5 pockets, but audience members—given their backgrounds or experiences—are not familiar with  
6 these meanings, then lexical ambiguity would not help mobilize more audience support.  
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12 To test this assumption, we develop a measure that captures the degree to which the  
13 conceptual pockets opened up by a lexically ambiguous pitch overlap with those familiar to  
14 audience members. Specifically, we identify the conceptual pockets opened up by an  
15 entrepreneur's pitch by locating the clusters of words that are internally connected but  
16 disconnected from other clusters in the semantic network (i.e., network components) that are  
17 linked to the words used in the pitch. Next, we identify the conceptual pockets familiar to  
18 audience members by analyzing their comments on Product Hunt in the three months prior to the  
19 focal product's launch and locating the pockets connected to the words they used. Finally, we  
20 construct a measure of overlap between these two sets to capture the degree to which the lexical  
21 ambiguity in the pitch connects to the conceptual pockets that their audience members are  
22 already familiar with.  
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38 We then conduct a mediation analysis to evaluate if the use of lexical ambiguity  
39 mobilizes more audience support by opening up more conceptual pockets that actually connect to  
40 audience members' existing understandings. Following Preacher and Hayes (2008), we estimate  
41 bias-corrected confidence intervals (BC CIs) based on bootstrapping by resampling 500 times.  
42 The result shows a strong indirect effect of lexical ambiguity on audience support through this  
43 overlap measure ( $\beta = 1.222$ ,  $p = 0.029$ , 95% BC CI [0.125, 2.318]). These results are thus  
44 consistent with our theoretical argument that entrepreneurs who use lexical ambiguity in their  
45 pitch mobilize more audience support by opening up more conceptual pockets that audience  
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3 members are already familiar with, thus enabling them to make sense of the novel idea that is  
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5 familiar to them.  
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#### 8 9 **4.4. Robustness Tests**

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11 We first examine whether the results are robust to alternative model specifications and  
12  
13 different ways of accounting for the fixed effects. We report these tests in the “specification  
14  
15 curve” in Figure 6, which plots the primary coefficient from H1 across different model  
16  
17 specifications (Simonsohn, Simmons, and Nelson, 2020). The reporting of specification  
18  
19 robustness is increasingly being used by management scholars to increase the transparency of  
20  
21 how model choices impact one’s results (Frake and Harmon, 2024; Harmon and Mariani, 2024).  
22  
23 The y-axis represents the coefficient of our *lexical ambiguity* variable from the baseline model  
24  
25 (Model 2 in Table 3), along with the associated 90% and 95% confidence intervals. The x-axis  
26  
27 represents different model specifications, which include: (a) the current negative binomial model  
28  
29 and an alternative OLS model; (b) different standard error treatments, such as those clustered by  
30  
31 entrepreneur team, category, and year, as well as Eicker-Huber-White robust standard errors; and  
32  
33 (c) different fixed effects, including current year- and label-level fixed effects and entrepreneur-  
34  
35 level fixed effects. The coefficient for our *lexical ambiguity* variable is positive, significant, and  
36  
37 relatively stable across most specifications.  
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44 It is also worthwhile to note that the relationship between entrepreneurs’ lexical  
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46 ambiguity and audience support remains directionally consistent when including entrepreneurial  
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48 team fixed effects despite limited within-team variation (73.52 percent of teams had only a single  
49  
50 launch). The coefficient with team-level fixed effects is significantly positive when not  
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52 controlling for product or team quality (e.g., being featured or entrepreneurs’ prior success) but  
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54 falls just below significance ( $p = 0.103$ ) once these controls are introduced.  
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[INSERT FIGURE 6 HERE]

## 5. DISCUSSION

This study investigated how entrepreneurs can mobilize support for their novel ideas by using lexical ambiguity in their pitch. By leveraging a semantic network approach, which enabled us to develop an innovative conceptualization and measurement of lexical ambiguity, we show that entrepreneurs who use more lexical ambiguity receive greater support from audience members. Taken together, these findings advance our understanding of how entrepreneurs mobilize support for new ideas, shed new light on the nature of ambiguity in organizational communication, and showcase the use of semantic networks as an innovative approach to analyzing language.

