

**NOW IT MAKES MORE SENSE: HOW NARRATIVES CAN HELP ATYPICAL  
ACTORS INCREASE MARKET APPEAL**

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## ABSTRACT

Extensive research shows that atypical actors who defy established contextual standards and norms are subject to skepticism and face a higher risk of rejection. Indeed, atypical actors combine features, behaviors, or products in unconventional ways, thereby generating confusion and instilling doubts about their legitimacy. Nevertheless, atypicality is often viewed as a precursor to socio-cultural innovation and a strategy to expand the capacity to deliver valued goods and services. Contextualizing the conditions under which atypicality is celebrated or punished has been a significant theoretical challenge for organizational scholars interested in reconciling this tension. Thus far, scholars have focused primarily on audience-related factors or actors' characteristics (e.g., status and reputation). Here, we explore how atypical actors can leverage linguistic features of their narratives to counteract evaluative discounts by analyzing a unique collection of 78,758 narratives from crafters on Etsy, the largest digital marketplace for handmade items. Marrying processing fluency theory with linguistics literature and relying on a combination of topic modeling, automated textual analysis, and econometrics, we show that categorically atypical producers who make more use of abstraction, cohesive cues, and conventional topics in their narratives are more likely to overcome the evaluative discounts they would ordinarily experience.

Atypicality; evaluation; narratives; storytelling; language; linguistic; topic modeling;

## INTRODUCTION

Paul Cézanne is considered one of the great fathers of modern art, but he was fiercely ostracized for defying established norms of beauty in his time. A forerunner of Cubism, he broke away from Impressionism and developed a highly atypical aesthetic style that resisted categorization in contemporary aesthetic theories (Shiff, 1986), resulting in the systematic rejection of his work: the Salon, the official art exhibition of the Académie des Beaux-Arts in Paris, rejected Cézanne's submissions every single year from 1864 to 1869. This example is illustrative of a widely studied phenomenon in organizational and economic sociology: organizational audiences tend to misunderstand, avoid, or devalue social actors with atypical traits, attributes, offers, or behaviors in a given category who fail to conform to category-based expectations (Zuckerman, 1999, 2000; Hsu et al., 2009; Negro & Leung, 2013). Extensive empirical evidence shows that relevant audiences tend to give poorer evaluations to firms that pursue atypical strategies, markets tend to devalue organizations that fail to conform to category-based expectations, peers tend to penalize people who enact culturally deviant identities, and consumers tend to find hybrid products confusing (Hsu, 2006; Kovács & Hannan, 2015; Kovács & Johnson, 2014; Leung & Sharkey, 2014). Preferences for typical stimuli over atypical ones have also been documented with regard to colors, aesthetic qualities, and semantic categories (see Palmer et al., 2013 for a review).

These recurring empirical associations across cultural, social, and organizational domains are partly the result of social audiences' cognitive constraints about what constitutes an acceptable social object. But they are also emblematic of what French theorist Michel Foucault (1979) called the "normalizing society," referring to the homogenizing pressures exerted by modern institutions which use the statistical abstraction of "normal" as their core organizing principle. Foucault

emphasized that normalization serves a “double function” by creating a classification system that immediately rewards or penalizes those it classifies. In this classification system, “the penalty of the norm” functions, paradoxically, by defining a class of subjects as the same and then using normative criteria to establish individual differences. As a result, differences become “value-laden, a shortcoming rather than a viable alternative” (Espeland & Sauder, 2007, p. 73), and pressure builds to conform as closely as possible to the norm.

Luckily, despite abundant evidence regarding the penalties of atypicality, non-compliance can still be a risk worth taking, and conditions may even exist whereby the benefits of atypicality exceed those of conformity. In many contexts, atypicality persists not only because it serves as a salient identity marker (Smith, 2011; Pontikes, 2012; Trapido, 2015; Berger & Packard, 2018) but also because it sometimes results in disproportionate rewards. For example, Smith and Chae (2017) demonstrated that atypical organizations enjoy large rewards when they perform well. Atypical combinations of ideas lead to scientific breakthroughs (Schilling & Green, 2011; Uzzi et al., 2013; Ferguson & Carnabuci, 2017), while the activation of counter-stereotypical thinking propels the generation of creative ideas (e.g., songs are more likely to become commercial hits if they combine sonic elements in atypical ways) (Askin & Mauskapf, 2017; Berger & Packard, 2018; Wagner et al., 2019). These findings may seem unsurprising to scholars in entrepreneurship or strategy for whom nonconformity is often seen as a precursor to competitive advantage, innovation, or the creation of new categories altogether. Our goal, however, is different. We are not interested in demonstrating the performance upsides of atypicality. Instead, in the spirit of Smith (2011, p. 63), we aim to expose conditions under which “otherwise punishable nonconformity may be tolerated and even rewarded by relevant audiences”.

Recently, researchers have made significant strides in exposing such conditions. Findings from an increasing number of studies indicate that different audiences value different things; therefore, the acceptance of an atypical social object (e.g., idea, individual, organizational form, product/service offering, etc.) likely depends upon the particular theory of value embraced by audience members (Pontikes, 2012; Cattani & Ferriani, 2014). Another line of inquiry points out that unfavorable responses to atypicality may be attenuated when the categorical system underpinning audience evaluation is emergent or in flux (Rao et al., 2005; Ruef & Patterson, 2009; Wry & Lounsbury, 2013). Alternative accounts have focused on actors' visible signals of commitment or performance in shaping audiences' perceptions of atypicality, with penalties being replaced by enthusiasm when demonstrations of competence overcome audience skepticism (Smith, 2011; Zuckerman, 2017). Other studies have posited the role of identity features such as status (Phillips et al., 2013), reputation (Sgourev & Althuizen, 2014), and authenticity (Buhr et al., 2021; Hahl & Ha, 2020) in insulating against evaluative discounts faced by atypical actors. The finding that famous chefs have the freedom to erode established cuisine categories without losing audience favor (Rao et al., 2005) is illustrative of this line of scholarship.

These studies have identified several socio-cognitive factors shaping evaluative responses to atypicality, thereby unveiling the "social magic" that creates discontinuity out of continuity (Bourdieu, 1984, p. 117). Yet these explanations are limited in their ability to offer prescriptive advice to actors who do not enjoy reputational advantages or who must simply hope for demand characterized by heterogeneous evaluative orientations, exogenous conditions of categorical flux, or, more simply, benign audiences. We seek to address this limitation by drawing on the nascent stream of scholarship concerned with how actors can strategically mobilize cultural elements to shape audience members' responses to their offers ( Zhao et al., 2013; Giorgi and Weber, 2015;

Smith & Chae, 2016; Cattani et al., 2017; Vossen & Ihl, 2020) and propose that one overlooked source of variation is the linguistic composition of actors' narratives.

Narratives<sup>1</sup>, defined as “rationalizing accounts of ... identity” (Glynn & Navis, 2013, p. 1130) wherein intertwined sequences of events and characters are temporally ordered to make a point (Ewick & Silbey, 1995; Garud & Giuliani, 2013; Polletta & Gardner, 2015), have been shown to play a crucial role in aligning actions to audience interests, expectations and normative beliefs (Lockwood et al., 2019; Lounsbury & Glynn, 2001; Martens et al., 2007; Navis & Glynn, 2011). Moreover, in light of their ability to create patterns of cues that activate audiences' mental models and inform evaluation, narratives play a central role in shaping human cognition (Graesser et al., 1994). Accordingly, we suggest that atypical actors can strategically use narratives to provide their target audiences with the means for more easily understanding their atypical propositions' meaning and value. Marrying linguistics literature with processing fluency theory (Alter & Oppenheimer, 2009; Reber et al., 2004; Schwarz, 2004) we articulate and test three narrative features – i.e., abstraction, cohesion, and conventionality - that affect the subjective ease experienced while processing atypicality, thereby impacting evaluation. Each of these features reflects one of the three fundamental components of language (Bloom & Lahey, 1978): *content* - i.e., the meaning encoded in the language used, *structure* - i.e., the organization and relationship between linguistic elements, and *use* - i.e., the contextual embeddedness of the language used. Specifically, we contend that decisions about whether to use more or less abstract cognitive anchors, deploy appropriate cohesive cues to tie words and sentences together, and incorporate contextually conventional elements into one's narrative, directly result in experiences of processing fluency that affect how audience members make inference about and orient their actions toward atypicality. Empirically, we focus on the world of crafting, a context where stories

constitute a precious source of value and awareness (Mishler, 1992, 2006). Our dataset includes a unique collection of 78,758 narratives from crafters offering their handmade products on Etsy, the world’s largest digital marketplace for craft items. Using a combination of natural language processing tools and econometrics, we lend support to our contentions by showing that atypical producers who make more use of abstraction, cohesive cues and conventional topics in their narratives are more likely to overcome the evaluative discounts they would ordinarily experience.

Collectively, our findings contribute to the recent line of scholarship on the conditions under which atypical actors can overcome penalties related to a lack of categorical compliance (Smith & Chae, 2017; Younkin & Kashkooli, 2020), and specifically, the mechanisms whereby strategically deployed narratives can alleviate demand-side penalties for atypicality (Zhao et al., 2013; Smith & Chae, 2016). Moreover, by illuminating the interplay between an actor’s atypicality and specific narrative features, we contribute to research in cultural entrepreneurship (Lounsbury & Glynn, 2001; Glynn & Navis, 2013; Garud et al., 2014) and add micro linguistics foundations to prior language-informed perspectives on innovation and entrepreneurship that have primarily focused on broader rhetorical approaches such as discourse or storytelling (Martens et al., 2007). Finally, leveraging computational advancements in textual analysis, we offer an original methodological approach to uncover micro-mechanisms whereby individual narratives elicit particular responses among audiences, thereby contributing to increasing calls to “enrich understanding of the links between words and action outcomes” (Lockwood et al., 2019, p. 21; see also Giorgi et al., 2015).

## **THEORETICAL BACKGROUND**

The notion of (a)typicality occupies center stage in the rich scholarship concerned with how categorization processes influence social and economic outcomes primarily informed by the prototype theory pioneered by Eleanor Rosch and her colleagues (Rosch, 1975; Rosch, Mervis, et al., 1976; Mervis et al., 1976; Rosch, 1978; Mervis & Rosch, 1981). According to this theory, there are two related determinants of an object's typicality. First, the extent to which this object shares a property with other category members<sup>2</sup>. Second, the extent to which an object tends to span categories (i.e., combine properties of other related categories)<sup>3</sup> (Rosch & Mervis, 1975). Rosch and Mervis (1975) showed experimentally that both these variables—sharing features with other category members and sharing features with contrast categories—influence learning speed, categorization, and categorical expectations. Following Rosch and Mervis's pioneering insights, vast scholarship in psychology and consumer research has demonstrated a positive relationship between typicality and preference and the tendency to use more typical category members as referents in comparisons (Ward & Loken, 1988). Past research in this tradition has yielded evidence suggesting that relative to atypical instances, typical exemplars of a category are more likely to be named sooner in free recall of category members (Nedungadi & Hutchinson, 1985), learned more rapidly as category members (Meints et al., 1999), and classified more quickly and with fewer errors (Mervis & Rosch, 1981).

Organizational and social theorists interested in categories as “cognitive infrastructures” of markets have also found inspiration in Rosch and her collaborators' findings to advance the use of a categorical lens to conceptualize organizational identity. This approach understands sense-making as a classificatory process wherein relevant audiences, drawing on a shared set of criteria, encounter objects, identify their relevant traits, place them into categories, and use these classifications to derive expectations and inform their judgments. In a burgeoning literature,

scholars theorize the effects of categorical compliance (or degree of typicality as a member of a category) on evaluative outcomes such as preference, allocation of attention, or choice (Zuckerman, 1999; Zuckerman et al., 2003; Hannan, 2010). Across a variety of settings, this work has demonstrated that audiences respond better to producers and offerings<sup>4</sup> that are more similar to a category prototype concerning features combination (Durand & Paoletta, 2013), and penalize those that are less representative of that category - i.e., they are categorically atypical resulting in lower appeal (Hsu et al., 2009).

The main mechanism evoked to explain such penalties is that categorical atypicality generates confusion and uncertainty because it is difficult to educate relevant audiences about things that are unfamiliar to them (Smith, 2011). Categories operate as cognitive shortcuts to facilitate a shared understanding among actors and simplify processing and evaluative efforts by offering proxies for unobservable qualities, skills, and value (Zuckerman, 1999; Hannan et al., 2007). Because categorically atypical producers violate the assumptions of appropriateness associated with prototypical categorical membership (by, for instance, combining characteristics and features that crosscut categorical boundaries), they defy codified expectations about desirable and appropriate qualities (Zuckerman, 2000; Zuckerman et al., 2003; Hannan et al., 2019) and increase audiences' cognitive effort to make sense of them (Hannan et al., 2019)<sup>5</sup>. This argument finds considerable support in research on cognition, suggesting that atypicality is processed less easily, as more neural resources are required to perceive and classify atypical patterns (Winkielman et al., 2006). Moreover, since audiences rely on categorical membership to screen the actors who are capable of, and committed to, serving them (Phillips et al., 2013), by virtue of their ambiguous positioning within the system of categories atypical producers are often assumed

to be *dilettantes* unwilling (or incapable) to serve the audience in ways the audience values (Leung, 2014; Leung & Sharkey, 2014; Hahl & Ha, 2020).

These socio-cognitive dynamics are often intertwined and mutually influence each other (Kovács & Johnson, 2014), decreasing the appeal of categorically atypical producers to audience members. Overall, the conceptualized mechanisms in the existing literature suggest the following baseline hypothesis:

*H1: Categorically atypical producers have lower expected market appeal than typical ones.*

### **Receptiveness to atypicality: Influencing evaluation through words**

Notwithstanding the many downsides, atypicality may yield substantial benefits, most notably by increasing organizational visibility: atypical objects stand out more from the crowd and thus may garner attention more easily. Especially in contexts oriented towards novelty, this may be congruent with expectations that actors break from conventions. Thus, although atypical combinations carry a high risk of rejection, such risk can be compensated by disproportionate rewards resulting from highly unique products. For example, Hsu et al. (2012) suggested that feature films that combine genres in highly unconventional ways have a higher likelihood of exceptional success than films that do not. In the realm of science, Foster et al. (2015) found that biomedical articles that explore unusual connections among chemicals have a much harder time getting published but garner significantly more attention when they do. Atypical combinations can also help actors project distinctive identities (Navis & Glynn, 2011; Durand & Paoletta, 2013), which may be valued by customers who can fulfil their desire to gain status by purchasing distinctive products (Lynn & Harris, 1997), even if those products are distinctive in name only (Miller & Kahn, 2005).

These examples help explain why scholarly attention is shifting from documenting and illustrating the atypicality penalty to identifying factors that moderate its functioning. To this end, various lines of research have focused on audience-side enabling factors such as the existence of an audience predisposed to favor atypicality. Novelty-hungry venture capitalists may treat evidence of product atypicality as a proxy for innovation (Pontikes, 2012)<sup>6</sup>, just as “high-brow consumers may use their acceptance of atypical products to signal their education” (Kacperczyk & Younkin, 2017, p. 740) or critics may actively target atypical offerings to affirm their connoisseurship (Chong, 2013)<sup>7</sup>. Related studies have shown that settings populated by multiple audiences may be less averse to atypicality (Cattani et al., 2014; Goldberg et al., 2016). Diverse audiences may mitigate the potential illegitimacy penalty by rendering an unfavorable evaluation less salient, as offerings can be evaluated differently by audiences holding different world theories (Durand & Paoletta, 2013; Ertug et al., 2016; Cattani et al., 2017). It has also been noted that audiences are more open to atypical product offerings introduced by high-status actors as status can mitigate the uncertainty associated with such offerings (Phillips & Zuckerman, 2001). Evidence of success also may reduce evaluators’ reliance on typicality and provide producers with greater leeway for experimentation (Smith, 2011).

Research in this area has begun to shed light on how the atypicality penalty can be avoided; however, because it focuses primarily on factors over which producers have no or very limited control (i.e., the audience’s structure or orientation; exogenous conditions of categorical flux; status; etc.), we know much less about how producers can strategically position their offerings according to their interests and audience members’ current or future preferences (Cattani et al., 2017). To address this limitation, we draw on organizational scholarship concerned with how words operate to shape people’s inferences about the social worlds they inhabit (Lounsbury &

Glynn, 2001; Martens et al., 2007; Navis & Glynn, 2011; Sinha et al., 2020). But while the prevailing orientation within this body of work has been to theorize on the cultural dimensions of storytelling as a symbolic action device, we focus more on the linguistic appeal of narratives to audiences' cognition.

From a theoretical perspective, the insight that narratives can shape audience perceptions by influencing how the information under scrutiny is cognitively processed finds significant leverage in processing fluency theory (Alter & Oppenheimer, 2009; Reber et al., 2004; Schwarz, 2004). Processing fluency, defined as the feeling of ease or difficulty associated with the cognitive processing of a stimulus, is a ubiquitous experience in human cognition that has been shown to be a potent cue for evaluative judgments across a broad range of cognitive processes (Shah & Oppenheimer, 2007). Experimental research on processing fluency converges to remarkably uniform conclusions: processing fluency varies across evaluative targets, and high fluency is reliably associated with more positive evaluations. Feelings of fluency engender positivity increasing confidence (Reber & Schwarz, 1999), preference for the message and the messenger (Oppenheimer, 2006), experiences of aesthetic pleasure (Reber et al., 2004), and more liking in general (Oppenheimer, 2008; Petty et al., 2007; Reber et al., 1998).