### 5.1. Contributions to Cultural Entrepreneurship

This study makes several contributions to the literature on cultural entrepreneurship. Most importantly, we extend this body of work by demonstrating that ambiguity in entrepreneurial communication need not always be detrimental. Much of the prior literature has treated ambiguity—particularly categorical ambiguity—as a liability, underscoring the risks it poses for legitimacy (Lounsbury and Glynn, 2001; Martens *et al.*, 2007). Our results challenge this assumption. We show that lexical ambiguity—a distinct form of ambiguity arising from an entrepreneur’s choice of words—can, in fact, *generate* legitimacy for novel ideas. By disentangling lexical from categorical ambiguity, we highlight that not all forms of ambiguity carry the same liability, and we provide a more refined understanding of when and how different types of ambiguity can advance entrepreneurial goals.

In doing so, we also expand our understanding of how legitimacy develops around novel ideas. While we know that a novel idea gains legitimacy when it is associated with already

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3 familiar meanings (Lounsbury and Glynn, 2001, 2019), our semantic network approach reveals  
4 several important extensions. First, we highlight that who creates these associations can differ.  
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6 Prior work has primarily examined how *entrepreneurs* can use stories, analogies, or metaphors to  
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8 locate their ideas within a prevailing meaning system (Clarke *et al.*, 2019; König *et al.*, 2018;  
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10 Martens *et al.*, 2007), establishing a common ground of interpretation for audience members.  
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12 Lexical ambiguity, by contrast, opens up a wider range of potential meanings without explicitly  
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14 linking the idea to all possible interpretations. As a result, this enables audience members  
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16 *themselves* to forge these associations in ways that are resonant with their own interpretive  
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18 repertoires. Indeed, our study leverages a semantic network approach that allows us to not only  
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20 identify the conceptual pockets opened by lexically ambiguous words but also demonstrate when  
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22 these pockets align with those held by audience members to generate greater support. In this  
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24 sense, we show that lexical ambiguity does not exacerbate the liability of newness, but instead,  
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26 mitigates it by allowing audiences to co-construct legitimacy in ways that are uniquely familiar  
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28 to them, thus responding to recent calls for a deeper understanding of how audiences make sense  
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30 of novel ideas (see Cattani *et al.*, 2020).  
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38 Second, our study suggests that the association of novel ideas with familiar meanings can  
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40 unfold at a different level of analysis than prior research has emphasized. Much of the literature  
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42 has argued that familiarity with novel ideas emerges when the new idea is classified into existing  
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44 categories. For example, analogies connect a novel product (e.g., the minivan) to an extant  
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46 category (e.g., full-sized vans), thereby generating legitimacy through categorical fit (Anthony *et*  
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48 *al.*, 2016; Clarke *et al.*, 2019; Glaser, Fiss, and Kennedy, 2016; König *et al.*, 2018; Rosa *et al.*,  
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50 1999). Our study shifts attention from the idea level to the lexically ambiguous words  
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53 entrepreneurs use to describe these ideas. Rather than forcing a novel idea into an established  
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3 category, these words create interpretive openness, enabling audiences to generate their own  
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5 connections to conceptual domains familiar to them. Here again, our semantic network method  
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7 provides empirical traction by allowing us to show how this interpretive openness actually  
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9 connects to audience members' familiar meanings, demonstrating how different audience  
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11 members can find different meanings in the same idea.  
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15 Finally, our findings also demonstrate an innovative way that entrepreneurs can mobilize  
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17 support from diverse audiences. Prior research has suggested that entrepreneurs might tailor their  
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19 communications to different segments by crafting distinct messages for distinct audiences  
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21 (Falchetti *et al.*, 2022). While plausible, such a strategy is sometimes infeasible, particularly in  
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23 online environments where entrepreneurs pitch ideas without knowing who their audience will  
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25 be or what their preferences are. Our results show that in these contexts, lexical ambiguity  
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27 provides a powerful alternative. By opening multiple conceptual pockets simultaneously, lexical  
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29 ambiguity allows dispersed audiences with varied interpretive lenses to each locate familiar  
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31 meanings and thus draw their own connections to the novel idea. Importantly, this approach  
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33 makes it possible to trace how such “unified diversity” (Eisenberg, 1984) emerges, offering a  
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35 systematic tool to reveal how lexically ambiguous communication generates common ground in  
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37 support of a novel idea amidst heterogeneous interpretations of it.  
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## 43 **5.2. Reexamining the Nature of Ambiguity**

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46 Our study also invites a reconsideration of the nature of ambiguity, how it emerges within  
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48 organizational communication, and its effects. Interestingly, ambiguity itself is ambiguous, as it  
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50 can take multiple forms, and these forms can have markedly different effects. In this section, we  
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52 elaborate on the differences between two major types of ambiguity—categorical and lexical—  
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54 before speculating on additional varieties that may warrant further scholarly attention.  
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3 The first and most widely studied form is *categorical ambiguity*, which has been central  
4 to prior research in cultural entrepreneurship (Lounsbury and Glynn, 2001; Martens *et al.*, 2007)  
5 and categories scholarship (Hsu, 2006; Hsu *et al.*, 2009; Pontikes, 2012). This type of ambiguity  
6 arises when an object—such as an idea, a firm, or a product—fails to clearly fit within  
7 established categories. In such cases, audience members tend to engage in a process of  
8 classification, attempting to situate the ambiguous object within an existing system of meaning.  
9 Because doing so is challenging, ambiguity is often explicitly noticed by audience members and  
10 experienced as cognitive uncertainty and confusion (Leung and Sharkey, 2014), thus leading  
11 audience members to discount the object being evaluated (although exceptions have been noted,  
12 see Pontikes, 2012).  
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26 In contrast, our study introduces and elaborates upon *lexical ambiguity*. This form of  
27 ambiguity emerges not from the categorical fit of an object, but from the words chosen to  
28 describe an object. Rather than prompting a process of classification, lexical ambiguity triggers a  
29 process of interpretation where audience members attempt to make sense of what they are  
30 observing (Jarzabkowski *et al.*, 2010; Leonardi, 2011; Sillince *et al.*, 2012). In contrast to the  
31 confusion or uncertainty audience members often experience when confronted by categorical  
32 ambiguity, audience members typically do not even recognize or notice lexical ambiguity as  
33 such. Instead, they typically see and interpret the lexically ambiguous word within a prevailing  
34 context—which includes their own interpretive lenses—to arrive at an interpretation that is  
35 familiar and that makes sense to them. In this sense, lexical ambiguity operates not by producing  
36 confusion, but by implicitly enabling audience members to project their own interpretive  
37 frameworks onto an idea.  
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3 This distinction between categorical and lexical ambiguity also highlights a deeper  
4 theoretical point—that is, the difference between ambiguity as a perception and ambiguity as a  
5 property inherent to language. Prior work has often characterized ambiguity in terms of how  
6 ambiguity is *perceived*—that is, as vague (McMahan and Evans, 2018), unclear (Pontikes, 2012),  
7 or imprecise (König *et al.*, 2018). By contrast, communication and linguistics scholars tend to  
8 characterize ambiguity as a *property inherent to words themselves*, arguing that inherently  
9 ambiguous words—when being actively interpreted—typically are not perceived as ambiguous.  
10 This echoes Eisenberg’s (1984) point that whether or not a person perceives a given word as  
11 ambiguous is entirely independent of the ambiguity inherent to that word (i.e., whether or not the  
12 word has multiple meanings) (p. 230). Our study highlights why recognizing this distinction is  
13 important to understanding the effects of ambiguity on an audience.  
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28 Stepping back further, there may also be additional forms of ambiguity worthy of  
29 exploration. For instance, Padgett and Ansell’s (1993) account of Cosimo de’ Medici highlights  
30 how his multivocal or *ambiguous identity*—driven largely by his silence rather than his  
31 communication—enabled him to consolidate power. Whether this is best understood as  
32 categorical or lexical ambiguity, or something else altogether, remains an open question. Other  
33 forms of linguistic ambiguity are also promising to consider. *Syntactic ambiguity*, for example,  
34 arises from the nuances of English grammar, as in the phrase “superfluous hair remover,” which  
35 can mean either that the remover itself is unnecessary or that removing the hair is unnecessary.  
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47 *Pragmatic ambiguity*, by contrast, arises from where a phrase is uttered or by whom. For  
48 example, the utterance “the cops are coming” could signal warning, assertion, or relief depending  
49 on the prevailing circumstances. Attending to these multiple sources of ambiguity underscores  
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3 that ambiguity in language is not monolithic but multifaceted, and its effects depend heavily on  
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5 how it manifests and how audiences engage with it.  
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### 8 9 **5.3. A Semantic Network Approach to Organizational Communication**