While fluency experiences arise as a byproduct of a wide array of cognitive processes, including perception, memory, embodied cognition, our focus here is on linguistic fluency, i.e., the experience and effects of fluency extended to the domain of language processing. Research in psychology and communication has made considerable progress in identifying linguistic cues that induce fluency (or disfluency) and affect audiences' judgments (Alter & Oppenheimer, 2006; Shah & Oppenheimer, 2007). For instance, it has been shown that complex textual language hampers fluency making the reader skeptical about the content (Unkelbach, 2007) and less favorably

inclined toward the author (Oppenheimer, 2006). Similarly, words differ according to how easily they are processed. For example, ventures with names that are linguistically and phonetically easy to pronounce tend to receive more positive evaluations from both sophisticated and unsophisticated investors (Alter & Oppenheimer, 2006; Chan et al., 2018). Researchers have also used a processing fluency lens to link word choice and syntactic complexity in information disclosure with how investors form their evaluative judgments (Green & Jame, 2013; Rennekamp, 2012).

This body of work suggests that various linguistic elements can be strategically mobilized to produce feelings of processing ease, thereby informing audiences' judgments and improving their evaluation. Then, it stands to reason that atypical producers could leverage fluency-eliciting features of their narratives to compensate for the equivocality of cues associated with their atypical identity and thus elicit a more positive evaluation. We focus here on three such features that correspond to three fundamental dimensions of language: content, form, and use (Bloom & Lahey, 1978). As proposed by Bloom and Lahey (1978), who developed this framework in their pioneering work in the field of developmental psycholinguistics, all three components interact in shaping individuals' linguistic processing. *Content* conveys meanings about ideas, objects, actions, and feelings, as well as relationships between these elements, using single words or groups of words. *Form* refers to how language is structured and includes the linguistic conventions for organizing words to express elaborated ideas. The last component, *use*, reflects the way in which the context needs to be taken into account when choosing between different alternatives of words and structure. For each of these three dimensions, we derive one corresponding linguistic-based fluency enabler in the contest of atypicality processing: narrative abstraction, cohesion, and conventionality respectively. Narrative abstraction focuses on a story's content and its meanings,

and it can ease information processing by pointing out conceptual relationships between the seemingly unrelated and confusing components of atypical offerings (Rosch, Mervis, et al., 1976; Pan et al., 2018; Younkin & Kashkooli, 2020). Narrative cohesion refers to the syntactic structure that connects words and meanings, and it influences audiences' processing fluency by providing atypical offerings with a deeper sense of coherence (Navis & Glynn, 2011). Narrative conventionality instead is inherently tied to a story's contextual embeddedness, and it can lead to increased experience of fluency by infusing consistency between atypical offerings and their context (Schwarz, 2004). Below we discuss each of these mechanisms in detail.

### **Narratives as Linguistic Devices to Mitigate the Atypicality Discount: Abstraction, Cohesion, and Conventionality**

Findings from linguistics and cognition studies demonstrate that language abstraction plays an important role in information processing tasks (Rosch, 1975; Rosch, Mervis, et al., 1976). The basic principle is that thoughts and communication fall on a concreteness-abstraction continuum that identifies different hierarchically organized conceptual levels at which words evoke meanings (Hayakawa, 1949; Rosch, 1975; Mervis & Rosch, 1981). While concrete language refers to descriptive words that provide specific information and contextual nuance (Hansen & Wänke, 2010), abstract words refer to general, high-order decontextualized concepts (Brysbaert et al., 2014). As noted by Ohlsson and Lehtinen (1997), one of the main cognitive functions of abstraction is to facilitate the assembly process of different meanings and concepts into larger structures. That is, abstraction is a powerful mechanism to reduce the complexity of this combinatorial task and facilitate the processing effort, because it allows individuals to elaborate more easily an associative architecture between the various elements considered (Mkrtychian et al., 2019).

To the point, several studies suggest that when objects or situations present cues that are not expected to be found together, the inability to reconcile characteristic features with a known category can be resolved by adopting a more abstract level of categorization (Kang & Bodenhausen, 2015). Younkin and Kashkooli (2020) offered strong empirical evidence to corroborate this idea by demonstrating that when customers hear unconventional songs that combine extremely distant genres (e.g., folk and rap), they are more likely to resolve the ambiguity surrounding classification by using more abstract, superordinate categories such as *sound* or *music*. Findings in the marketing literature on lifestyle branding also show that abstraction facilitates challenging concepts' assembling processes. Indeed, brands that are marketed based on more abstract "lifestyle" associations (e.g., Ralph Lauren) have historically succeeded in introducing potentially confusing offerings that span many seemingly disparate categories (e.g., table linens, sunglasses, paint) (Batra et al., 2010). When companies shift the focus of their advertising from concrete product features to more abstract benefits, they divert customers' attention to more general attributes (Chernev et al., 2011) and enable people to "broaden their horizons" (Burgoon et al., 2013, p. 505), rendering atypical combinations of offerings easier to grasp and to relate to (Hayakawa, 1949; Martin et al., 1979). In a similar vein, [Shih \(2021\)](#) suggests that increasing the level of abstraction is a way to push forward the innovative frontier by making difficult-to-understand technologies more easily accessible to other innovators.

As we noted at the outset, producers with categorically atypical offerings are devalued or ignored because they generate confusion by combining elements that conflict with each other. We argue that narrative abstraction can mitigate this confusion by making more evident the relational structure between the features of these components, which, in turn, increases the feelings of linguistic fluency and leads to a more positive evaluation of atypicality. To further illustrate this

point, consider a “typical” case of atypicality: an actor (let us call her Leah) trying to broaden her identity by taking on multiple and unrelated professional roles that make her atypical in all those domains (Zuckerman et al., 2003; Leung, 2014). Now consider the following two sentences with different levels of abstraction:

Leah is an extraordinary *painter* and a talented *musician*.

Leah is an extraordinary *artist*.

The nouns *painter* and *musician* evoke a network of attributes and meanings associated with categories at the basic level of abstraction (Rosch, 1975, 1978), while *artist* reflects a superordinate-level (i.e., more abstract) category. As noted earlier, a lower language abstraction level implies more specificity in the cues. The nouns *painter* and *musician* indeed carry a set of distinctive features that situate Leah within specific groups of artists who express themselves through painting and music, implicitly forming detailed expectations regarding attributes such as artistic movement (Cubism, Dadaism, Surrealism), musical style (classical, jazz, soul), techniques (oil, watercolor, acrylic), musical instruments (piano, guitar, drums) and tools (paintbrush, canvas, easel). To fully convey the value of an atypical identity, a narrative leveraging concrete language must therefore include multiple attributes. An elaborate strategy is necessary to hold the different pieces together (Caza et al. 2018). This combination, in other words, is unlikely to make sense to the audience due to the difficulty of commingling multiple specific elements and locating them within a known, common overarching theme.

On the contrary, when moving up the abstraction ladder, the generalizability of the attributes evoked by language increases (Rosch, Mervis, et al., 1976), thereby minimizing differences and emphasizing linkages between roles, in some cases making them more relevant (Wry & Lounsbury, 2013; Younkin & Kashkooli, 2020). Going back to our example, the word

*artist* leaves out the specific features associated with the words *painter* and *musician* and retains only those attributes shared across a multitude of creative people (painters and musicians, but also writers or sculptors). Hence, the more abstract word *artist* evokes general features and broader meanings such as creativity, self-expression, and perseverance that can help people draw on a more encompassing category in evaluating Leah's atypicality. Thus, the more abstract category of artists likely results in an ease of processing and subsequent attenuation of confusion-related penalties.

In summary, to the extent that people draw on their metacognitive experiences in making a wide variety of judgments (Schwarz, 2004; Schwarz & Clore, 2007; Song & Schwarz, 2008) linguistic variables that facilitate fluent processing increase the evaluative target's appeal. For this reason, we argue that by evoking more encompassing meanings, abstract narratives may be useful in inviting an inclusive classificatory lens that yields more opportunities to increase audiences' understanding of puzzling categorical combinations, thereby moderating the atypicality discount<sup>8</sup>. In other words, these arguments suggest that the aversion to atypicality driving audience members' negative responses may attenuate at a high level of narrative abstraction.

*H2: The categorical atypicality penalty decreases as the level of abstraction of a producer's narrative increases.*

In the simplest terms, cohesion refers to the presence (or absence) of explicit linguistic cues that enhance the recognition of conceptual continuity, organic relationship, and logical flow between the elements of a text (Crossley et al., 2019; Graesser et al., 2004; Halliday & Matthiessen, 2013). These *cohesive* elements - which include conjunctions, connectives, overlapping words, and synonyms among others - are structural language elements that connect different segments and inform the reader of the relations between these parts. Cohesion directly affects the cognitive

processing of a narrative, as it enhances the ability of the reader to make connections between its parts and successfully form a coherent mental representation of the elements presented (Loxterman et al., 1994; McNamara et al., 1996; McNamara & Kintsch, 1996). To put it in other words, cohesion is a linguistic property of a text (Graesser et al., 2004)(Graesser et al., 2004), whose cognitive correlate is coherence (Moe, 1979).

That cohesive cues support the process of inference generation and facilitate narrative comprehension creating a coherent storyline (Crossley et al., 2019; Graesser et al., 2004), suggests that cohesion may play an important role in increasing the experience of processing fluency when audience try to make sense of otherwise confusing categorically atypical offerings. This appears consistent with prior research unraveling the link between coherence and fluency. For instance, Topolinski and Strack (2009) show experimentally that coherent words triads tend to be processed more easily and fluently than non-coherent ones. In addition to increasing processing ease, coherence is also a prominent factor in favoring positive evaluation. Research in entrepreneurship, for example, suggests that resource-seekers who project non-conventional identities are more likely to appeal to their audience when their narratives coherently combine different identity elements together (Navis & Glynn, 2011).

Thus, we suggest that when atypical producers use explicit cohesive elements that cue the audience on how to form a coherent representation of their narrative, audiences' perception of fluency increases, thereby eliciting more benevolent evaluations of the producers and their atypical offerings.

*H3: The categorical atypicality penalty decreases as the cohesion of a producer's narrative increases.*

The meaning of a narrative is not only comprised of the words, phrases, and relative structures but rather develops through an interactive process between the audience and the text. In this interaction, audiences extensively rely upon existing knowledge, orientations, and experiences to draw inferences and form mental maps to interpret the situations referred to in the narrative (Bruner, 1991). Accordingly, an intuitively appealing strategy for activating relevant background knowledge is to encourage audiences to make linkages between the socio-cultural context in which they are crafting their stories and the narrative itself. This form of anchoring may involve deploying narrative elements that draw on established market categories to supply a reservoir of conventions<sup>8</sup>.

When a narrative features elements that evoke conventional codes (e.g., signs, words cues, etc.), it emphasizes the consistency between “a linguistic regularity, a situation of use, and a population that has implicitly agreed to conform to that regularity in that situation” (Nunberg, Sag, & Wasow, 1994, p. 492). Via the basic mechanism of priming, in which a presentation of one element can preactivate a related element, this consistency breeds coactivation, and thus fluency (Winkielman et al., 2012), which makes it easier for audiences to relate to an object they might otherwise dismiss. In other words, supplying audiences with more contextual cues encoded in conventionalized patterns of discourse and actions eases the interpretation of particular components of the narrative and their relationship, making a story (and its teller) more appealing (Alter & Oppenheimer, 2009; Song & Schwarz, 2009). For instance, turns of phrases that are conventional in other contexts can facilitate the processing of a substantively novel claim, making the new claim feel truthful (Schwarz et al., 2021). Hence, claims composed of phrases that conventionally co-occur in the corpus of language are more likely to be believed (Zhang & Schwarz, 2020). Similarly, adhering to institutional conventions in their identity claims may help

entrepreneurs "identify with other actors, values, or symbols that are themselves legitimate" (Ashforth & Gibbs, 1990, p. 181), thereby reducing the processing effort and enhancing the credibility of the entrepreneurial endeavor.

It follows from these arguments that by mobilizing conventional narratives, atypical producers may help their audiences (re)contextualize their ambiguous offerings using more contextually embedded references, thereby alleviating the puzzlement atypicality is likely to spawn. In other words, narratives with conventional elements can facilitate the cognitive processing of atypicality by helping audiences see more clearly how the elements of categorically atypical offerings relate to established categories, conventions, and meanings. In fact, incorporating conventional elements also signal knowledge of social practices and norms, thereby fulfilling expectations of legitimacy usually defied by atypical producers (Navis & Glynn, 2011; Durand & Kremp, 2016)<sup>9</sup>. Consistent with this idea, recent studies have shown that managers of atypical organizations may prepare for legitimacy threats by using naming conventions that signal conformity to existing market categories (Smith & Chae, 2016). Similarly, Zhao et al. (2013) suggested that strategic names imbued with known reputations counter liabilities associated with category-spanning by channeling attention and credibility. These examples capture the gist of our moderating hypothesis, implying that infusing an atypical offering's narrative with conventional elements can help audiences anchor their evaluations on prevailing cultural references and contextual norms, thereby heightening their processing fluency and mitigating the atypicality penalty. Accordingly, we expect:

*H4: The categorical atypicality penalty decreases as the contextual conventionality of a producer's narrative increases.*

## EMPIRICAL SETTING: ETSY AND THE WORLD OF CRAFTING

Our empirical setting is Etsy, a digital platform that enables creative small businesses to establish virtual shops to sell handmade items and craft supplies. With more than 47 million active buyers (Etsy & GfK, 2019), Etsy is the largest digital marketplace in the craft industry-valued at around \$43.9 billion in the United States in 2017 (Dobush, 2017). This setting affords several theoretical and empirical advantages. First, like most online markets, Etsy displays all products offered by crafters on their home pages, where offerings are grouped into categories to help audience members more easily navigate the different products. For this reason, categorically atypical producers become immediately evident. Moreover, each product page displays all the items previously reviewed by other customers and a sample of the other products currently offered by the crafters (see Figure A1 in the online appendix for an example of the user experience when browsing a product page). This means that even when customers scrutinize one particular product, the website's structure makes it apparent if the producer occupies an atypical position in the categorical space. Second, and more importantly, stories are a significant source of value in this craftsmanship space. Beyond helping individuals create their identities as crafters and artists (Mishler, 1992, 2006), stories play a crucial role in building customers' appreciation of crafters' work, connecting products to artisans' biographies, and infusing objects with value, both symbolic and material. In addition, because digital platforms offer the unprecedented capability to aggregate and quickly render a massive number of offerings comparable, stories may help crafters stand out in an environment characterized by intense competition for attention. Consequently, Etsy has enabled and strongly encouraged communication among crafters and customers ever since its inception. For instance, a standard recommendation that Etsy provides in the *Seller Handbook* to crafters when setting up their virtual shops is that they should take the time to craft stories that are

not only transparent and true but also detailed and personal (e.g., sharing key backstory details, including the initial creative spark, notable milestones) to create a connection (i.e., resonance) with customers. Etsy also explicitly emphasizes the importance of a convincing narrative as a source of competitive advantage, suggesting that stories give a shop added value and credibility and help attract new buyers and create a loyal following among current ones. In Figure 1, we present two examples of crafters' narratives with their distinctive plot-characters-story characterization (Ewick & Silbey, 1995).

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Insert Figure 1 about here  
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## **DATA AND EMPIRICAL STRATEGIES**

We employed web scraping algorithms on Etsy's website to gather data about 192,305 crafters operating in the digital marketplace in March 2019. We visited their profile pages to collect each crafter's socio-demographic characteristics, cumulative performance statistics, personal story, and self-determined list of product categories. We eliminated crafters from the sample who did not have narratives on their profile pages or whose narratives were written in a language other than English. In addition, because the performance of conventional topic models degrades significantly when applied to short texts due to infrequent word co-occurrence patterns in each document (Cheng et al., 2014; Lin et al., 2014), we excluded all documents with less than 30 words from the analysis. All of the raw textual data were preprocessed following recommendations in the literature (Feldman & Sanger, 2007; Hickman et al., 2020)<sup>10</sup>. Our final sample comprises validated narratives from 78,758 crafters (one narrative per crafter) operating in 146 product categories on the platform.<sup>11</sup> The total size of the corpus is 6,072,413 words, and the average narrative length is 201 words. We took several steps to probe the extent to which these narratives are factored into

buyers' decisions, including the systematic analysis of Etsy's online forum, a series of interviews, and the statistical comparison of crafters with and without narratives to populate their respective 'About' sections. All these analyses can be found in the Online Appendix A2.

## Measures

***Dependent variable.*** To test our hypotheses, we followed previous studies and relied on sales as an indicator of market appeal (e.g., [Kim & Jensen, 2011](#); [Zhao et al., 2013](#)). In digital contexts, the number of items sold directly indicates *market appeal*; thus, the dependent variable in this study is the number of products sold by crafters. In supplementary analyses used as robustness checks, we employed an alternative approach that measures market appeal as the number of reviews received by each crafter (controlling for their quality).