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11 Finally, we believe that the semantic network approach adopted in this study offers  
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13 several contributions to those interested in studying language or organizational communication.  
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15 To begin, by utilizing a semantic network approach, we were able to develop an innovative  
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17 conceptualization and measurement of lexical ambiguity. The few studies that have explored  
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19 lexical ambiguity have typically focused on a single word (e.g., “internationalization” or  
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21 “standardization”) and examined its effects in one empirical setting (Jalonen *et al.*, 2018;  
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23 Jarzabkowski *et al.*, 2010; Leonardi, 2011; Sillince *et al.*, 2012). While we might have followed  
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25 a similar path by identifying several lexically ambiguous words that entrepreneurs use in their  
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27 pitches and examining their influence on mobilizing support, we sought instead to create a more  
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29 generalizable framework based upon a semantic network approach.  
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35 Our approach offers two key advancements. Conceptually, plotting the overall semantic  
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37 network of all words used in a setting allows us to identify the structure of meaning surrounding  
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39 a focal word by identifying all the conceptual pockets to which each word is connected. Because  
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41 these networks are constructed from a large dataset of all communication within a setting—such  
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43 as Product Hunt—we are able to capture semantic connections that more traditional qualitative  
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45 approaches may be unable to observe. In turn, this also allows us to identify whether the  
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47 conceptual pockets unlocked by lexically ambiguous words overlap with those conceptual  
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49 pockets inhabited by audience members, thereby offering a way to examine precisely how lexical  
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51 ambiguity mobilizes support. Empirically, this approach also expands the scope of measurement.  
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55 Rather than limiting analysis to a single ambiguous word, our method quantifies the degree of  
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3 lexical ambiguity across any type or length of communication. By mapping out how every word  
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5 in a corpus relates to every other word, our measure can identify the broader impact of lexical  
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7 ambiguity on audiences, which we believe could be used more generally in other organizational  
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9 settings.  
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12 In addition to the development of lexical ambiguity, we argue that another theoretical  
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14 benefit of utilizing a semantic network approach is that it resonates with the well-established  
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16 relational understanding of language. Scholars such as De Saussure (1916), Wittgenstein (1953),  
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18 and Rorty (1980) have argued that meaning does not reside in a word by itself, but in their use  
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20 and connections to other words in a given context. From this perspective, language is  
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22 fundamentally relational, context-dependent, and embedded in broader linguistic and social  
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24 systems. Indeed, the meaning of a term like “pivot” shifts depending on whether it appears  
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26 alongside words such as “strategy” in entrepreneurship, “movement” in dance, or “play” in  
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28 sports. Our semantic network approach makes these relational dynamics visible by mapping how  
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30 words cluster and connect within a given discourse.  
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36 This relational approach to language also highlights both the power and underutilization  
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38 of semantic network methods in organizational research. Computerized text-based methods such  
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40 as dictionary-based approaches (Tausczik and Pennebaker, 2010), topic modeling (Hannigan *et*  
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42 *al.*, 2019), and word embeddings (Aceves and Evans, 2024) have each provided valuable insights  
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44 into how language shapes audience evaluations, and continue to do so. What has been less  
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46 emphasized is the aforementioned relational premise that meaning is constituted by the broader  
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48 structure of connections among all words in a corpus (and not just pairwise comparisons between  
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50 individual words). A semantic network approach operationalizes this premise, providing tools for  
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3 examining both global and local linguistic structures of meaning, which we believe could open  
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5 new avenues for studying how meaning operates in organizational communication.  
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## 8 9 **6. CONCLUSION**