### ***Independent variables.***

Prior research has shown that a producer's *categorical atypicality* can be gleaned from how coherently her products are positioned within the offering space ([Hsu et al., 2009](#); [Goldberg et al., 2016](#); [Gouvard et al., 2021](#)). The rationale behind this approach is that if a producer's offering crosscuts categorical boundaries, e.g., a restaurant featuring a wide variety of dishes inspired by a combination of various cuisines or an artist whose tracks defy genres, she is unlikely to conform to each category's typical attributes (Hsu et al., 2009), especially if the offering mix elements that characterize categories that lie far apart in the feature space ([Kovács & Hannan, 2015](#); [Goldberg et al., 2016](#)). Consider three artisans: one sells leather shoes, the second sells leather shoes and leather jewelry, and the third sells leather shoes and handmade soaps. Based on the consolidated assumption that prototypical category membership in each group is mutually exclusive ([Hannan,](#)

2010), the first artisan can be considered most typical among the three because the other two artisans generate confusion about their categorical identity. However, the third artisan's offering is more atypical than the second because leather shoes and handmade soaps are conceptually more distant as they share very few attributes and target unrelated customers, unlike leather shoes and leather jewelry. Our operationalization relies on the set of product categories available to crafters to market their offerings on the platform, and we used a consolidated measure available in the literature to measure categorical atypicality (Kovács & Hannan, 2015; Goldberg et al., 2016):

$$\text{Atypicality} = 1 - \left( \frac{1}{1 + \frac{D(t)}{(|l_t| - 1)}} \right), \text{ if } |l_t| > 1$$

where  $|l_c|$  denotes the number of the product categories an offering belongs to and  $D(t)$  represents the sum of the pairwise cognitive distance between those categories, calculated using an adjusted Jaccard similarity index given by the formula  $D(t) = \sum_{i \in l_t} \sum_{j \in l_t} l(i, t)l(j, t) \left( -\frac{\ln(J(i, j))}{\gamma} \right)$  (Goldberg et al., 2016). It is important to acknowledge that, on Etsy, like many online digital markets, the system of products categories tends to be extremely specific to help customers find products. For instance, there are four different categories to list a shoe product: *Boys' shoes*, *Girls' shoes*, *Men's shoes*, *Women's shoes*. Consequently, also typical crafters are more likely to increase the number of product categories served to boost visibility and sales. To illustrate, more than 80% of the crafters whose products are offered within the *Women's shoes* category place their offerings also in the other three shoes-related categories. For this reason, since our measure consider the number of categories spanned as a starting point, the average level of categorical atypicality in this setting is artificially high (mean = 0.30, standard deviation = 0.33). To account for this specific contextual characteristic, in line with previous work (e.g., Schilling & Green, 2011; Uzzi et al., 2013), we created a binary variable to classify crafters at the 90<sup>th</sup> percentile or above (i.e., > 1.5

standard deviations above the mean level of atypicality) as atypical. In sum, our measure of categorical atypicality combines three elements: a producer's offering position within the categorical space - i.e., the number of product categories spanned; information about the conceptual distances among these categories - i.e., the extent to which the product categories spanned tend to co-occur with one another; and a field-level comparison with other producers' behavior - i.e. how common it is for other producers in this setting to market their offerings in multiple, conceptually distant categories<sup>12</sup>.

The study of narratives in cultural dynamics has benefited tremendously from the increased availability of textual data and new computational tools for investigating them (DiMaggio et al., 2013; Hannigan et al., 2019; Aceves & Evans, 2022). To measure the *level of abstraction* in crafters' narratives, we used a modified version of the Brysbaert Concreteness Index (BCI), which relies on abstraction norms for 40,000 commonly used word lemmas in contemporary English (Brysbaert et al., 2014). To build the dataset, the authors asked participants to rate, based on their personal experiences, the concreteness of each word, defined as the extent to which the word refers to a meaning that exists in reality, can be contextualized, and can be experienced directly through one's senses (i.e., by smelling, tasting, touching, hearing, or seeing) and actions. In contrast, abstract words are more challenging to visualize and cannot be experienced physically (e.g., imagination, ethics, and resentment). To derive concreteness norms, the authors asked 4,000 participants to rate each word's concreteness on a scale ranging from 1 (abstract or language-based) to 5 (concrete or experience-based).<sup>13</sup> One of the BCI's main limitations is that it neglects that concreteness and abstractness may be two qualitatively different characteristics, with abstract and concrete word meanings represented and organized in different ways (Crutch & Warrington, 2005; Duñabeitia et al., 2009). This issue is directly acknowledged by the authors of the index.

They claim that “the distribution of concreteness ratings is bimodal, with separate peaks for concrete and abstract words, whereas ratings on a single, quantitative dimension usually are unimodal, with the majority of observations in the middle” (Brysbaert et al., 2014, p. 908). To address this shortcoming, we used the BCI as a starting point to clearly distinguish between concrete and abstract words and operationalize the level of a narrative’s abstraction as the net proportion of abstract words per text.<sup>14</sup>

We, therefore, categorized words with ratings falling 1 SD below the mean as abstract and all other words as concrete. For example, based on this classification, the words “painter,” “canvas,” “woodcraftsman,” and “jewel” were classified as concrete, while the words “creative”, “perseverance”, “meaning” were classified as abstract. As a result, the distribution of the two resulting groups was effectively unimodal. Based on these two distinct categories, we then used the Linguistic Inquiry and Word Count (LIWC) text analysis application (Pennebaker et al., 2001; Boyd & Pennebaker, 2015; Harrison & Dossinger, 2017) to calculate the percentage of abstract and concrete words in each narrative<sup>15</sup>. Using this feature, we computed a concreteness score and an abstraction score for each narrative and operationalized the level of a narrative’s abstraction as the net proportion of abstract words per text. Accordingly, we subtracted the concrete score from the abstract score to create a continuous measure of narrative abstraction. More formally, for each narrative, we computed the following measures:

$$\text{Conc. Score}_n = \frac{\text{Number of concrete words}}{\text{Total number of words}} \qquad \text{Abs. score}_n = \frac{\text{Number of abstract words}}{\text{Total number of words}}$$

$$\text{Narrative abstraction}_n = \text{Abs. Score}_n - \text{Conc. Score}_n$$

A positive value of narrative abstraction reflects the author’s tendency to invoke abstract features and concepts in the story.<sup>16</sup> Table 1 presents four examples of narratives at different levels of abstraction, along with their respective abstraction and concreteness scores.

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Insert Table 1 about here  
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Previous research identifies three forms of cohesion that differ in the way in which they establish connections amongst text elements, namely lexical, causal, and semantic (Allen et al., 2016). Lexical cohesion results from chains of overlapping words throughout a narrative that contributes to increasing the continuity of the story. Causal cohesion is signaled by function words such as connectives, conjunctions, and pronouns that act as explicit connections among the various narrative elements and assist in the logical flow of the content. Finally, semantic cohesion arises from relationships among concepts established without relying on lexical reiteration - for instance using synonyms or semantically related words. Here, to reflect its complex and multidimensional nature, we operationalize cohesion as a composite measure that incorporates all three components. In the robustness checks, we present a set of additional analyses where we report the results using the disaggregated components.

To build our composite measure of cohesion we relied on LIWC and the Tool for the Automatic Assessment of Cohesion - TAACO (version 2.0 - Crossley et al., 2019). TAACO is a natural language processing tool that measures different linguistic features related to text cohesion. First, we analyzed the *lexical* form of cohesion built by linking text segments together by the repetition of words and calculated how many adjacent sentences in a narrative include any overlapping items. More specifically, a cohesion score is computed as the total number of sentences that include words that occur in the following sentence divided by the number of sentences considered. In addition to our lexical-based dimension of narrative cohesion, we also constructed a variable that focuses on specific function words, i.e., pronouns, connectives, and conjunctions, that signal explicit causal relationships between segments of the narrative. The

*causal* form of narrative cohesion was thus captured using LIWC’s algorithm for Analytical Thinking (Pennebaker et al. 22), a factor-analytically derived measure based on several categories of function words that suggest cohesive, logical, and causal writing style (Boyd & Pennebaker, 2015; Jordan et al., 2019; Pennebaker et al., 2014). Finally, we also incorporated *semantic* cohesion by looking at the semantic relationships found in the narratives. To this end, we again utilized TAACO v 2.0 (Crosley et al., 2019) to capture the underlying semantic similarity between adjacent text sentences through a Latent Semantic Analysis model (Landauer et al., 1998). We obtain our composite measure of cohesion by averaging the three components. Table 2 presents four examples of narrative at different levels of cohesion.

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Insert Table 2 about here  
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Finally, we used topic modeling to analyze the conventionality of Etsy’s crafters’ narratives<sup>17</sup>. We used latent Dirichlet allocation (LDA) topic models (Blei et al., 2003) to analyze the full set of documents collected in order to discover the hidden thematic structure behind the crafters’ stories. The basic assumptions of these “generative models for documents” (Steyvers & Griffiths, 2007, p. 424) are that each document is a random combination of latent topics, each of which represents a probability distribution of words that define the meaning of the topic (Mohr & Bogdanov, 2013; Hannigan et al., 2019). Since the analysis of language in a document is a valuable way to unravel its cognitive content (Whorf, 1956; Duriau et al., 2007), identifying latent topics and their distribution over the entire set of narratives offers valuable insights into the different dimensions along which sellers craft their stories in this setting. We computed a variety of topic models, and we graphed the average coherence score of each model given different number of

topics. We used this evidence as guidance to identify a plateau and study several models more closely from an interpretive perspective (DiMaggio et al., 2013; Hannigan et al., 2019), leading to a solution with 90 topics that balances trade-offs between topics variation, statistical validation, and ease of interpretation.<sup>18</sup> Table A3 in the Online Appendix lists all 90 topics.

We conceptualized *narrative conventionality* as a systematic bias towards topics (and thus features) that are also central in other crafters' narratives. We utilized the structure of the listing categories to define narrative conventionality. The 146 product categories identify the context: topics highly relevant in a product category indicate conventional features. LDA yields two important outputs: the distribution of topics in each document and the weight of topics in the corpus of data. First, we calculated the weight of topics in each of the 146 product categories to identify the most shared and diffused topics (see Berger & Packard, 2018 for a similar application). Then, we used the actual distribution of topics in each narrative to measure narrative conventionality. Specifically, we adopted a measure developed by Durand and Kremp (2016) to capture the extent to which crafters overemphasized topics representative of the product category and the entire marketplace. To operationalize the variable, we regressed the proportion of each crafter's narrative devoted to a particular topic against the proportion of all other artisans' narratives dedicated to that topic within the same product category using the following equation:

$$T_{in} = \hat{\alpha} \cdot \bar{T}_i + \hat{b}_i + u_{ic} \quad \text{with } E(u_{ic}) = 0$$

where  $T_{in}$  represents the weight of topic  $i$  for narrative  $n$  and  $\bar{T}_i$  is the average weight of topic  $i$  for all other narratives in the category. We used the slope of the regression line as the base for our measure of narrative conventionality. If a relatively large share of a crafter's narrative overlapped with topics in other crafters' stories, the slope of this regression was greater than 1, indicating an

above-average presence of conventional topics. Conversely, when a narrative primarily covered topics that did not appear in other crafters' narratives, the slope was less than 1.

Figure 2 provides a graphical illustration of the process. We selected three crafters who were selling their products in the Painting category, whose narratives reflect three different levels of conventionality based on topic distribution. All the topic weights are scaled so that the largest value is equal to 1. The first narrative in Panel A is extremely unconventional: it has a strong religious orientation and revolves around Topic 53 (which accounts for 61% of the entire narrative); however, Topic 53 is scarcely diffused among the narratives of other sellers in this product category. The second narrative in Panel B incorporates some conventional features, as indicated by the fact that Topic 36 (i.e., the most diffused topic in the painting category) comprises 12% of the narrative. However, this story is only moderately conventional because two other topics include a larger share of this narrative (Topic 84: 30%; Topic 89: 23%). The third narrative in Panel C shows a high level of conventionality: the majority of the narrative (51%) is devoted to Topic 36, and other highly emphasized topics (Topic 66: 16%; Topic 58: 11%) are among the most diffused among narratives of crafters targeting the same category.

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Insert Figure 2 about here  
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***Control variables.*** We included several control variables at the crafter, market, and narrative levels to rule out possible alternative hypotheses. Several characteristics may influence crafters' market performance. Academic research corroborates the existence of significant evaluative disparities based on gender and race. For instance, the gender imbalance has been widely documented in entrepreneurial contexts (Brooks et al., 2014; Clarke et al., 2019), particularly in online art marketplaces.<sup>19</sup> Similarly, evaluative discounts are often applied against

ethnic and racial minorities. This bias may also affect a well-crafted story (Polletta & Gardner, 2015). For example, Higgins and Brush (2006) showed that poor women who cast their personal stories in heroic terms are more likely to be disbelieved. Accordingly, we controlled for both the *gender* and *nationality* of each crafter. Another potential factor affecting crafters' market performance is their unobservable capabilities and skills (Zuckerman, 2017). In this respect, crafters with better reputations and more experience in the marketplace may systematically outperform newcomers. For this reason, we controlled for *average review score* (a proxy for the crafter's quality and reputation) and *years of experience* on the platform. The likelihood of a crafter being noticed and appreciated could also depend on market-specific factors. Certain product categories are more popular in online marketplaces than others and have larger customer bases. For instance, Craft & Supplies, Handmade Items, and Jewelry are the top-selling categories on Etsy, as they embody the essence of the marketplace, and sellers operating in these categories report the highest sales.<sup>20</sup> However, top categories naturally lead to a high concentration in certain market niches, making it more difficult for crafters in that space to stand out and attract market attention. We, therefore, control for *product category* and *level of competition*. In addition, to ensure that our results capture the effects of categorical atypicality and not simply of category-spanning, we also controlled for producers who span multiple categories. For this reason, we included a binary variable (*category spanning*) that accounts for crafters whose offerings target multiple product categories (without considering the conceptual distance between them).

Finally, our literature review surfaced other narrative features that may hinder or facilitate narratives' success in eliciting positive responses. Specifically, ample evidence shows that differences in text length and in the complexity of its vocabulary and syntax may prompt different reactions via an attention mechanism. In addition, several studies suggest that the extent to which

a narrative focuses on the present as opposed to past or future events may influence audience members' responses. Consequently, we introduced three additional control variables, *narrative length*, *narrative complexity*, and *narrative temporal orientation*. Table 3 summarizes all of the control variables used in the study and their operationalization.

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Insert Table 3 about here

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### **Model Specification**

We adopted negative binomial regression because the dependent variable, positive audience reaction, is a non-negative count variable with over dispersion<sup>21</sup> (Hausman et al., 1984). We included robust estimators to control for mild violations of underlying assumptions (Cameron & Trivedi, 1998). Following a hierarchical introduction of our independent variables (Cohen et al., 2015), we created a baseline model including control variables. In Model 1, we introduced *categorical atypicality* to test H1. Models 2, 3, and 4 introduced interactions between *categorical atypicality* and, respectively, *narrative abstraction*, *narrative cohesion*, and *narrative conventionality* to test H2, H3, and H4.

## **FINDINGS**

Descriptive statistics of the variables and their correlations are shown in Tables 4 and 5, respectively. We calculated means and SDs using untransformed measures for ease of interpretation. All correlations in the data are reasonably low. We further controlled for multicollinearity using Variance Inflation Factors (VIFs). Results show a mean VIF of 3.68, well below the traditional threshold of 5 (Cohen et al., 2015). Thus, multicollinearity is unlikely to influence our analyses.

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Insert Tables 4 and 5 about here  
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Table 6 presents the results of the negative binomial regression models. Product categories and nationality dummies are not shown in the table to save space. The baseline model shows significant relationships between several control variables and market appeal. Consistent with conventional wisdom, we find that better ( $\beta = 0.605, p < 0.001$ ) and more experienced crafters ( $\beta = 0.222, p < 0.001$ ) are more likely to appeal to the audience. Holding other variables constant, for every additional year of experience and every additional star in the rating, a crafter's predicted number of products sold increases by 83.0% and 24.9%, respectively. The competition coefficient is negative and significant ( $\beta = -0.587, p < 0.001$ ), indicating that attracting market attention is more difficult in crowded niches. We also observe that although 87% of Etsy sellers self-identify as women (Etsy & GfK, 2019), female crafters tend to be slightly penalized compared to their male counterparts ( $\beta = -0.032, p < 0.05$ ). Finally, empirical evidence shows that longer ( $\beta = 0.030, p < 0.05$ ) and less complex ( $\beta = 0.001, p < 0.05$ ) narratives are more likely to attract attention and increase market appeal, whereas narratives with a greater focus on past events ( $\beta = -0.128, p < 0.05$ ) are less likely to have market appeal.

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Insert Table 6 about here  
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Model 1 introduces *categorical atypicality*. The negative coefficient ( $\beta = -0.203, p < 0.001$ ), indicates that, in our context, atypical producers are more likely to be discounted. This result supports our baseline hypothesis and confirms the negative impact of atypicality on audience appeal, as suggested in prior literature. *Ceteris paribus*, the illegitimacy discount that crafters with atypical positioning in the offering space experience corresponds to 1202 fewer sales, a considerable drop. This finding stands in contrast to recent evidence suggesting that online

contexts should exhibit more tolerance for forms of differentiation (Taeuscher, 2019; Taeuscher et al., 2020). It's important to observe, however, that the positive and significant ( $\beta = 0.371, p < 0.001$ ) *category-spanning* coefficient indicates that in our context, the audience is not opposed to offerings that group different products together, but instead to those that combine categories positioned far apart from each other in the category space. This result adds theoretical nuance to existing evidence that in online digital markets, increasing the number of product niches covered is a powerful strategy to boost visibility and sales (Church & Oakley, 2018).

Turning now to our second variable of theoretical interest, Model 2 assesses the effects of the interaction between *narrative abstraction* and *categorical atypicality*. Consistent with H2, the positive and statistically significant interaction term ( $\beta = 0.336, p < 0.05$ ) indicates that atypical crafters who use abstract language in their stories are more likely to make the audience recognize the underlying structure of their offering positioning and elicit positive responses in the market. In contrast, the main effect of narrative abstraction is negative but non-significant. Although it falls short of statistical significance, this result is aligned with previous findings on the effectiveness of linguistic concreteness (Pan et al., 2018) in eliciting resource commitment, but also indicates that the same narrative strategy is less effective when paired with categorically atypical offerings: linguistic abstraction makes atypical producers more appealing.

In Model 3, we test the interaction between *narrative cohesion* and *categorical atypicality*. The analysis shows that the interaction between cohesive narratives and atypicality has a positive and significant effect on the market appeal ( $\beta = 0.010, p < 0.01$ ). H3, positing that atypical crafters using linguistic elements to cue audiences on identifying cohesive patterns in their narratives are more likely to mitigate against a negative evaluation, is therefore confirmed. Interestingly, the model also indicates a general unfavorable reaction to the presence of cohesive cues in crafters'

narratives ( $\beta = -0.004, p < 0.001$ ). This finding suggests that the use of cohesive narratives may infuse more coherence into the disconnected elements that distinguish categorically atypical producers thereby easing their evaluation. Yet the same processing benefit does not appear to operate for typical producers who are in fact penalized by the increase in cohesion. The negative effect, however, disappears in the fully specified model, where the coefficient is no longer significant.

Finally, Model 4 adds the interaction between producer atypicality and narrative conventionality. The main effect of *narrative conventionality* is positive and significant ( $\beta = 0.102, p < 0.001$ ), confirming previous findings on the importance of displaying familiar cues to increase the effectiveness of a story (Martens et al., 2007; Vossen & Ihl, 2020). In line with our theory, Model 4 shows that when crafters with atypical positioning in the offering space incorporate conventional features into their stories, audience members are more likely to appreciate them. More formally, the interaction term between producers' *categorical atypicality* and *narrative conventionality* is positive and significant ( $\beta = 0.129, p < 0.001$ ), confirming our contention that storytelling can moderate the negative effect of atypicality. By leveraging stories that emphasize conventional elements, atypical crafters can increase audiences' ease of processing and counteract the discounts they usually experience. All results are consistent in the fully specified Model 5.

To elucidate the practical implications of our findings, using estimations from the fully specified model (Model 5), we can compare the percentage variation in the sales for atypical crafters at different levels of narrative abstraction, cohesion, and conventionality<sup>22</sup>. After controlling for quality, experience, product category, and several other individual and contextual factors, the results show that when sellers with atypical positioning within the categorical space avoid using abstract language, as indicated by the lowest values of narrative abstraction in the data,

they sell on average 2,854 fewer items than their typical counterparts. However, increasing the abstraction level eliminates this discount: at the maximum level of narrative abstraction, atypical sellers sell, on average, 284 more craft items than typical sellers. Similarly, when narratives exhibit stronger cohesion, they improve the evaluation of atypicality. At the minimum level of narrative cohesion, the atypicality discount translates into 2,570 fewer sales, while increasing the presence of cohesive cues reduces this performance gap by an impressive 85.9 % (at the maximum level of cohesion in our data, an atypical crafter sells only 362 fewer items than a typical one). Finally, also narrative conventionality can overturn the market appeal penalty suffered by atypical crafters. At the minimum level of narrative conventionality, audience reaction to atypicality translates into 1,707 fewer sales than typical crafters. In contrast, at the maximum level of conventionality, the negative discount not only disappears but it is overturned, with atypical crafters selling 5,700 more items than typical crafters. To facilitate interpretation, in Figure 3 we graphically illustrate the relationship between our three moderating variables and audience response for typical and atypical crafters. Taken together, these findings support our hypotheses that by leveraging the flexibility of a more abstract narrative style to invite a more inclusive perspective, using cohesive elements to help audiences develop a more coherent mental representation of their atypical positioning, and including conventional elements that relate to contextual expectations and conventions, atypical actors can harness the cognitive and symbolic value of narratives to their advantage.

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Insert Figure 3 about here

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### **Additional Analyses**

In addition to the reported analysis, we tested the sensitivity of our results to different model specifications and variable construction approaches (see Table A4 in the Online Appendix).

First, model 6 confirms that our results are robust to OLS estimates (with a logarithmic transformation of the dependent variable to limit the violation of OLS assumptions). Second, we addressed the concern that our results might be influenced by the operationalization of conventionality. To rule out this potential source of concern, in a separate set of analysis we computed our measure of narrative conventionality for 30, 70, 100, and 140 topics. All results are consistent with any of these alternatives; however, when using 30 topics (well below the optimal number of 90 determined by combining statistical and interpretative logics), the interaction between atypicality and narrative conventionality is no longer significant. This supplementary finding confirms the importance of proper fine-tuning of the topic model to accurately represent the features characterizing the context under study. The number of topics is a crucial parameter in LDA because it directly affects the granularity of the generated model. When analyzing 30 topics the model tends to substantially aggregate concepts and produce a solution with a low level of granularity. This has repercussions for the measure of conventionality because the model does not effectively grasp relevant differences between narratives that use category-specific topics, given the large number of product categories at the crafters' disposal. In addition, we used a simpler and more straightforward measurement approach by calculating the sum of positive deviations from the three topics with the highest average topic loadings in the product category, thus capturing the extent to which narratives focus on important topics in their category - see [Haans \(2019\)](#) for a similar operationalization. All the effects are unchanged (Model 7), suggesting that the specific operationalization of conventionality is not driving the results.

We also tested the robustness of our results to alternative operationalizations of abstraction. Model 8 replicates our results using a different language abstraction measure proposed by Markowitz and Hancock (2016). The authors considered three linguistic elements that signal

concreteness in a text—namely, the use of articles, prepositions, and quantifiers—and built an abstraction index, taking the inverse of the sum of the standardized LIWC scores for these three categories. Higher values indicate a less descriptive and contextualized narrative style in this abstraction index. Our results still hold after controlling for this alternative measure.

To establish that the significance of the interaction between narrative cohesion and atypicality was not an artifact of the aggregative measurement strategy, we also looked at the individual effects of each component of cohesion. The results are unchanged when replacing the composite measure in the regression model with the lexical (Model 9), which is also considered the most common marker of cohesion in a text (Hoey, 1996), and the causal form of cohesion (Model 10). However, when focusing on the semantic dimension of cohesion (Model 11), results are not consistent with the general empirical patterns described above, indicating that increasing cohesion using semantically similar content throughout the narratives does not improve the evaluation of atypicality. While we can only speculate at this point, we suspect that one reason might have to do with the fact not all cohesion indices demonstrate strong, significant correlations with coherence (Crossley et al., 2019), thereby variably affecting the experience of fluency when processing the narrative.

To rule out alternative explanations of our findings, we also controlled for the effect of actors' status. We used a simple measure of popularity, where we count a crafter's number of followers (model 12). All results remain consistent when we include this variable. We also controlled for the business scope of a seller, considering the number of product categories in which a crafter operates (Model 13). The inclusion of this additional control does not impact the hypothesized relationships between categorical atypicality and the three narrative features.

To assess whether results depend on a few highly successful sellers with highly unconventional characteristics, we reran the analyses controlling for high-performing outliers such as crafters with an exceptionally high number of sales (90<sup>th</sup> percentile). Results in Model 14 show that after controlling for outliers, our findings are unchanged. Finally, we performed an additional analysis measuring audience appeal as the number of reviews received, controlling for their ratings (Model 15). In digital contexts, the number of reviews further indicates market appeal and audience engagement (Zifla & Wattal, 2016; Church & Oakley, 2018). All coefficients of interest remain significant and in the expected direction, strengthening confidence in our findings.

## DISCUSSION

*Stories are a communal currency of humanity.*

–Tahir Shah, *Arabian Nights*

The rapidly changing nature of work (Barley et al., 2017; Caza et al., 2018), the rise of digital platforms and their transformative impacts on market structures (Cutolo & Kenney, 2021), as well as the recent disruptions caused by the global pandemic, have created unprecedented organizational challenges, exposing an urgent need for new and unconventional approaches to social problems. Yet, audiences' well-known aversion to offers that defy clear conventions, standards, and categorical boundaries poses a significant hurdle to this call for atypicality. How can actors succeed in their attempts to advance unconventional offerings and escape the normalizing constraints so aptly described by Michel Foucault?

To address this question, we drew on the notion of processing fluency and combined it with linguistic literature to posit three narrative features that may help atypical actors address the confusion engendered by their offerings: abstraction, cohesion, and conventionality. Using a combination of natural language processing tools and econometrics, we examined the narratives

of 78,758 crafters operating on Etsy, the largest digital marketplace for handmade and craft items. Our findings indicate that, in line with baseline expectation of categorical theory, typical producers are favored over atypical ones by the market audience. However, our findings show that abstraction, cohesion and conventionality offer three possible mechanisms for the moderation of the atypicality penalty. The use of a more abstract language can prompt a favorable interpretation of atypical producers by offering a more inclusive and intuitive principle of categorization that ease audiences' processing effort. Cohesive narratives mitigate against the negative effects of atypicality by helping audiences form more coherent mental representations of their puzzling identity thereby bolstering the fluency of their evaluative effort. Finally, narrative conventionality leads to increased experience of fluency by infusing consistency between atypical offerings and their context thereby compensating for the equivocality of cues associated with atypicality. Below we discuss the contributions of these findings to the cultural entrepreneurship and categorization literature and other related literature.

First, our study contributes to and expands the line of work investigating the role of narratives in cultural entrepreneurship (Lounsbury & Glynn, 2001; Martens et al., 2007; Wry & Lounsbury, 2013; Garud et al., 2014). Our findings show that atypical crafters face penalties when they infuse their narratives with concreteness but benefit from framing them in abstract terms. While some language-oriented scholars have documented a general distrust for abstract communication due to the fact that highly abstract messages are less clear and persuasive (Paivio et al., 1968; Sadoski, 2001; Toma & D'Angelo, 2015) and "so often used, consciously or unconsciously, to confuse and befuddle people" (Hayakawa, 1949, p. 177), others have offered contrasting evidence on the grounds that abstract language is associated to perceptions of the speaker as more likeable (Douglas & Sutton, 2010), powerful (Wakslak et al., 2014), confident

(Douglas & Sutton, 2006) and someone more likely to be a “visionary” (Carton & Lucas, 2018). Our findings contribute to the several attempts at reconciling this inconsistency illustrating that the shifting effectiveness of abstract versus concrete communication may be due to situational factors (Huang et al., 2021; Pan et al., 2018). Most of the studies on language concreteness were conducted in decontextualized environments, with isolated words, words in vitro, without considering the fundamental role of the surrounding narrative context (Mkrtychian et al., 2019). We suggest that when language is considered in action, as part of contextualized narratives, more situational cues are made available, resulting in comparably more efficient processing of both semantic types, and, as a consequence, in the lack of evidence indicating preference of concreteness over abstraction (Schwanenflugel & Shoben, 1983). We also suspect that the relative preference for concrete over abstract language may be contingent on the nature of the audience. The audience in our setting is mostly constituted by lay people with limited domain-specific expertise, supporting recent behavioral experiments suggesting that when narratives are targeted to lay evaluators, an abstract framing is more likely to elicit favourable evaluative responses than a concrete one because this frame matches the high-level construal that lay people commonly use to process information during the evaluative task (Falchetti et al., 2021). The positive moderating effect of narrative cohesion complements findings pointing at the importance of internal coherence in the framing of entrepreneurial narratives (Martens et al., 2007; Navis & Glynn, 2011) by analytically dissecting the linguistic elements that can help achieve such coherence in the face of categorically atypical, hence potentially confusing, offerings. Finally, the positive interaction effect between narrative conventionality and atypicality speaks to prior literature that documents entrepreneurs’ strategic use of their cultural repertoires to achieve alignment with their audience’s beliefs and expectations (Giorgi, 2017; Lockwood & Soublière, 2022). All in all, these findings

should be particularly relevant to scholars interested in the strategic choices that actors make to improve how their products are received (Cattani et al., 2017; Kim & Jensen, 2011; Younkin & Kashkooli, 2020; Cancellieri et al., 2022), especially in cultural markets in which respect for aesthetic standards and an orientation towards novelty often coexist in a dialectic fashion, and decision-makers choices typically are subject to ambiguous assessment criteria (Bielby & Bielby, 1994).

Second, our study has implications for categorization research (Zuckerman, 1999; Pontikes, 2012). Recent work suggests that categorical boundaries may be less salient in platform-mediated markets, where the technological and architectural components provided by platforms to limit negative externalities, i.e., reviews, rankings, and recommendation systems, relieve typicality pressure (Zuckerman, 2017). Our work provides a nuanced understanding of these dynamics, suggesting that even in online market settings the tolerance for atypicality may fade as the threshold for identifying categorically atypical producers is set at a sufficiently high level: even though online marketplaces may disproportionately attract audience members searching for highly distinctive offerings (Taeuscher et al., 2020) the penalty for very atypical producers persists. We also extend recent studies on the interplay between categorization and language by drawing attention to the role of narratives as navigational devices that may help audiences appreciate more clearly how and the extent to which an atypical producer is associated with claimed categories. With few exceptions (Verhaal et al., 2015; Smith & Chae, 2016), the potential of language has not been incorporated into the debate on the consequences of atypicality. Although perhaps circumscribed to instances where audiences and candidates can interact freely with each other (i.e., without third-party mediation), this language-informed perspective augments our understanding of the possible agentic mechanisms that may offset the perils of atypicality (Zuckerman, 2017;

Smith & Chae, 2017). At a broader level, these findings substantiate the notion that narratives can support social actors' efforts at challenging the disciplinary power exerted by modern institutions which use the statistical abstraction of "normal" as their core organizing principle (Foucault, 1979). Despite being often portrayed as a deliberate attempt at reaping the benefits of innovation and competitive differentiation, the pursuit of atypicality sometimes embodies an act of resistance, an effort to claim a different identity for oneself and carve out a space for one's distinctive voice within a society that constantly warns against the consequence of nonconformity. We demonstrated that both the content, form and structure of narratives could serve this effort. Ultimately, atypical actors may strategically leverage storytelling to foster a more inclusive social space, where non-conventional objects are more likely to be tolerated and even rewarded.

In addition, our work also adds to the literature aimed at exposing the sources of processing fluency and their intricate relationship (Alter & Oppenheimer, 2009; Oppenheimer, 2008). We posit three novel linguistic cues, abstraction, cohesion, and conventionality, that can elicit fluency by altering the manner in which information is represented and processed. Perhaps more interestingly, our findings indicate that disfluency brought about by an atypical categorical positioning (Reber et al., 2004) and fluency elicited via these linguistic cues can generate competing forces that may cancel each other out. While only an experimental design or an in-depth qualitative analysis could precisely tease out the cognitive underpinnings of these effects, we believe that our findings delineate intriguing research possibilities for future scholarship in this area.

To the best of our knowledge, this paper offers one of the first large-scale applications of topic modeling combined with computer-based content analysis to study entrepreneurial narratives and their performance impacts. Computational linguistics provides excellent opportunities to

understand narratives' pivotal role in social, cultural, and economic dynamics (Cutolo, Ferriani, & Cattani, 2020). With the growing availability of tools to unravel latent cognitive, structural, and emotional meanings of extensive collections of texts (Hannigan et al., 2019), as well as vast textual databases online (e.g., Berger & Packard, 2018), these opportunities are even more intriguing. Our approach for extracting and measuring narratives' abstraction, conventionality, and cohesion has the merit of being easily scalable and adaptable to a wide variety of settings; however, we are well aware that the proper application of these and related analytical approaches presuppose a strong understanding of the underlying assumptions. For instance, decisions made during text preprocessing or when tuning LDA model parameters may affect the statistical power of subsequent analyses, and ultimately, the efficacy of text mining classification results (Hickman et al., 2020). Continuing to engage with this growing methodological space is crucial to making progress in developing reliable and rigorous analytical toolkits for the study of cultural domains (DiMaggio et al., 2013), particularly the relationship between linguistic properties of communication and organizational outcomes (Oliveira, Argyres & Lumineau, 2022)

Finally, to further illustrate the practical meaning of our findings, consider the profound transformation in the nature of work that has dramatically transformed the notion of a "typical career" (Petriglieri et al., 2019). Increasingly, individuals are embracing atypical work paths, such as by holding multiple jobs simultaneously (e.g., lawyer and yoga instructor, real estate agent and blogger) to enrich their work experiences and pursue their dreams, passions, or serendipitous opportunities (Campion et al., 2020; Caza et al., 2018). These individuals experience severe difficulties conveying the value of their professional endeavors to colleagues and potential employers because they deviate from prototypical career models (Zuckerman et al., 2003; Leung, 2014; Caza et al., 2018). Our work offers actionable evidence on how these atypical professionals

could frame their own stories to communicate their capabilities without coming across as dilettantes. To give an example, these atypical workers could strategically craft a narrative around their strengths and work style (e.g., in the *About* section on their LinkedIn profiles or in application cover letter), drawing attention to the conventional skills and capabilities that match specific jobs they are targeting (e.g., identifying keywords that recruiters in the industry are paying attention to), or emphasizing the overarching purpose behind all of their work experiences rather than describing each one in great detail. More broadly, we believe the practical import of our findings can be extended to various evaluative settings where communication can be used strategically to alter identity perceptions. Consider, for instance, the language used by the leaders of categorically atypical publicly traded firms during the earning calls they periodically hold with the analysts who cover their stocks. Or think of the narrative elements that atypical restaurants facing the scrutiny of culinary critics could deploy in their menus or how highly unusual venturing ideas could be strategically narrated in crowdfunding campaigns. We leave to future research the task of elucidating key narrative features such as the one described in this study across multiple domains of audience interaction and examining how they relate to perceptions of atypicality.