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11 Novel ideas are often confusing, leaving audiences uncertain about how to evaluate them.  
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13 Conventional wisdom, therefore, suggests that entrepreneurs should minimize ambiguity in their  
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15 pitches. This study challenges that assumption by demonstrating the legitimating potential of  
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17 lexical ambiguity. By opening up multiple conceptual pockets, lexically ambiguous language  
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19 allows audience members to arrive at their own familiar interpretations of a novel idea,  
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21 increasing the likelihood of their support. In doing so, we extend cultural entrepreneurship  
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23 research by challenging the long-standing caution against conveying more ambiguity and  
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25 showing that, under certain conditions, it can be an asset rather than a liability. More broadly, our  
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27 findings invite a renewed conversation on the diverse forms of ambiguity in organizational  
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29 communication and their role in shaping how novel ideas gain legitimacy.  
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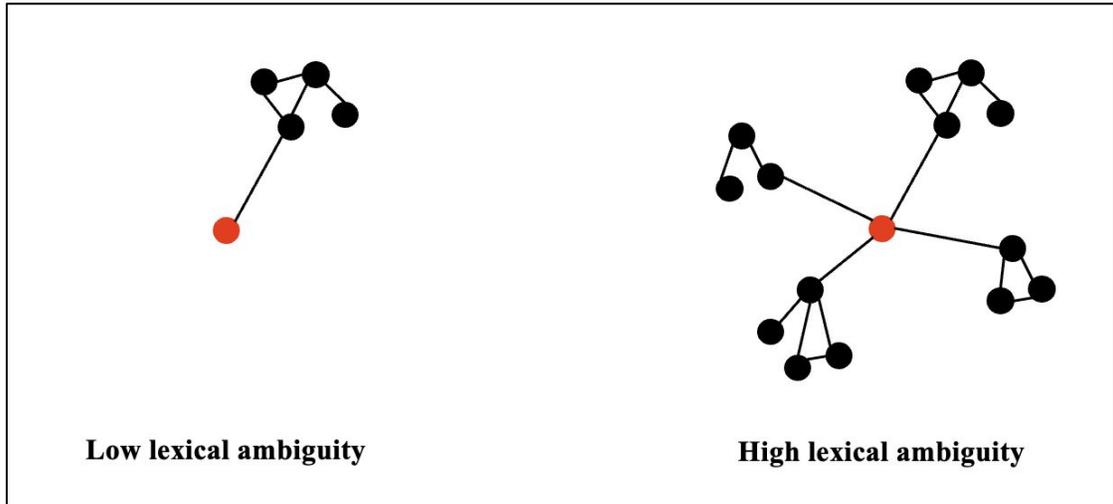
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**Figure 1.** Stylized example of a lexically ambiguous and lexically unambiguous word



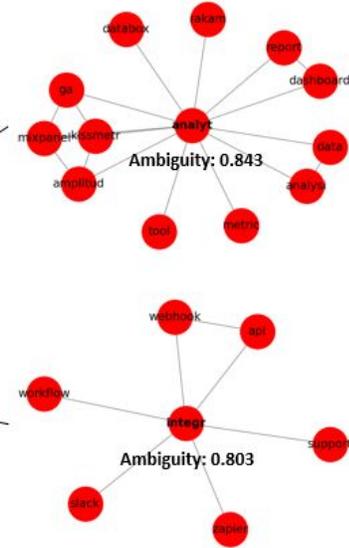
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3 **Figure 3.** Examples of lexical ambiguity  
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5 **High ambiguity score (top 10 percentile)**  
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11 Hey everyone, I'm co-founder and Head of Product at App  
12 Samurai. Today we are very excited to announce App Samurai,  
13 self-service app marketing tool for startups. App Samurai aims  
14 to make mobile marketing as easy as possible for startups.  
15 Mobile ad planning, execution, and analysis are complicated for  
16 startups because they don't reach all available app marketing  
17 tools. App Samurai makes it easy for them without requiring in-  
18 depth mobile marketing knowledge! From now on, It's really  
19 easy to create and manage user acquisition and boost  
20 campaigns for startups and indie developers! With the help of  
21 attribution and 3rd party **analytics** tool **integrations** App  
22 Samurai provides unique optimization capabilities and smart  
23 recommendations for user acquisition campaigns. You can sign  
24 up and try the platform here:



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29 **Low ambiguity score (bottom 10 percentile)**  
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33 Hi everybody, Lanyon is a static site generator. It functions as a  
34 wrapper around Jekyll, Webpack, and BrowserSync, in an  
35 attempt to give you the best of all worlds. Lanyon allows you to  
36 build and refresh assets instantly and offers fast and reliable file  
37 watching. This is not to replace Jekyll, but just use it in a more  
38 powerful way. I've been trying to onboard my JavaScript-based  
39 team to use Jekyll for documentation and static **sites** for our  
40 open source projects, but more than half ran into nokogiri  
41 errors or other trouble pulling in the ruby dependency tree.  
42 Once we did get it to work for everybody, many tmate.io  
43 sessions later, complaints where about the asset pipeline being  
44 that much slower/less capable than what they were used to.  
45 Alternatives (Hexo) could solve that, but I really wanted to keep  
46 Jekyll for content authoring as those alternatives have other  
47 serious tradeoffs. I figured it shouldn't be overly hard to take  
48 away the mentioned painpoints via an opinionated **wrapper**  
49 and Lanyon was born. Lanyon takes away the installation  
50 headaches by utilizing Docker and adds more powerful asset  
51 management via Webpack.