### **Limitations and Future Directions**

Consistent with previous research (Kovács & Hannan, 2015; Goldberg et al., 2016), we inferred atypicality from a measure of positioning within the broad category space. While generally accurate, this approach does not capture the distance of a given offering from the category prototype, thereby providing only a partial perspective on atypicality. Indeed, offerings that do not span categories can still be atypical with respect to typical traits of that category (Askin & Mauskapf, 2017). This within-category atypicality could be explored in future conceptual and

empirical research. Previous research has shown that contextual characteristics may hinder or facilitate narratives' capacity to attract audience attention (Lounsbury & Glynn, 2001; Navis & Glynn, 2011; Haans, 2019). Among relevant contextual factors, we suggest that market competition is an important structural dimension that can drastically affect how audiences interpret and react to narratives. When a market is crowded (i.e., the number of potential actors is high), a differentiation strategy is expected to be positively correlated with competitive success (Porter, 1980). Within such an environment, we would expect a narrative strategy that mobilizes different cultural elements to prevail over one that emphasizes congruity and adherence to conventional approaches. In the future, researchers may take advantage of some of the empirical strategies employed here to shed light on this aspect. Furthermore, the proposed mechanisms might be contingent on additional audience-level characteristics. For instance, individual differences in the tolerance for ambiguity (Furnham & Ribchester, 1995; Boulougne & Durand, 2021; Cancellieri et al., 2022) may also result in heterogeneous preferences for conventionality, abstraction, or cohesion. More research is needed to shed light on how audience characteristics influence the interaction between categories and language. In positing the fluency-enabling role of conventional narratives we have emphasized the importance of establishing consistency between the context and the offering. Yet we cannot rule out the possibility that the use of such conventions evokes concomitant feelings of perceptual familiarity, which may in turn lead to increased conceptual fluency (Janiszewski & Meyvis, 2001). While evidence in psycholinguistics suggests that conventional expressions may or may not entail familiarity (Gentner & Bowdle, 2001; Bowdle & Gentner, 2005; but see also footnote 9), an interesting extension to our study would be to use an experimental design to expound the interplay of these two mechanisms in affecting processing fluency. Finally, while we have focused explicitly on narratives as means for sensemaking and

sense giving, several other non-narrative forms of linguistic communication exist, such as discourses, frames, and accounts (Lockwood et al., 2019). In future studies, it might be fruitful to examine the antecedents of different linguistic approaches. For example: Who is more likely to develop a narrative over other forms of communication, and under what conditions? When are actors more likely to employ abstract as opposed to concrete narratives? Where do conventional narratives come from? These and other related questions merit further research attention. We hope this study will stimulate renewed interest in the language-category nexus and improve our appreciation of how language can shape social, cultural, and economic dynamics.

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## FOOTNOTES

1. From this point forward, we use the term narratives and stories interchangeably.
2. For example, in the category of birds, a sparrow is small, has long wings and short legs, flies, lives in a nest, lays eggs, tweets, etc. On the other hand, an ostrich is huge, does not fly, has small wings and long legs, and runs. In other words, it lacks some of the most common features of birds, and thus is less typical (i.e., perceived to be less representative of the category) than a sparrow.
3. For example, a platypus, which is categorized as a mammal because it nurses its young, also has an iconic duckbill and lays eggs, which are features more commonly seen in categories other than mammals (i.e., birds and reptiles).
4. Zuckerman (2017) offered a clear account of why this process applies equally to producers and offerings. Specifically, producers' atypicality is derived on the bases of their primary attributes, most commonly those that relate to the proposed offerings or the services provided (e.g., [Goldberg et al., 2016](#); [Negro & Leung, 2013](#)).
5. Going back to our earlier example, when the first platypus specimens arrived from Australia, the scientists in England who were examining them found them so puzzling that they suspected a hoax.
6. In their role as evaluators, venture capitalists look for companies that can become "market makers" and so they are more likely to choose ambiguous offerings with the potential to establish unique market niches. As one VC put it "The more ambiguous spaces are more about uniqueness; you can stake out your space before anyone becomes the leader" (Pontikes and Barnett, [2015](#), p. 1420).
7. Think of the debut album by the American composer Wendy Carlos, *Switched-On Bach*, a highly unusual rendering of Johann Sebastian Bach based on mixture between different musical genres and traditions. Described by renown pianist Glenn Gould as "one of the most startling achievements of the recording industry in this generation" it elicited raging responses among classical music traditionalist reviewers, but it received enthusiastic support from young reviewers who were more sensitive to the introduction of electronic renditions of classical masterpieces and who were motivated to establish their intellectual leadership on emerging musical trends ([Sewell, 2020](#)).
8. In many everyday behaviors, people observe conventions—agreements regarding how to act in a specific group or community. Prominent among activities that depend on conventions is our use of language, whereby vocabulary, syntax and general patterns of usage convey an array of agreed-upon meanings.
9. The idea that actors can mobilize conventional narrative elements to improve audience receptiveness to atypical offers owes much, conceptually, to the vibrant line of innovation and cultural entrepreneurship scholarship looking at ways in which the unfamiliar can be framed in terms of the familiar to make it more appealing. Exemplars in this vein include, for instance, Hargadon and Douglas (2001) analysis of how firms can introduce radical innovations by employing skeuomorphs or design characteristics that comfort the consumer by making semiotic references to familiar objects. The use of analogies to support the emergence of new market categories by tethering them to preexisting conventions through descriptions that lend them meaningfulness is too indicative of this effort (Navis and Glynn, 2010). And so is new ventures' strategic deployment of identity claims that "emphasize the enterprise's relationship to, and membership in, industry categories that are aligned with cultural understandings, norms, and beliefs about what is appropriate and normative" (Lounsbury & Glynn, 2001, p. 553). From this body of work, we borrow the central intuition that actors can enhance the reception of their products through deliberate efforts at anchoring them to the familiar by invoking valued schemas and cultural understandings (Rindova & Petkova, 2007). However, unlike the

prevailing focus in this literature on the role of language as a symbolic device to infuse familiarity into unfamiliar objects, – our distinctive focus is on the importance of conventional elements as linguistic resources infusing consistency between atypical offerings and their context, thereby easing audience’s cognitive processing. As noted by Bowdle & Gentner (2005, p. 204) “conventional... expressions can be either familiar or unfamiliar, depending on [the topic]”, suggesting that narrative conventionality does not necessarily and/or exclusively simplify the understanding of unfamiliar objects by increasing their familiarity. The difference is subtle, but substantial. While a familiar expression involves a particular target–base pairing that has been encountered before, conventionality is determined primarily by the base term of an expression. The conventionalization of a base term follows from its repeated use so that it acquires a domain-general meaning. Correspondingly, our processing-fluency-based argument does not necessarily need to hinge on feelings of familiarity to hold. As Kelley & Rhodes (2002, p. 296) put it “when sources of fluency are noticed and appreciated ..., enhancements in perceptual processing may be attributed to features ... and so not give rise to a feeling of familiarity”.

10. We ran separate analyses excluding narratives with less than 5 (53 documents), 15 (1,365 documents), and 25 (3,219 documents) words. Although results were not significantly different from those reported here, we noticed that after preprocessing (e.g., removing stopwords and extremely uncommon words) these thresholds rendered narratives too short to perform meaningful analyses. For this reason, we followed canonical recommendations in the field of computational linguistics and selected 30 words as the minimum threshold for short documents (Hickman et al., 2020). Correspondingly, the total number of narratives excluded from our sample due to their length is 4,326. We then used NLTK libraries in Python and Google Refine Expression Language (GREL) to eliminate punctuation, stopwords (pronouns, prepositions, adverbs, conjunctions), non-relevant elements (such as numbers, personal names or links to social network profiles), as well as non-English and extremely infrequent words that could bias the results (Bird & Loper, 2004).

11. Initially, we had intended to collect a longitudinal dataset. Starting in April 2018 we crawled the profiles once a month for almost a year, but in this timeframe, less than 1% of the crafters in the sample modified their narratives. We therefore opted for a cross-sectional dataset obtained from our latest website scrape, which occurred in March 2019.

12. We acknowledge the categorical heritage of our conceptualization of *atypicality*, as it originates from the category spanning literature. Acts of category spanning are nearly always considered expressions of atypicality, as actors, organizations or products that traverse multiple categories are unlikely to align to the prototypical features of each (Hsu, 2006; Hsu et al., 2009; Kovács & Hannan, 2010). This stream of work follows a discrete approach to account for typicality (Kovács & Hannan, 2015, p. 259), assuming that an object’s atypicality generally increases with the number of categorical labels it bears. However, a closer examination of this assumption suggests that category spanning only leads to atypicality under certain conditions. Consider the case of an offering that spans two categories. When the conceptual distance between the categories is low, their prototypes tend to be closer and display more similar features (Gärdenfors, 2000; Pontikes & Hannan, 2014). This may be due, for instance, to an increase in the frequency of boundary spanning behaviors –e.g., in presence of emulation dynamics or industry logics (Rao et al., 2005). Consequently, there is a high degree of overlap between the categories - using Pontikes’ (2012) terminology they are “lenient”. In this case, the spanning of categories may well reflect a rather typical positioning within both categorical spaces, as many prototypical features are shared between the two categories. For this reason, we adopted a more dynamic perspective on the emergence of atypicality that goes beyond the mere straddling of categories.

13. For instance, the word “apple” received a concreteness rating of 5, whereas the word “spirituality” received a rating of 0.37 on the same scale.
14. We did conduct additional analysis using the BCI, and the results are consistent across the two approaches. This additional analysis is available upon request.
15. LIWC is a dictionary-based text analysis software widely adopted to study emotional, cognitive, and structural elements present in individuals’ written communications (Boyd & Pennebaker, 2015; Pennebaker & King, 1999) that utilizes user-generated dictionaries to calculate the frequency of dictionary words as a percentage of total words in a text.
16. To ensure that our computer-aided content analysis was properly capturing the level of abstraction of the narratives, we manually examined a random set of 30 narratives.
17. Topic modeling is gaining increased traction in social science as a suitable approach for uncovering patterns in textual data. For a review of its uses in management, see Hannigan et al., (2019).
18. A description of the technical details and the parameters used to fine tune the model is available upon request.
19. [https://drive.google.com/file/d/0B4er8zOc\\_D\\_QQ1l0d3FSemNPeTg/view](https://drive.google.com/file/d/0B4er8zOc_D_QQ1l0d3FSemNPeTg/view)
20. <https://cedcommerce.com/blog/sell-on-etsy-top-selling-items-on-etsy/>
21. A likelihood ratio test and a Lagrange Multiplier (LM) test from Cameron and Trivedi (1998) indicated that a pure Poisson model was not appropriate for the data. Nevertheless, to increase confidence in the results, we ran each of the models using a Poisson specification and obtained similar results.
22. The values in this section were predicted using the margins, at command in Stata.

## FIGURES

**Figure 1. Example Etsy narratives with plot-characters-story configuration (blue: presence of past events/characters; red: events temporally ordered; green: events and characters intertwined).<sup>1</sup>**

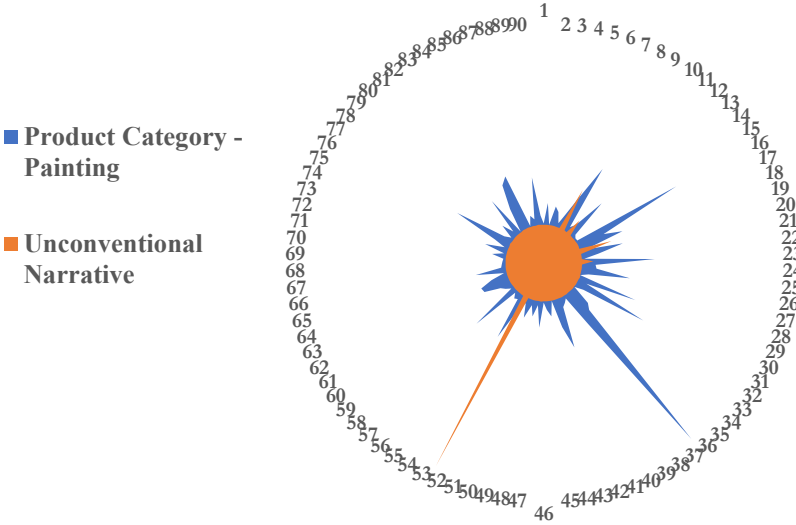
<p><b>Sometimes all you need is a good book, a cup of coffee and a nice warm blanket.</b></p> <p>I remember the first time my grandma taught me how to knit. I was around eight-year-old and to this day it is one of my most precious memories. We used to sit together, just the two of us, listening to same local radio station, drinking tea, laughing and knitting our troubles away. Sometimes I was just watching her work.</p> <p>She got sick a few years ago and I desperately wanted to find a nice Christmas present that would keep her warm. When I was shopping for gifts, I saw this amazing chunky yarn made from merino wool. It was thicker and softer than any yarn I've seen before. I felt in love with it right then and I just knew everyone would love it too. It was freezing and snowing when I was carrying this huge skein home, but a smile never left my face. I found my perfect gift! The first two blankets I've ever made were for my Grandma and for my Mum. The two most important women in my life. Women whose love and compassion have shaped me into a person I am today. I poured my heart and soul into those blankets and when I saw a smile on their faces, I knew it was worth it. To this day, whenever I make a red chunky blanket I think of my Grandma.</p> <p>I love my job. My shop brings me so much joy every day, but nothing makes me happier than the knowledge that somewhere across the globe someone will open their order and feel the same glee and excitement I felt when I touched this beautiful yarn for the first time.</p> <p>Thank you for visiting my shop:)</p>	<p><b>Become the woodcarver</b></p> <p>I was born in 1980 in the small republic of the Soviet Union, Kirghizstan. In 2003, I graduated from the Kyrgyz Technical University as an electrical engineer. One year later, I realized that this area does not for me. In 2004, I opened a chain of menswear stores. In 2008, I sold my business and emigrated to Canada in the province of Quebec. I started my life all over again. Plus, a new language that should be studied. But, since my arrival, I felt at home! When I left Kirghizstan, I decided to find a profession that I would have liked indeed. In 2009 I was lucky enough and I found myself in an unknown area for me -woodcarving. I started in Workshop "St-Louis-De-France" with Pierre Goulet-professor, who became, later, one of my best friends. I quickly realized that I cannot live without creation.</p> <p>In the summer of that same year, I found a place at the woodcarving shop where I started like a sculptor. In 2010, I became a member of the Club of woodcarvers of Quebec City. it has opened for me a lot of new horizons and gave me a chance to work with other sculptors. Afterwards, I took part in many competitions and exhibitions. In 2011, I was elected treasurer in the club administration. In the summer 2011, I opened my own workshop. Since that time, I give courses of woodcarving.</p> <p>All baggage accumulated and my participation in the work of the club, gave me everything I needed for turn my passion into a real career! In March 2012, I left my job and started working for myself.</p> <p>At this point I am completely immersed in my professional career. I continue to give woodcarving courses. I am doing special orders, and participating in exhibitions, competitions, and in salons. In November 2012 I was recognized as a professional artist and became a professional member of the CMAQ</p>
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<sup>1</sup> These elements were identified by Ewick and Silbey (1995) and Garud and Giuliani (2013).

**Figure 2. Narrative conventionality relative to the “Painting” product category in which the most diffused topics are Topic 36 (*Artworks, Canvas, Paint, Painting, Art*), Topic 16 (*Love, Create, Share, Life, Inspire*), and Topic 31 (*Art, Work, Gallery, Artist, Create*).**

**A Father to the Fatherless & Creator of All That is Good**  
 At the age of 19, I ended up on an orphanage in Mexico and it was there God changed my heart forever as He set in my heart a vision to reach the orphan through the Heart of God Ranch. In 2007, God granted me the gift of a beautiful son named Peyton. Not only has God been preparing me through all of my experiences as a born-again believer and teacher to be able to help the orphan, He now entrusted me with the honorable role of being a "Mother" to one of His very own treasures. As a family brought together by God along with our beautiful Aussies, our desire is to build His Kingdom here on earth with the spiritual gifts and physical talents He has given us. As we wait upon Him to reveal the fullness of the Heart of God Ranch, we hope this shop is a blessing to many. We believe as God expands the Heart of God Ranch Sign Co., it will be a part of the physical Ranch yet to come in Tennessee. May "His Kingdom come, His will be done on earth as it is in Heaven" in our lives until that glorious day! "But as it is, they desire a better country, that is, a heavenly one. Therefore, God is not ashamed to be called their God; for He has prepared a city for them..." All glory is His through the name above all names, Jesus Christ our Lord!

**Most diffused topics:** Topic 53 (*God, Bless, Give, Serve, Lord*), Topic 8 (*Life, Time, Feel, People, Change*), Topic 19 (*Farm, Live, Animal, Family, Barn*)



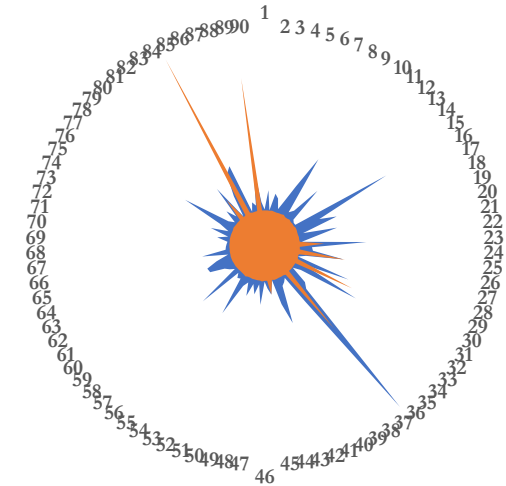
**Panel A: Unconventional Narrative**

**Artist-Turned Biologist-Turned Artist Again**

After a decade spent working as a graphic designer for advertising and promotions, I began to feel that I needed a new challenge. Having loved science as a high school student, I decided to return to college to earn a degree in natural resources conservation. This led to my move to Colorado to earn my Wildlife Biology degree at Colorado State University. After another 10 years in wildlife, working with animals both in the field and supporting research and conservation efforts in an office setting, I got the urge to do artwork again. In 2007 I began wildlife watercolor portraits and they were so popular with friends and family that I began selling them online. Nothing makes me happier than being able to make someone's living space a little brighter with one of my prints, depicting one of nature's most noble creatures. Enjoy browsing. Comments and suggestions are always welcome.

**Most diffused topics:** Topic 84 (*School, Year, Work, Art, College*), Topic 89 (*Make, Start, Friend, Family, Sell*), Topic 36 (*Artworks, Canvas, Paint, Painting, Art*)

- Product Category - Painting
- Moderately Conventional Narrative

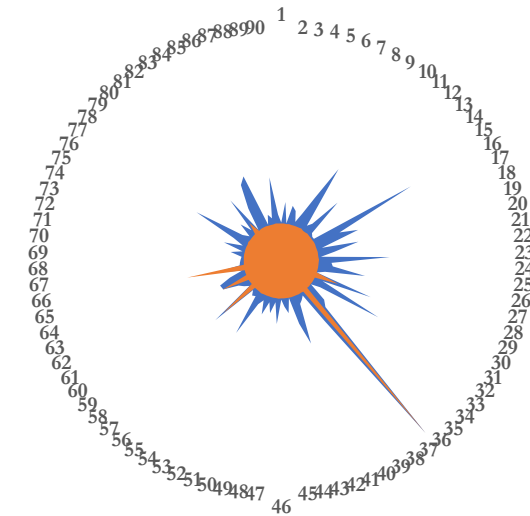


**Panel B: Moderately Conventional Narrative**

**Yuri Sinchukov Fine Art**

My name is Yuri Sinchukov, I am a professional artist. I was born and grew up in small town Sokal in the west of Ukraine. I started drawing from childhood. I lived without a father, and my mother told me that he was also an artist, and his artworks was beautiful. I wanted to be like my father. I remember I drew my portrait with a ballpoint pen when I was 12 years old. I just looked in the mirror and drew. I was glad of my result. I like to work in different styles of painting and fine arts - realism, impressionism, abstract art, minimalism, etc. I like to draw with a graphite pencil in a realistic style. I also like watercolor, oil painting and color pencils. I am also a drawing teacher for several years and very glad that I can help people draw beautifully. I hope you will enjoy my art! I am always happy when people like my works and value it. Please be sure every artwork I did with positive and good feelings. You can find original, one of a kind painting in my shop as well as many affordable fine art prints.

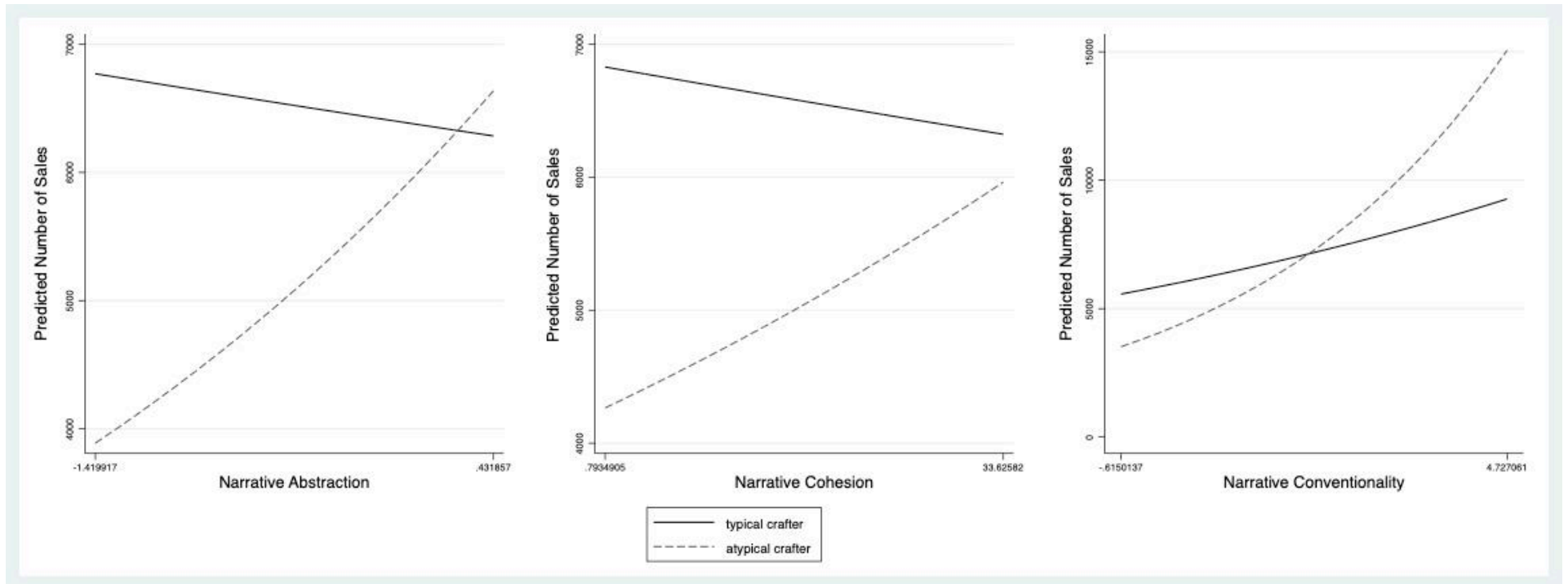
- Product Category - Painting
- Highly Conventional Narrative



**Panel C: Highly Conventional Narrative**

**Most diffused topics:** Topic 36 (*Artworks, Canvas, Paint, Painting, Art*), Topic 66 (*Work, Create, Make, Material, Product*), Topic 58 (*Art, Draw, Create, Love, Color*)

Figure 3. The moderating role of Narrative Abstraction, Cohesion, and Conventionality in the evaluation of Atypicality.



## TABLES

**Table 1. Narrative abstraction**

Narrative	Narrative abstraction	Abstraction score	Concreteness score
<b>I'm a sleepy artist</b>			
<p>Hi! My name is Saul and I'm an artist! I've been running this Etsy Store since I was around 13 years old. Here I sell my art, which includes painting, prints, stickers, zines, even art dolls! I make everything myself, including the printed goods with a printer I bought myself a few years back. Have any questions? Feel free to ask!</p>	-0.71	17.65%	62.36%
<b>Where love is being created and shared</b>			
<p>Our shop is a destination to enhance your true style with heartfelt headpieces.</p>			
<p>We cater for all styles and create everything from earthy bohemian accessories to modern luxe bridal adornments - the perfect addition to your dream day. The shop was originally founded in 2013 on Etsy. Our business grew and we currently have more than 1200 followers from all over the world with extremely positive feedback from previous clients. The key to success is forming a personal connection with every single client to ensure that our fascinating and high-quality designs cater to your individual taste. This personalized touch combined with the professionalism of service that we have become revered for means that we now have a wide base of repeat customers that share in the joy of specially created adornments by us. Each piece is exclusively handmade with love and care in Australia. Most pieces are created with delicate fabrics and feminine beads shining romantically. Only the best materials are carefully handpicked for uniqueness and quality, which is the essence of creating a keepsake heirloom. Let us take you on a journey to reach your perfect look!</p>	-0.69	21%	67%
<b>Everything can be completely different</b>			
<p>Architect since 1992 I was always fascinated by a poem by Salvatore Quasimodo: "Laughs the magpie, black on the oranges" and especially from that laugh, so humane, that you would never expect from a magpie ... then I like to think that things can be different from what we know and that they can mostly "turn" !!! A crocheted wool thread is the ultimate in the concept of transformation because it is infinitely changeable. The lamps I realize are all different and have only one thing in common: my passion for light, architecture and ... the crochet.</p>	0.33	51.61%	38.7%

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**Design is a way of life, a point of view. To design is to transform  
Prose into Poetry”  
Paul Rand**

Spaces have the potential to physically connect and transport us; our memories, our dreams, and our aspirations. Inspiring spaces activate our senses and refresh our spirits. Design opens the door to the great opportunity of dignifying and adding value and meaning to a space. We create unconventional and unexpected re-imagined designs that have a sense of understated originality, character, and context.

0.36      48.05%      33.77%

Our themes focus on the details of the Bourbon Whiskey and Wine trades, along with Vintage Originality to create unique décor pieces for collectors and connoisseurs.

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**Table 2. Narrative Cohesion.**

Narrative	Cohesion Score
<p><b>Self-taught jewellery designer based in Melbourne.</b>            It's hard to translate a piece of art into something wearable. Luckily, after taking inspiration from Pablo Picasso's line drawings and regular attendance at life drawing classes, Light Lustre Studio was formed to bring simple creations of art to all people interested in owning some wearable art at a reasonable price. All pieces have always, and will continue to be hand-made by an artist in Melbourne :-).</p>	33.60
<p><b>Jammer Jewelry .... A pursuit in handmade quality and artistic design.</b>            I opened my etsy shop in the summer of 2010. I feel lucky to have lived most of my life in the beautiful state of New Mexico with its unique blend of southwestern cultures and history, artistic inspirations, beautiful sunsets, great year-round climate and of course our super delicious green chile. I suppose that living here for so long has contributed to my artistic motivations and endeavors as many of my jewelry designs have a definite southwestern flair both in contemporary and traditional appeal. My jewelry is primarily focused on inlay design and metal fabrication. Inlay is such a great media because of all the variations of geometric shapes, and color combinations I'm able to come up with. In a way, it's almost like painting a picture in a small and confined space. My pre-etsy days were filled with selling at a number of juried art shows which were surely a great learning experience. I think that my designs went through a fairly rapid evolution as a direct result of the one-on-one communication and feedback from my many customers. At that time, I was doing a lot custom work which would always expand my ideas on new and creative designs. At the present time, I am the proud owner of 2 beautiful Afghan Hounds, Spooky and Rico, who are of course spoiled rotten and loved to the max. Life is not complete without man's best friend.</p>	30.45
<p><b>My Creations, My Loves, and My Life</b>            I am coming back after a three-year hiatus. I've closed my gallery and am working on a much smaller scale with Etsy. Creating jewelry mostly, but also cooking (I have some dynamite cookies!), painting, knitting, crocheting, upcycling ... just creating anything, as long as I am in that Zone and this is where I'll be showcasing the finished products. I love anything vintage as well, silverware, silver plate, sterling silver. Cultural vintage pieces. You'll see some of my transformed upcycled jewelry too. Come back often. I don't stress myself and put on listings when I can. Slow and steady, right?            Customer service is very important to me so if you have any questions, let me know!            Kathy</p>	3.79
<p><b>Living the dream</b>            If someone would have told me a few years ago that I would be living my life as a working artist , that I would be living my dreams with such passion I would have called them crazy! Life is so beautiful this way, when you least expect it there it is right in front of you. Where had it been all these years? Was it just locked up inside, waiting for you to discover it? It is amazing to me the potential that everyone has and how blessed we are when we finally find it , if we find it. How sad it must be to keep it all locked up your whole life , to never let it be and do what it was meant to. Until quite recently I had no idea that I could just be exactly what I've always wanted to be. I had this mental picture of her, but never realized that all you need to do to be her is just be her. I hope that doesn't sound too ridiculous but I just decided I am not who I've always been told I am. I am exactly who I think I am, it's that simple. When you are not kind to yourself and tell yourself you are not good enough or you can't do anything right , than guess what you can't. Anyway I am a mixed media artist who is inspired everyday by my 2 little girls who have taught me with a little imagination and love all things are possible!</p>	0.79

**Table 3. Operationalization of control variables**

Variable	Operationalization
Seller quality	Average star rating (on a 0–5 scale) received by each seller in the previous 12 months
Experience	Number of years the seller had been on Etsy
Competition	Average number of sellers in the product category
Gender	Binary variable: 1 = female, 0 = male
Category spanning	Binary variable: 1 = if the seller targets multiple product categories, 0 = otherwise
Nationality	Set of binary variables to account for the sellers' countries of origin: 1 = United States 2 = Europe 3 = South America 4 = Africa 5 = Asia 6 = Oceania 7 = Canada 8 = Not reported
Product category	Set of binary variables for each of the 146 product categories (the full list of product categories is available at <a href="https://www.etsy.com/categories">https://www.etsy.com/categories</a> )
Narrative length	Number of words in each narrative
Narrative complexity	Flesch Reading Ease Score for each narrative
Narrative past focus	Normalized percentage of words in each narrative that reflects an individual's past focus (based on a dictionary built in the LIWC program that specifies a set of 145 past oriented words such as "had," "did," "was," "were")
Narrative present focus	Normalized percentage of words in each narrative that reflects an individual's present focus (based on a dictionary built in the LIWC program that specifies a set of 169 past-oriented words such as "is," "does," "are")
Narrative future focus	Normalized percentage of words in each narrative that reflects an individual's future focus (based on a dictionary built in the LIWC program that specifies a set of 48 past-oriented words such as "will," "may," "might," "shall")

**Table 4. Descriptive statistics**

Binary variable	%	Binary variable	%
Gender		Macro product category	
Male	34.6 %	Shoes	4.02%
Female	65.34%	Clothing	5.47%
Nationality		Books, movies & music	4.60%
USA	55.87%	Paper & party supplies	3.06%
Europe	24.54%	Toys & games	5.37%
South America	0.34%	Craft supplies & tools	7.12%
Asia	2.43%	Weddings	9.49%
Oceania	2.51%	Accessories	16.40%
Africa	0.26%	Bath & beauty	11.70%
Canada	4.31%	Art & collectibles	18.03%
Not declared	9.75%	Electronics & accessories	5.78%
Categorical Atypicality		Pet supplies	7.42%
Yes	9.02%	Home & living	22.10%
No	90.98%	Jewelry	16.40%
Category Spanning		Bags & purses	13.14%
Yes	16.53%		
No	83.47%		

**Table 5. Correlation matrix**

Continuous variable	Mean	SD	Min.	Max.	1	2	3	4	5	6	7	8	9	10	11	12
1. Number of sales	3020.26	12431.07	0	1630579	1											
2. Seller quality	4.57	1.27	0	5	0.07	1										
3. Experience	5.07	2.8	0	14	0.16	0.14	1									
4. Competition	2838.36	648.44	925	4469	-0.09	-0.01	0.01	1								
5. Narrative length	203.1	128.07	39	1640	0.03	0.04	0.12	0.03	1							
6. Narrative complexity	63.71	12.44	-327.9	121.2	0.01	0.02	0.00	-0.02	0.01	1						
7. Narrative past focus	3.54	2.38	0	19.05	-0.01	0.00	0.00	-0.01	0.00	0.01	1					
8. Narrative present focus	8.20	2.80	0	23.94	0.00	0.00	0.00	0.00	0.00	0.00	-0.35	1				
9. Narrative future focus	0.85	0.86	0	10.48	0.00	0.00	0.00	0.00	0.01	0.00	-0.04	0.17	1			
10. Narrative abstraction	-0.25	0.15	-1.42	0.43	-0.01	-0.02	-0.08	0.03	0.06	-0.17	0.00	0.00	0.00	1		
11. Narrative cohesion	23.29	6.52	0.79	33.6	0.01	-0.02	0.06	0.00	0.03	-0.44	0.00	0.00	-0.01	0.11	1	
12. Narrative conventionality	1.05	0.63	-0.61	4.73	0.01	-0.01	-0.06	0.01	-0.06	0.12	0.00	0.00	0.00	0.00	-0.19	1