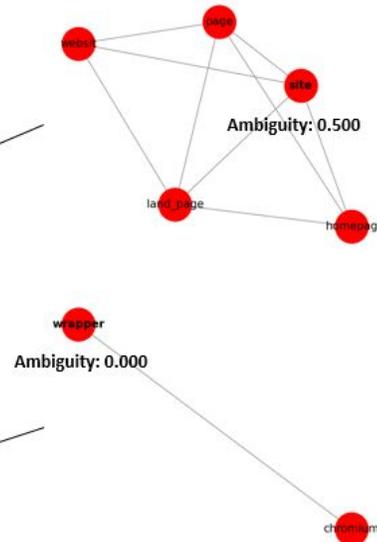


Figure 4. Interaction plot between *Lexical Ambiguity* x *Audience Interpretive Diversity*

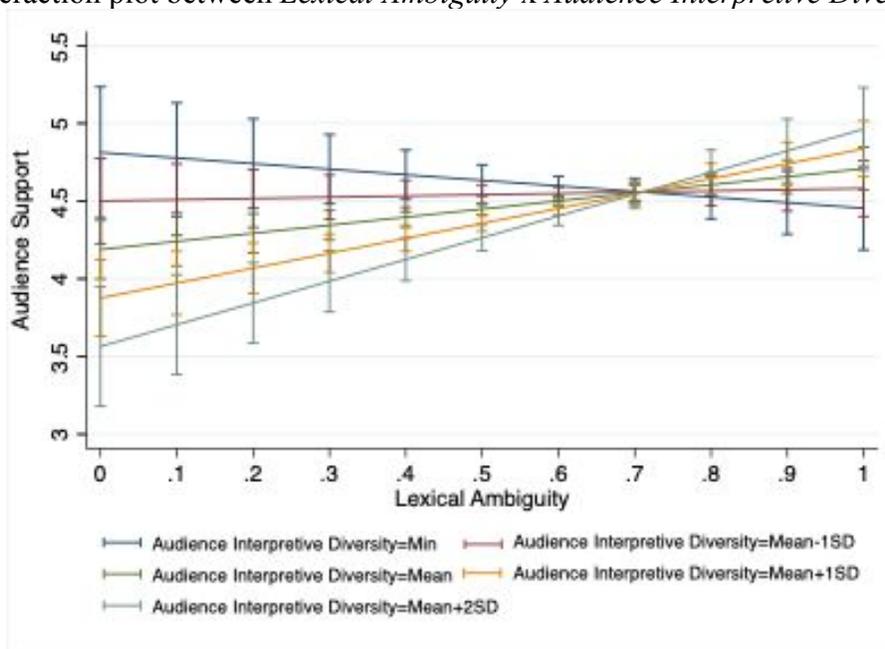


Figure 5. Interaction plot between *Lexical Ambiguity* x *Novelty*

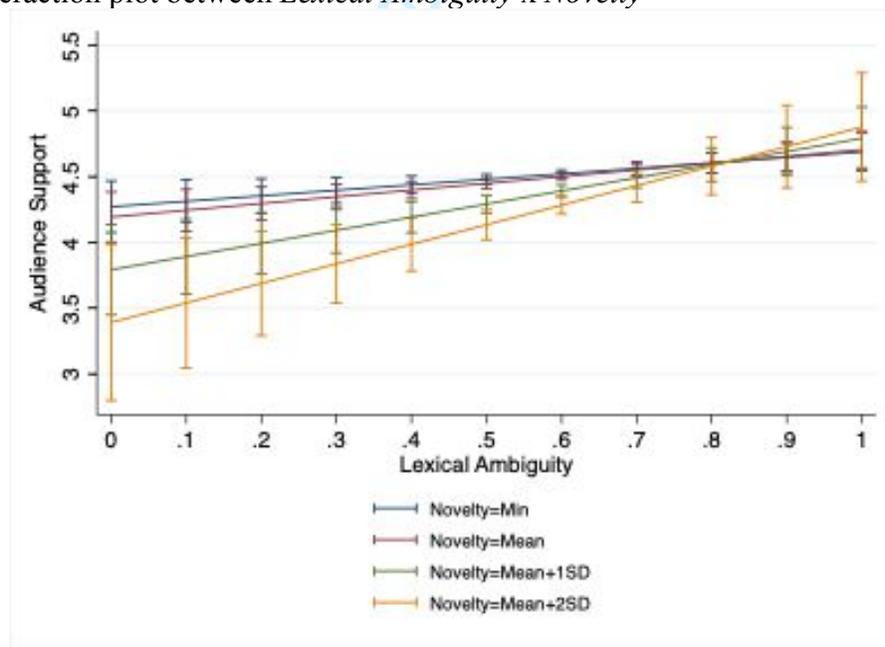
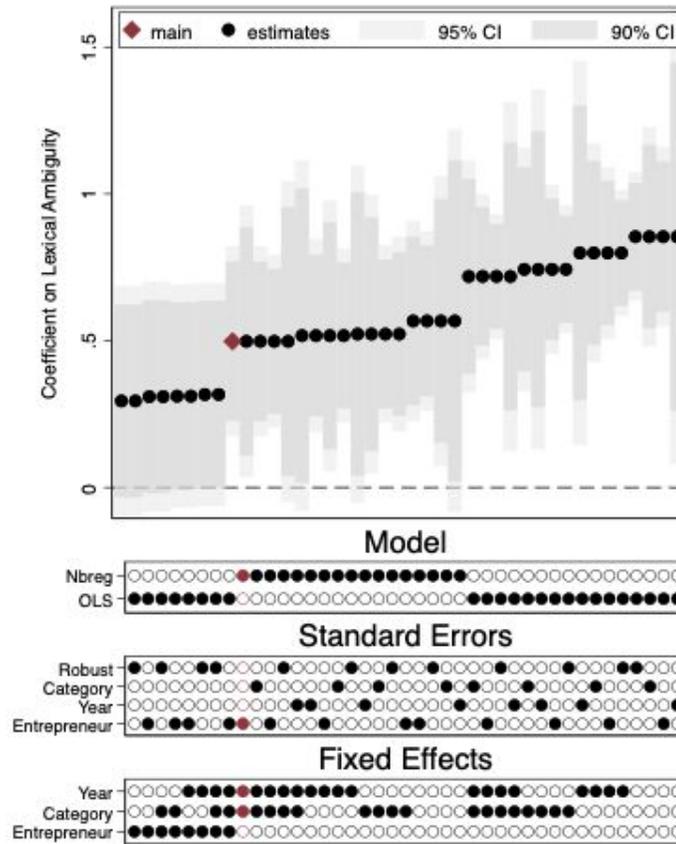


Figure 6. Specification Curve



Note: The specification curve shows the summary of the coefficient for *lexical ambiguity* using different specifications. The red dot shows the coefficient estimate for the current model specification used in Model 3 of Table 3. The OLS model estimates  $\ln(\text{audience support}+1)$  due to the skewed nature of the DV.

**Table 1. Descriptive Statistics**

	Mean	SD	Min	Max
Audience Support	151.46	237.68	0.00	3446
Lexical Ambiguity	.01	.08	-0.46	.27
Audience Interpretive Diversity	.66	.17	0.00	1.36
Novelty	.12	.63	0.00	54.2
Team Size	1.98	1.61	1.00	26
Follower Count	1020.14	3575.43	2.00	50740
Network Constraint	.15	.21	0.00	2
Label Count	2.92	1.87	0.00	21
Past Success	611.1	1686.11	0.00	30675
Featured Product	.75	.43	0.00	1
Word Popularity in Pitch	4598.87	1522.18	216.14	18137.62