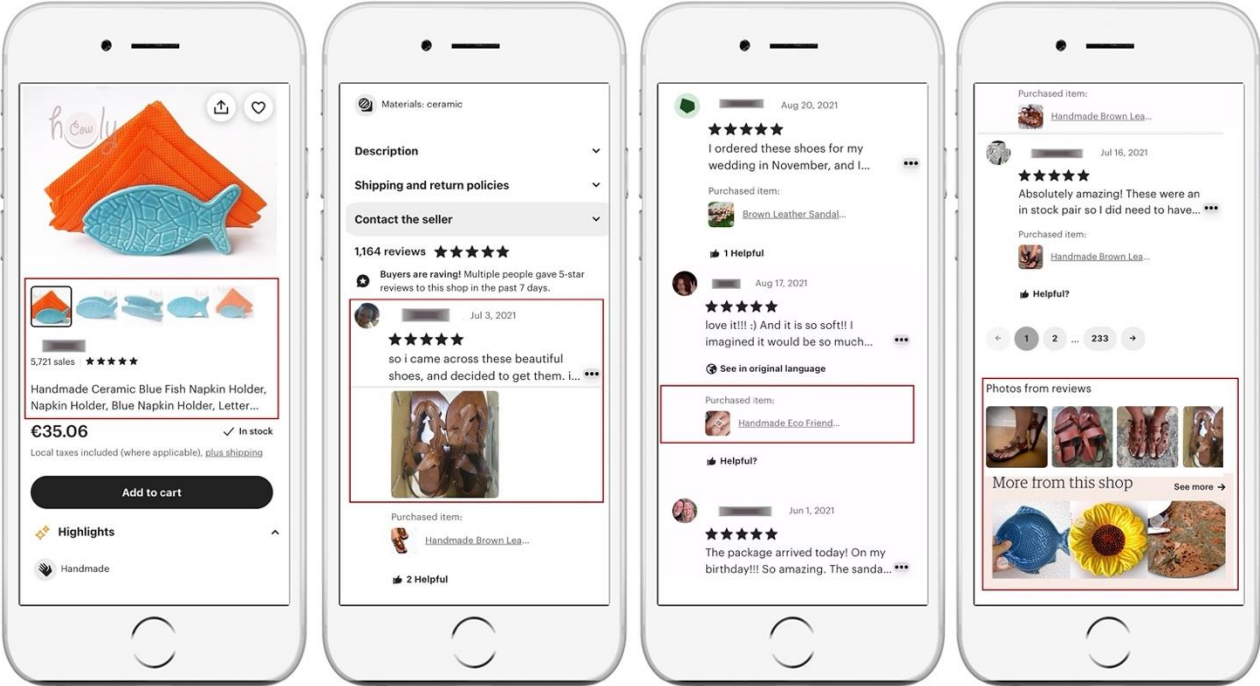
**Table 6. Negative binomial regression models for market appeal (coefficients reported)**

Variable	Baseline model		Model 1		Model 2		Model 3		Model 4		Model 5	
	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.
Seller quality	0.605***	0.007	0.604***	0.007	0.604***	0.007	0.604***	0.007	0.605***	0.007	0.604***	0.007
Experience	0.222***	0.003	0.222***	0.003	0.221***	0.003	0.222***	0.003	0.223***	0.003	0.223***	0.003
Competition (logged)	-0.581***	0.058	-0.587***	0.058	-0.586***	0.058	-0.590***	0.058	-0.583***	0.059	-0.585***	0.059
Gender	-0.032**	0.016	-0.031*	0.016	-0.031+	0.016	-0.033*	0.016	-0.034*	0.016	-0.036*	0.016
Narrative length (logged)	0.030**	0.014	0.030*	0.014	0.030*	0.014	0.031*	0.014	0.036**	0.014	0.037**	0.014
Narrative complexity	0.001*	0.001	0.001+	0.001	0.001+	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Narrative past focus	-0.135**	0.065	-0.133*	0.065	-0.138*	0.065	-0.138*	0.065	-0.132*	0.065	-0.135*	0.065
Narrative present focus	-0.082	0.071	-0.080	0.071	-0.082	0.071	-0.081	0.071	-0.077	0.071	-0.075	0.071
Narrative future focus	-0.074	0.090	-0.070	0.090	-0.074	0.090	-0.077	0.090	-0.074	0.090	-0.077	0.090
Category spanning	0.428***	0.044	0.371***	0.041	0.373***	0.040	0.368***	0.041	0.363***	0.040	0.362***	0.040
Categorical atypicality			-0.203***	0.034	-0.111***	0.051	-0.411***	0.082	-0.313***	0.052	-0.564***	0.122
Narrative abstraction					-0.030	0.055					-0.040	0.055
Narrative abstraction x Categorical atypicality					0.368*	0.146					0.329*	0.147
Narrative cohesion							-0.001**	0.001			-0.002	0.001
Narrative cohesion x Categorical atypicality							0.009**	0.03			0.013***	0.004
Narrative conventionality									0.100***	0.013	0.095***	0.013
Narrative conventionality x Categorical atypicality									0.134***	0.040	0.177***	0.043
Nationality		Yes		Yes		Yes		Yes		Yes		Yes
Product categories		Yes		Yes		Yes		Yes		Yes		Yes
Constant	2.574***	0.097	2.561***	0.097	2.554***	0.098	2.686***	0.109	2.460***	0.096	2.523***	0.111
Ln alpha	0.462	0.006	0.462	0.006	0.462	0.006	0.462	0.006	0.460	0.006	0.459	0.006
Log pseudo likelihood	-635025.20		-634989.3		-634983.18		-634975.32		-634879.9		-634860.26	
Wald Chi-square (d.f.)	40771.78 (134)		41166.07 (135)		41233.24 (137)		41095.34 (137)		41164.17 (137)		41163.04 (141)	
p-value	0.000		0.000		0.000		0.000		0.000		0.000	

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . N = 78,758

ONLINE APPENDIX

Figure A1. User experience: Screen shot of a product page that shows how the crafter's (atypical) categorical positioning is clearly visible on a product page



## Appendix A2. Why Stories Matter

We took several steps to probe the extent to which producers' narratives are factored into buyers' decisions. First, we examined Etsy forum by searching for posts that discuss the value of storytelling. Searching for occurrences of 'stor\*'; narrative', 'narratives', and 'about section' we found more than 150 threads. We examined all the threads so selected and found several posts discussing the role of sellers' story in the "About" section. These posts suggest that customers not only value but also expect a story to be there. For instance, consider this point raised by one of the sellers: *"When shopping on Etsy I always read the About Section to learn about the seller and what they create. It is my belief that failure to set up a complete shop experience for the customer equals lost sales."* One seller commented on this post saying that *"I use it and I've had a few buyers send me messages about it which has opened up an opportunity for positive exchanges and led to sales"*, while a customer followed up by saying that *"I also think the "about" section is important, especially when purchasing handmade items. I love to know what inspires people and how they learned and are perpetuating their craft."* Similarly, in a different thread directly inquiring about the extent to which buyers value the story behind a seller, one seller wrote that *"Customers love our "about" story in our profile. I get comments about it. They like to hear how someone got started or obstacles they surpassed to become who they are today"*, and a customer replied saying that *"I like reading the Seller's About page (if there is one) for a warm fuzzy story about what inspired the product. If it's cute enough, it will inspire me to buy"*. Table A2 at the end of this appendix reports an illustrative sample of posts highlighting customers and sellers' convictions about the role of storytelling in shaping meaning and influencing purchasing decisions. Collectively these posts suggest that customers seem to genuinely care about the story in the "About" sections, while sellers expect their market to be responsive to such stories.

Second, we interviewed a group of sellers and buyers asking them about the role of narratives in their experience on the platform. Specifically, we posted a call for interviews on different Etsy groups and Facebook pages, and 19 users got back to us. Two of them were customers, four sellers and 13 were both customers and sellers. Statements from our informants suggest that the narratives shared by crafters are relevant when evaluating a product, particularly for those customers who are also sellers. Several informants saw the purchasing experience as an opportunity to support a crafter and conveyed the idea that stories help sealing a deal by building a connection. One of the customers interviewed (who also run a shop on the platforms), for instance, noted that the 'About' section

*"is especially important for sellers as it helps customers connecting with them, their story and their values. We always want to support someone's business more if we feel we are like-*

*mindful, we share the same values, we appreciate their work and more than anything if we can picture the person behind the business and identify with them and/or their story”.*

Customers appear to see the story behind the sellers as a window into the seller’s life and a way to establish a sense of connection that may influence the purchasing decision. Another interviewee struck a similar note:

*“The about section gives us an idea of who we are buying from, what their values are and why we would want to support them in particular. It also reflects the style and the voice of the creator, or small brand and gives us the feeling of an intimate connection with them”.*

The same informant suggested that a story may sometimes become part and parcel of the customer’s user experience on the platform:

*“I have two types of customers, one who buys a listing and never asks any questions and may or may not give feedback. Then I have other customers who have carefully read my ‘about’ and write to me saying they really resonate with my work and style and have questions and requests about their order. Often, they comment on something in my about section that they relate to or inspires them.”*

Two Etsy habitual customers further confirmed the effect of sellers’ stories on their purchasing intentions, especially for the identity cues embedded in those narratives:

*“For me, as a buyer, I always read the about sections as I’m passionate about supporting small businesses”,*

*“If I am buying from someone on Etsy for the first time, ..., I like to check out who they are and what they are about, to help verify they are an individual artist / creative not a multinational corporate business”.*

Overall, these insights provide qualitative support for the conjecture that sellers’ narratives affect customers’ purchasing decision by creating resonance and shaping customers’ attitude toward sellers.

Finally, to further investigate the impact of producers’ narratives on the buying experience on Etsy, we devised a statistical approach. First, using the full sample of 192,305 crafters, we run a t-test to determine whether crafters who have a narrative in their home page are more successful than those who don’t. This analysis offers a preliminary indication that storytelling matters on Etsy, as crafters including a story in their profile sell on average 1361 products more than those who do not fill their ‘About’ section ( $p < 0.001$ , d.f. 192,303). Second, we estimated a negative binomial regression model using the number of sales as our dependent variable and a binary variable

(*narrative*) that takes value 1 if a crafter has a narrative on her profile as well as several controls (i.e., the quality of the seller, experience on the platform, reviews, and a binary variable for each of product category). Results confirm a positive and significant effect of narratives on crafters success ( $\beta = 0.347, p < 0.001$ ). We also run the same kind of analyses for atypical crafters. In the full sample, 21,544 crafters are categorized as atypical following our measurement strategy (11.2 %, in line with the sample used for the analysis). Among the atypical sellers, 7,939 (36.85 %) did not have a story in their shop page. Again, we run a t-test to compare the number of sales of the two groups of atypical crafters and we found that atypical crafters without a story sell, on average, 46% fewer products than the atypical crafters who use storytelling to contextualize their entrepreneurial effort ( $p < 0.001$  d.f. 21,542)

**Table A2. Collection of posts discussing the importance of narratives for both buyers and sellers retrieved from the Official Etsy Forums**  
<https://community.etsy.com/t5/Etsy-Forums/ct-p/forums>

	Thread title	Forum Section	Content
	Do Buyers want the Story?	Creative Process	<p>As we create items that we love and hope others do as well, make things that fill a need that buyers keep coming back for, or just passing along something old to be new again to someone else (to name a few)! What is the benefit in sharing the story?</p> <p>Calling on all the experienced Etsy creatives out their (from a First Timer on Etsy)!</p> <p>Do the majority of people like to read the story that inspired the item you're selling, or is a detailed description that's to the point without the mushy details make the sale? How much is TOO Much for a personal narrative? I would be so thankful for your insight!</p>
<b>Posts</b>			
1			<p>I like the story behind the shop and the seller in the 'About' section as I then feel like I am buying from a human being and I like to read about the small business I'm supporting. I don't think every product needs a story unless there is a very good reason for it. When it comes down to the product listing, you need the key information first then any additional information afterwards</p> <p>I like reading Seller's About page (if there is one) for a warm fuzzy story about what inspired the product. If it's cute enough, it will inspire me to buy.</p>
2			<p>Me personally I want the story. I'd rather look at the details later but the story helps me better understand the item.</p> <p>You have my attention for a certain amount of time, don't waste it by giving me a robotic speech please</p>
3			<p>Customers love our about story in our profile. I get comments about it. They like to hear how someone got started or obstacles they surpassed to become who they are today.</p>
4			<p>There is probably not much interest in a story of mass produced items, but when something is handmade one-of-a-kind, I do appreciate a short story as a buyer. I do read About section, and especially love photos of artists'/crafters' working space, see their hands making their items, their raw materials and their work in progress. As a seller, I try to include one photo in each listing of that item "in progress." When somebody orders custom, I always take pictures of a process and send it to my client as work progresses. They absolutely love it. And I appreciate that they care to know how their item is made. It makes me feel valued.</p>
5			<p>I would hope that people who buy from me want the story. I'm not sure they do though. They've certainly never responded as such in the feedback. Personally I do like the backstory to what I buy on Etsy because I understand that genuine sellers come from all walks of life and have all sorts of different set ups. I keep a bit of the 'story' for the about me page and then put all the rest of that behind the scenes stuff into my blog and my Instagram feed. If buyers really want to connect to a seller I think they are more likely to find them on social media to keep up with what's going on. I need to do more of the organic behind the scenes stuff.</p>

6 | As solely a buyer, I love stories behind items. But, most of all I'd like to know everything I could see if I was in a shop, but can't online. Too many sellers don't even bother to provide measurements, decent photos and even what things are made of. It's so frustrating.

Thread title	Forum Section	Content
Shop story	Managing your shop	Hey, my fellow Etsy goers! Quick question. I just started a new shop a few days ago. How detailed should my Shop Bio/Story be? I wrote petty much an essay for mine. I entail the moment I decided to sell things, why I like doing it, what I want the buyer to feel, etc. Is that off-putting for future consumers?

**Posts**

1 | Hi Beaded I just read your About Story and I thought it was great. I love how you spoke about what inspired you and I could tell by reading it it was genuine. Sometimes it's hard to put thoughts to paper but I think you nailed it.

2 | I wish you good luck in your shop. Remember if you ever get frustrated with your shop just look back at what you wrote and remember why you are here. I really appreciate sellers who take the time to tell us buyers the story of how their shops came into being. Your story is well-written and inspiring as well. I wish you success!

Thread title	Forum Section	Content
I don't have a story!	Creative Process	I'm struggling to think of what to put in my 'about' part of my shop as I don't feel that I have much of a 'story' and also I'm not good at talking about myself. I don't really have a workplace or a particular process when I make things (it's all rather random and disorderly and usually happens on my bedroom floor). I do everything myself so I don't have any partners or anyone like that to talk about either. A lot of what I make is made from used birthday cards or calendars etc, so I suppose I should talk about that but I'm not really sure how to 'sell' it well. Any advice (about anything to do with my shop) would be greatly appreciated, thanks

**Posts**

1 | Having that unique ability to appear at scraps (what very well might be "junk" to another), & design a card or picture is a God-given gift not all of us have. I had a friend who loved to quilt (& truth be told, was an excellent quilter); however, she bought only kits. On the other hand, I love imagining my own colors & fabrics in the same pattern. That's half the fun.

1 | I'd much more excited when I read about who, what, when, where, & how a shop owner creates .

Sit down and write the pro's and con's about your creative process. Pick out those that you're most proud of (ask family members, close friends) & then put it all into a short outline. Read other shop owner's stories (particularly, in your field of interest). That'll give you plenty of ideas. Keep a positive attitude about this process & you'll come up with a story that describes you to a "T."

2 | I always look for an About before purchasing - or at least some info in the seller profile. It can be anything really, but if a seller has not bothered with it, I generally don't buy from that shop. I also check the About section on websites I've never bought from before. I guess I want to know what I'm getting into, lol.

3 | This can depend on the buyer. Sometimes it helps and other times it isn't relevant. I've had quite a few repeat buyers ask questions or make comments regarding my About Section. I've also had people share it helped confirm I was the artist they had seen in person at a showing. And the area is scanned by

search engines so keywords can be beneficial in this area too.

Like @ZehOriginalArt I read sellers stories before buying.

4 Oh course you have a story! You just told a lot about yourself with this post which was something I feel most of us can relate too. When I read it, all I thought was "Yes, it sure is difficult to talk about ourselves. I relate to that and boy do I like her!" Over time it gets a little easier to market ourselves and it becomes part of our work. But, an Etsy About Page is simply a way to connect with our buyers. It can be utilized in many different ways. It can be about our work, or family, or area, about inspirations or simply about what makes us happy. It can be something related to our items or our hopes in how our items make people feel. It can be a short story or poem which has meaning to us. It can be about our pets or hobbies. The possibilities are endless. An About Page can be just as creative as the seller. It is simply a way to share a bit about either our personality or work. On Etsy, it is wonderful to know a shopper is buying from a real life human being. The About Section helps us with this.

Thread title	Forum Section	Content
Your Shop Story	Managing your shop	Hey everyone! Every shop has a distinct story that makes their products meaningful. Without your story, you wouldn't be here taking a chance on your goods. We want to know your story (and don't forget to link your shop so we can check it out)!

Thread title	Forum Section	Content
About Section Not Utilized	Creative Process	Noticed that many shops are not posting anything in their About Section. When shopping on Etsy I always read the About Section to learn about the seller and what they create. It is my belief that failure to set up a complete shop experience for the customer equals lost sales.