Pitch Length	37.91	31.49	6.00	365
Pitch Tone	.46	.48	-0.98	.98
Pitch Uncertainty	0	.01	0.00	.15

N=21,085

**Table 2. Correlation**

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) Audience Support	1.00													
(2) Lexical Ambiguity	0.06	1.00												
(3) Audience Interpretive Diversity	0.04	-0.03	1.00											
(4) Novelty	0.06	-0.01	-0.01	1.00										
(5) Team Size	0.26	0.04	0.11	0.04	1.00									
(6) Follower Count	0.04	-0.07	0.11	-0.02	0.10	1.00								
(7) Network Constraint	-0.11	0.01	-0.59	0.03	-0.03	-0.17	1.00							
(8) Label Count	0.29	0.08	-0.03	0.39	0.20	-0.12	0.12	1.00						
(9) Past Success	0.17	-0.01	0.10	-0.00	0.30	0.36	-0.17	0.02	1.00					
(10) Featured Product	0.33	0.01	0.07	-0.01	0.15	0.08	-0.19	-0.07	0.09	1.00				
(11) Word Popularity in Pitch	0.07	0.38	-0.02	-0.03	0.06	-0.07	0.01	0.04	-0.01	0.06	1.00			
(12) Pitch Length	0.20	-0.02	0.00	0.06	0.20	-0.06	0.02	0.23	0.08	0.13	0.03	1.00		
(13) Pitch Tone	0.09	0.11	-0.02	0.00	0.06	-0.06	0.01	0.07	-0.02	0.05	0.17	0.01	1.00	
(14) Pitch Uncertainty	0.02	-0.03	-0.01	-0.00	0.00	-0.01	-0.00	0.00	-0.01	0.04	-0.03	0.09	-0.02	1.00

N=21,085

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**Table 3.** Main Results (Negative binomial model estimating DV=*Audience Support*)

Variables	Model 1			Model 2			Model 3			Model 4			Model 5			Model 6		
	$\beta$	S.E	p															
Team Size				0.105	(0.01)	0.000	0.109	(0.01)	0.000	0.109	(0.01)	0.000	0.109	(0.01)	0.000	0.109	(0.01)	0.000
Follower Count				0.000	(0.00)	0.581	0.000	(0.00)	0.407	0.000	(0.00)	0.393	0.000	(0.00)	0.406	0.000	(0.00)	0.392
Network Constraint				-0.747	(0.08)	0.000	-0.926	(0.07)	0.000	-0.932	(0.07)	0.000	-0.931	(0.07)	0.000	-0.938	(0.07)	0.000
Label Count				0.293	(0.01)	0.000	0.321	(0.02)	0.000	0.320	(0.02)	0.000	0.323	(0.02)	0.000	0.323	(0.02)	0.000
Past Success				0.000	(0.00)	0.000	0.000	(0.00)	0.000	0.000	(0.00)	0.000	0.000	(0.00)	0.000	0.000	(0.00)	0.000
Featured Product				2.339	(0.04)	0.000	2.338	(0.04)	0.000	2.339	(0.03)	0.000	2.338	(0.04)	0.000	2.339	(0.03)	0.000
Word Popularity in Pitch				0.000	(0.00)	0.696	0.000	(0.00)	0.964	-0.000	(0.00)	0.987	0.000	(0.00)	0.953	-0.000	(0.00)	0.998
Pitch Length				0.004	(0.00)	0.000	0.004	(0.00)	0.000	0.004	(0.00)	0.000	0.004	(0.00)	0.000	0.004	(0.00)	0.000
Pitch Tone				0.190	(0.02)	0.000	0.185	(0.02)	0.000	0.186	(0.02)	0.000	0.184	(0.02)	0.000	0.184	(0.02)	0.000
Pitch Uncertainty				0.385	(1.30)	0.767	0.472	(1.31)	0.718	0.595	(1.31)	0.649	0.572	(1.31)	0.662	0.694	(1.31)	0.597
Lexical Ambiguity	1.545	(0.19)	0.000	0.513	(0.17)	0.002	0.498	(0.17)	0.003	0.516	(0.16)	0.002	0.540	(0.17)	0.001	0.561	(0.17)	0.001
Audience Interpretive Diversity							-0.371	(0.09)	0.000	-0.373	(0.09)	0.000	-0.375	(0.09)	0.000	-0.378	(0.09)	0.000
Novelty							-0.176	(0.03)	0.000	-0.176	(0.03)	0.000	-0.197	(0.02)	0.000	-0.197	(0.02)	0.000
Lexical Ambiguity X Audience Interpretive Diversity										2.647	(0.88)	0.003				2.698	(0.89)	0.002
Lexical Ambiguity X Novelty													0.775	(0.38)	0.041	0.803	(0.36)	0.027
Constant	3.033	(0.19)	0.000	-0.845	(0.17)	0.000	-0.943	(0.17)	0.000	-0.948	(0.17)	0.000	-0.952	(0.17)	0.000	-0.958	(0.17)	0.000
Category FE		Included																
Year FE		Included																
Chi2		1406.03			8476.26			9712.68			10371.83			9669.07			10319.61	
Degrees of freedom		10			20			22			23			23			24	

N=21,085

*Note:* All models use negative binomial model with standard errors clustered at the entrepreneur level, to estimate the audience support a product receives in a week. All models include label and year-level fixed effects. The moderators in the interaction terms are centered for the ease of interpretation.

## Managerial Summary

Entrepreneurs often face the tough challenge of convincing audiences to support their novel ideas. While conventional wisdom suggests that their pitches should avoid ambiguity, our research shows that using ambiguous language can help entrepreneurs gain audience support. Additional analyses reveal that ambiguity is particularly beneficial when entrepreneurs are seeking to engage a diverse audience or presenting more novel ideas. Together, these findings highlight a communication strategy that can help entrepreneurs broaden their appeal and improve their chances of successfully bringing innovative ideas to market.

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