**Posts**

1 I feel the About section is important to have, no matter how brief or how few photos, because it is the only place people can see how long your shop has been open. As a long-time seller, that stamp of endurance is important to me. It's equally important to me as a buyer, though I will purchase from a short-time shop if they have something I want/need and look reputable.

2 I use it and I've had a few buyers send me messages about it which has opened up an opportunity for positive exchanges and led to sales. I feel it helps for two main reasons. Etsy has shared having an About Section helps a shop in their search status. I am sure this only a minimal amount but I need all the help I can get. And secondly, keywords can be placed in it which will be scanned by outside search engines. This also assists with getting found. The About Section does not necessarily have to be "about" the shop owner. Many people are shy or simply do not want to share particular information on the internet. This is very understandable. The About Section can be used simply to highlight products, show the quality of materials or shipping and/or highlight a region where the shop is located or is relevant to the items. Or it can even be a creative history lesson if vintage products are being sold and so on.....What's nice about Etsy is every seller is unique so the About Sections will vary greatly from shop to shop.

3 I also think the "about" section is important, especially when purchasing handmade items. I love to know what inspires people and how they learned and are perpetuating their craft. What I DON'T like to see are sob stories...it somehow feels way too personal. As a customer I don't want to know the details of a seller's personal crisis, whatever it may be. I'm not a family member or close personal friend so the spilling of guts makes me feel squicky and a little voyeuristic. I also think that someone missing that section may have something to hide. Btw, I too, miss the shop opening dates, which is why I placed mine in my banner. And, @SmudgePlant @I'm always happy to see pet pictures...;).

Thread title	Forum Section	Content
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Etsy Insights: Writing an engaging About section

Etsy Success

Hi! I'm Tess and I work on the Brand Content team here at Etsy. I create education for the Seller Handbook to help sellers improve their shops and I write shop features for the Etsy Journal. I also produce the Etsy Success podcast ([etsy.me/podcast](https://etsy.me/podcast)) where you can hear expert tips and insights straight from Etsy staff and your fellow sellers.

Your About section is a key touchpoint for connecting with your audience on Etsy, whether that means turning a browser into a buyer or earning a feature (on or off Etsy) to get more eyes on your shop. Plus, a completed About section can help your placement in Etsy search. Here are some tips for writing one that engages your target reader:

Grab their attention: Your first sentence should capture someone's interest and entice them to keep reading. Consider teasing a surprising fact or anecdote about your business to encourage shoppers to turn the metaphorical page.

Tap into your unique selling point: Think about what makes your shop different from the rest. Maybe you've developed an unusual technique for making your items, or you've committed to using only sustainable materials and packaging. The best way to hook your target audience is to provide a clear and compelling reasoning for why they should choose to buy from your specific shop. You can also use photos or videos to add a bit more color to your story.

Tell a story: I've worked on many Seller Handbook stories about shops that our team discovered simply by reading the About section. Calling out unconventional workspaces, dramatic career switches, and noteworthy side hustles are all signals to writers that you have a story that might appeal to their readers. Plus, people come to Etsy because they want to buy from a real person! So not only could these details get you press coverage, but focusing on real-life challenges, successes, and milestones can help you reach shoppers seeking that human connection.

What's your shop's "unique selling point"? Share what makes your products different in this thread.

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Thread title	Forum Section	Content
How important is the About section?	Managing your shop	Hey everyone! How important do you think the About section is in your shop? Do you change your About section photos? Do you read other shops' About sections? Do you think having a good/complete About section helps you make sales?Just wondering everyone's thoughts...

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Posts	
1	It is important. Buyers can get a sense of who you are. I don't read everyone's about page when I shop but I do leave shops that don't have one. I change it up from time to time. Oh and even if you don't think it is important, Etsy does. It's one of the things they list for having a good quality shop.
2	I agree. I love reading About sections, hearing the stories and seeing the spaces that inspire makers. Maybe it's because as a seller I know how much work goes into setting up/maintaining a shop. I wonder if buyers that are not sellers do the same?
3	<b>It add such a personal touch and makes it seem like we're shopping from a real person and not just the internet.</b>

Thread title	Forum Section	Content
Why is the "ABOUT" section now so prominent???	Managing your shop	Just wondered if someone on the design team for the new mobile site could explain why the " about" section is deemed to be so much more important and has prominent placement on the page than customers being able to view our items for sale??  I thought this was a shopping site, not Tinder!  Looking at my own stats, 141,000 page views.... Just 189 on my " about " page!!

Posts	
1	I'm not someone from the design team, but my own thoughts is that it's great to have everything on one page. People that don't really know Etsy (shoppers, not sellers), may not click through to all the other sections under the current design, as they don't know to look there. With it all on one page, About pages may increase buyer trust and interest to see RIGHT THERE who this person is, lending credence to the handmade nature of the site.

Notes: Description of the Forum sections - *Creative Process*: Chat about all things related to making your products come to life: design, materials, techniques, your workspace, and equipment. And don't forget work-life balance; *Managing your shop*: Whether you're brand new to Etsy or want to take your shop to the next level, here's the place to get tips & feedback from other shop owners, get advice about selling in person and online, ask questions about tools, learn about search optimization, discuss the Sell on Etsy app, and more. *Etsy Success*: Get insights and best practices from the Etsy team and other sellers, share your business knowledge, and participate in Q&As.

**Table A3. Complete list of topics and respective weights in the corpus (strongest keywords for each topic are in boldface)**

Topic #	Topic weight	Keywords	Topic #	Topic weight	Keywords
1	0.016	<b>wedding</b> , bride, bridal, accessory, dress	46	0.026	<b>product</b> , natural, skin, ingredient, organic
2	0.050	<b>gift</b> , special, personalize, create, make	47	0.105	<b>make</b> , quality, create, piece, item
3	0.009	<b>candle</b> , oil, scent, essential_oil, perfume	48	0.025	<b>fashion</b> , design, designer, accessory, brand
4	0.076	<b>vintage</b> , item, find, love, treasure	49	0.034	<b>house</b> , home, room, space, work
5	0.036	<b>order</b> , item, ship, day, shipping	50	0.022	<b>doll</b> , toy, make, child, miniature
6	0.015	<b>tea</b> , coffee, cup, bottle, wine	51	0.028	<b>beach</b> , sea, nature, tree, beautiful
7	0.044	<b>make</b> , size, hand, clean, dry	52	0.009	<b>music</b> , play, guitar, instrument, sound
8	0.058	<b>life</b> , time, feel, people, change	53	0.015	<b>god</b> , bless, give, rosary, serve
9	0.141	<b>time</b> , work, business, love, home	54	0.130	<b>day</b> , thing, make, time, find
10	0.012	<b>glass</b> , piece, stained_glass, art, work	55	0.060	<b>jewelry</b> , bead, make, piece, bracelet
11	0.020	<b>energy</b> , crystal, healing, spiritual, heal	56	0.022	<b>year</b> , diagnose, cancer, health, find
12	0.108	<b>make</b> , time, start, work, year	57	0.019	<b>wool</b> , silk, fiber, natural, linen
13	0.013	<b>flower</b> , floral, wreath, bouquet, make	58	0.030	<b>art</b> , draw, create, love, drawing
14	0.030	<b>clothing</b> , clothe, make, dress, fabric	59	0.022	<b>fabric</b> , quilt, make, sew, pillow
15	0.018	<b>girl</b> , make, bow, daughter, accessory	60	0.033	<b>baby</b> , child, make, kid, mom
16	0.117	<b>love</b> , create, life, world, bring	61	0.044	<b>style</b> , woman, design, fashion, wear
17	0.078	<b>sell</b> , year, start, business, store	62	0.068	<b>family</b> , mother, child, love, year
18	0.025	<b>print</b> , design, illustration, work, art	63	0.061	<b>design</b> , create, material, modern, piece
19	0.014	<b>farm</b> , horse, chicken, live, barn	64	0.055	<b>item</b> , find, store, sell, supply
20	0.036	<b>home</b> , decor, design, wall, style	65	0.012	<b>planner</b> , sticker, button, disney, pin
21	0.021	<b>paper</b> , card, stamp, hand, print	66	0.061	<b>work</b> , create, make, material, product
22	0.031	<b>crochet</b> , knit, yarn, pattern, make	67	0.014	<b>clay</b> , ceramic, pottery, piece, work
23	0.075	<b>world</b> , life, work, nature, beauty	68	0.015	<b>plant</b> , grow, garden, herb, seed
24	0.029	<b>vintage</b> , antique, item, piece, collection	69	0.014	<b>metal</b> , tool, make, work, hand
25	0.031	<b>wedding</b> , party, design, event, invitation	70	0.017	<b>jewelry</b> , stone, ring, gemstone, gold
26	0.043	<b>design</b> , graphic, designer, work, create	71	0.029	<b>costume</b> , make, mask, character, movie
27	0.018	<b>color</b> , blue, white, black, glitter	72	0.010	<b>light</b> , lamp, design, make, clock
28	0.011	<b>soap</b> , make, product, skin, natural	73	0.019	<b>photography</b> , photo, image, photograph, camera
29	0.119	<b>make</b> , love, thing, people, start	74	0.009	<b>case</b> , cover, design, phone, product
30	0.017	<b>animal</b> , bird, pet, fur, creature	75	0.018	<b>sign</b> , paint, wood, make, frame
31	0.044	<b>art</b> , work, artist, create, gallery	76	0.111	<b>create</b> , design, business, passion, creative
32	0.032	<b>dog</b> , pet, cat, collar, love	77	0.034	<b>wood</b> , furniture, piece, make, build
33	0.020	<b>leather</b> , make, hand, product, good	78	0.021	<b>jewelry</b> , metal, piece, make, silver
34	0.060	<b>jewelry</b> , make, design, range, color	79	0.044	<b>business</b> , company, team, work, family
35	0.025	<b>magazine</b> , feature, show, award, include	80	0.047	<b>sew</b> , sewing, machine, make, embroidery
36	0.032	<b>paint</b> , art, painting, artist, work	81	0.056	<b>live</b> , travel, home, love, mountain
37	0.112	<b>love</b> , craft, create, make, enjoy	82	0.009	<b>hair</b> , hat, tie, bow_tie, wear
38	0.016	<b>food</b> , cake, make, treat, cookie	83	0.106	<b>product</b> , quality, high, customer, good
39	0.036	<b>material</b> , make, product, recycle, environment	84	0.070	<b>school</b> , year, work, art, college
40	0.016	<b>book</b> , journal, write, read, story	85	0.113	<b>custom</b> , order, make, question, item
41	0.025	<b>print</b> , design, shirt, art, quality	86	0.022	<b>bag</b> , make, fabric, purse, design
42	0.061	<b>customer</b> , love, good, quality, great	87	0.026	<b>support</b> , donate, community, local, charity
43	0.007	<b>shoe</b> , pair, boot, sock, sandal	88	0.018	<b>design</b> , vinyl, custom, decal, engrave
44	0.030	<b>website</b> , link, sign, update, visit	89	0.116	<b>make</b> , start, friend, family, year
45	0.012	<b>map</b> , sport, game, bike, team	90	0.027	<b>culture</b> , traditional, artisan, tradition, craft

**Table A4. Robustness checks**

Variable	Model 6 (OLS)		Model 7		Model 8		Model 9		Model 10	
	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.
Seller quality	0.562***	0.004	0.604***	0.007	0.604***	0.007	0.604***	0.007	0.604***	0.007
Experience	0.246***	0.002	0.222***	0.003	0.224***	0.003	0.223***	0.003	0.223***	0.003
Competition (logged)	-0.386***	0.036	-0.585***	0.06	-0.588***	0.059	-0.570***	0.059	-0.585***	0.059
Gender	-0.023*	0.011	-0.036*	0.016	-0.031*	0.016	-0.036*	0.016	-0.035*	0.016
Narrative length (logged)	0.082***	0.01	0.036**	0.014	0.028*	0.014	0.034*	0.014	0.037**	0.014
Narrative complexity	-0.001	0	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Narrative past focus	-0.112+	0.044	-0.136*	0.065	-0.135*	0.064	-0.132*	0.065	-0.135*	0.065
Narrative present focus	-0.074	0.048	-0.078	0.071	-0.074	0.071	-0.070	0.071	-0.075	0.071
Narrative future focus	-0.038	0.063	-0.073	0.09	-0.077	0.09	-0.070	0.09	-0.077	0.09
Category spanning	0.568***	0.038	0.370***	0.040	0.363***	0.040	0.364***	0.040	0.362***	0.040
Categorical atypicality	-0.637***	0.093	-0.420***	0.107	-1.100***	0.123	-0.438***	0.128	-0.558***	0.121
Narrative abstraction	-0.117**	0.037	-0.015	0.055	0.612	0.123	-0.028	0.055	-0.042	0.055
Narrative abstraction x Categorical atypicality	0.216*	0.120	0.373*	0.147	0.651+	0.343	0.312*	0.147	0.330*	0.147
Narrative cohesion	-0.004***	0.001	-0.002*	0.001	-0.003+	0.001	-0.359***	0.044	-0.001	0.001
Narrative cohesion x Categorical atypicality	0.009***	0.003	0.011**	0.003	0.013***	0.003	0.259*	0.111	0.004***	0.001
Narrative conventionality	0.100***	0.009	0.323***	0.065	0.088***	0.013	0.083***	0.012	0.096***	0.013
Narrative conventionality x Categorical atypicality	0.283***	0.034	0.645***	0.195	0.160***	0.043	0.604***	0.007	0.177***	0.043
Nationality		Yes		Yes		Yes		Yes		Yes
Product categories		Yes		Yes		Yes		Yes		Yes
Constant	1.330***	0.074	2.618***	0.112	2.128***	0.130	2.779***	0.101	2.516***	0.112
Ln alpha			0.460	0.006	0.459	0.006	0.458	0.006	0.459	0.006
R-squared/ Log pseudo likelihood		0.5375		-634909.52		-634817.57		-634775.07		-634860.69
Wald Chi-square (d.f.)				41063.77 (141)		41274.85 (141)		41544.80 (141)		41166.07 (141)
p-value				0.000		0.000		0.000		0.000

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . N = 78,758

**Table A4. Robustness checks (continued)**

Variable	Model 11		Model 12		Model 13		Model 14		Model 15 (DV Reviews)	
	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.	Coeff.	Robust Std. Err.
Seller quality	0.604***	0.007	0.263***	0.005	0.605***	0.007	0.601***	0.007	0.605***	0.007
Experience	0.223***	0.003	-0.036***	0.002	0.223***	0.003	0.212***	0.003	0.274***	0.003
Competition (logged)	-0.583***	0.059	-0.266***	0.026	-0.583***	0.059	-0.569***	0.058	-0.405***	0.062
Gender	-0.035*	0.016	-0.056***	0.008	-0.036**	0.016	-0.03*	0.016	-0.014	0.015
Narrative length (logged)	0.035**	0.014	-0.084***	0.007	0.037***	0.014	0.033**	0.013	0.063***	0.013
Narrative complexity	0.001	0.001	0.002***	0.000	0.001	0.001	0.001	0.001	0.001	0.001
Narrative past focus	-0.132*	0.065	-0.053	0.034	-0.135**	0.065	-0.11*	0.063	-0.145*	0.061
Narrative present focus	-0.079	0.070	-0.046	0.036	-0.075	0.071	-0.071	0.068	-0.052	0.066
Narrative future focus	-0.071	0.090	0.036	0.046	-0.077	0.090	-0.104	0.086	-0.062	0.088
Category spanning	0.361***	0.040	0.183***	0.022	0.355***	0.041	0.336***	0.039	0.312***	0.038
Categorical atypicality	-0.186*	0.085	-0.461***	0.062	-0.564***	0.122	-0.512***	0.116	-0.560***	0.110
Seller status			0.882***	0.004						
Seller business scope					0.013	0.017				
Outliers							1.409***	0.072		
Narrative abstraction	-0.033	0.055	-0.021	0.029	-0.04	0.055	-0.062	0.053	-0.005	0.053
Narrative abstraction x Categorical atypicality	0.377**	0.145	-0.009	0.080	0.33+	0.147	0.316*	0.143	0.265+	0.137
Narrative cohesion	-0.419***	0.013	-0.008***	0.001	-0.002	0.001	-0.003*	0.001	-0.003*	0.001
Narrative cohesion x Categorical atypicality	-0.135	0.041	0.01***	0.002	0.013***	0.004	0.011***	0.003	0.013***	0.003
Narrative conventionality	0.110***	0.013	0.043***	0.007	0.095***	0.013	0.093***	0.013	0.087***	0.012
Narrative conventionality x Categorical atypicality	0.135***	0.043	0.176***	0.023	0.178***	0.043	0.165***	0.041	0.157***	0.039
Nationality		Yes		Yes		Yes		Yes		Yes
Product categories		Yes		Yes		Yes		Yes		Yes
Constant	2.563***	0.098	0.628***	0.060	2.530***	0.111	2.590***	0.107	0.444***	0.104
Ln alpha			-0.252	0.006	0.459	0.006	0.447	0.006	0.396	0.006
Log pseudo likelihood	-634834.71		-597880.97		-634859.78		-634167.58		-510915.58	
Wald Chi-square (d.f.)	41328.16 (141)		199362.39 (142)		41291.42 (142)		43336.91 (142)		41757.95 (141)	
p-value	0.000		0.000		0.000		0.000		0.000	

Note: +  $p < 0.1$ ; \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ . N = 78,758