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The Novelty Journey in Evaluation Processes: The Role of Personal Traits, Social Factors and Idea Framing in Shaping Audience Preferences

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The Novelty Journey in Evaluation Processes: The Role of Personal Traits, Social Factors and Idea Framing in Shaping Audience Preferences

A collection of four Research Papers

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THESIS OVERVIEW

This Ph.D. thesis includes a collection of four papers focused on the journey of novelty in evaluative processes: various experiments are employed to look at how individual traits, social factors and framing of ideas shape novelty's recognition. This project aims to increase the understanding of the underlying mechanisms in audience's evaluation processes of novelty – an area of scholarly inquiry that has received less attention with respect to the generation of novelty (Hennessey & Amabile, 2010; Anderson, Potočnik & Zhou, 2014; Berg 2016; Boudreau, Guinan, Lakhani, & Riedl, 2016; Cattani, Ferriani & Lanza, 2017; Mueller, Melwani, Loewenstein & Deal, 2017; Zhou, Wang, Song, & Wu, 2017) – by providing theoretical and empirical contributions to the literature on creativity, innovation, entrepreneurship and, more generally, on social evaluation. To explore the mechanisms that shape audience's evaluative outcome of novelty, different theoretical perspectives are adopted: specifically, the first two papers are experimental studies developed building on social-psychological literature; the third experimental paper takes a sociological lens; whereas, the fourth paper which consists of a literature review draws upon a broader range of scholarship on novelty evaluation - i.e. organizational theory, entrepreneurship, innovation, sociology and psychology.

The first paper investigates the moderating effect of a specific personality trait – temporal focus - on the recognition of novelty using two experiments: MTurk participants and NYU students. Specifically, building on temporal research, I explore whether individuals with a strong present focus are more willing to bear the risk of investing in highly novel ideas. The results confirm my expectations that a strong present focus favors the appreciation of high novelty.

The second paper is an empirical investigation of the power of framing in overcoming the liability of novelty. Building on Construal Level Theory, I conducted

two experiments to study how different ideas' framing shifts the evaluative outcomes. My findings consistently with the hypotheses show that evaluators appreciate more highly novel ideas when those ideas are framed in concrete "How" terms; whereas, the evaluator's appreciation of less novel ideas increases with abstract "Why" framing.

The third paper focuses on the recognition of novel contributions in the allocation of worth and builds upon sociological literature to examine how social factors – i.e. status and social ties – interplay in shaping audiences' evaluations. As expected, the experimental evidences show an interactive mechanism of status and social ties in advertising awards competition: specifically, when evaluative audiences have direct social ties with commercial's creators, the probability that the commercial is rewarded declines as the status of the commercial's creators increases.

Finally, the fourth paper consists of a literature review on the journey of novelty under a new theoretical perspective: indeed, this review synthesizes and integrates the existing literature into a coherent perspective built on the "*attention space problem*". The review also aims to establish connections across different research traditions and delineates viable recommendations for future researches.

Novelty Recognition: A Strong Present Focus to Foster

Radical Ideas

Abstract

Personal and contextual factors affect the evaluative process of novelty; this research explores one of the fundamental individual differences – temporal focus – in shaping novelty recognition. Specifically, we suggest that the recognition of novel ideas vary with audience’s temporal focus, which is defined as “the extent to which people characteristically devote their attention to perceptions of the past, present, and future” (Shipp, Edwards, & Lambert, 2009, p. 1). Building on temporal focus research, which associates strong present focus with inattentive consideration of future consequences, emphasis on novelty seeking, and willingness to take risk, we hypothesize that individuals with higher level of present focus would be more willing to invest in radical ideas with respect to incremental ideas. Two experiments, in which the audiences’ temporal focus was measured and the idea’s novelty was manipulated, confirmed the expectation that a strong present focus leads people to be more likely to invest in highly novel ideas. These findings contribute to the literature on creativity and, more generally, to the growing body of research that investigates the role of audiences in evaluation. It offers also practical implications by informing innovative organizations on how composing evaluative committees to favor novelty recognition.

Key words: Novelty; Evaluation; Audiences; Temporal Focus.

Manuscript under preparation

INTRODUCTION

Who can recognize novel ideas? Who is more prone to favor novelty? Decision-makers, gatekeepers, managers, critics, consumers strive for novelty, but very often highly novel ideas become “flops” rather than “hits.” Many of the greatest novel ideas of all time initially were rejected: John Harrison’s marine chronometer struggled for almost fifty years before being recognized as the most effective means to measure the longitude at sea (Cattani, Ferriani & Lanza, 2017); Alfred Wegener’s theory of continental drift was rejected as false by leading scientists and, only, forty years later was accepted as a scientific fact (Oreskes, 1999); Geroge Orwell’s novel *Animal Farm* was rejected by the editor before becoming an American classic (Mueller, Melwani, Loewenstein & Deal, 2017).

The above vignettes suggest how the journey of novel ideas tends to be challenging and fraught with uncertainty (Perry-Smith & Mannucci, 2017). Although the problem of novelty recognition is well-known among creativity and innovation scholars (Staw, 1995; Mainemelis, 2010; Zhou, Wang, Song, & Wu, 2017), it nevertheless rests an unresolved puzzle (Mueller et al., 2017). Research on creativity has primarily been concerned with the generation of novel and useful ideas, much less with their recognition (Hennessey & Amabile, 2010; Anderson, Potočnik & Zhou, 2014). However, novelty recognition “is the crucial starting point in the long process of putting new ideas generated into good use” (Zhou et al., 2017) and, scholars agree that novel ideas need to be appreciated by relevant social audiences (e.g., peers, critics, or users) before achieving success (Adarves-Yorno, Postmes & Haslam, 2007; Cattani & Ferriani, 2008; Cattani, Ferriani & Allison, 2014; Perry-Smith & Mannucci, 2017; Wijnberg, 1995; Wijnber & Gemser, 2000). Scholars have started to devote growing attention to the process of novelty recognition focusing on the evaluative audiences: for instance,

inquiry has shown that evaluators' cognitive styles, regulatory focus or culture may alter novelty evaluation (Berg, 2016; Loewenstein & Mueller, 2016; Mueller et al., 2017; Zhou et al., 2017). Overall, these works suggest that audiences evaluate novelty differently because of their heterogeneity in personal and contextual factors.

Prior research in organization and strategy has emphasized that one key individual difference in affecting evaluations and decision-making is the psychological view of time (Bluedorn & Denhardt, 1988, Kunisch, Bartunek, Mueller & Huy, 2017), and that time forms the basis of individuals' choices (Nadkarni & Chen, 2014). Indeed, also psychologists have devoted much effort to study temporal construct and its influence in human decision and behaviors (for instance, Zimbardo & Boyd, 1999; Holman & Silver, 1998). Temporal focus (also known as temporal orientation or time perspective) has received particularly attention (for instance see Shipp, Edwards, & Lambert, 2009) because of its relevance in strategic decision-making. For instance, it has been explored the effect of CEOs' temporal focus on new product introduction (Nadkarni & Chen, 2014). Yet, somewhat surprisingly, the causal mechanism that drives the relation between personal temporal focus and evaluation of new has not been illustrated so far. Specifically, to the best of our knowledge, to date no study has revealed how individual differences in temporal focus shape novelty evaluation. We argue that the reasons for this lack of research are twofold: first, scholars have only recently started to conceptually differentiate novelty from creativity (Diedrich, J., Benedek, Jauk & Neubauer, 2015; Zhou et al., 2017) and proposed to separate the two key dimensions of the creativity's definition: novelty and usefulness (Amabile, 1996; Hennessey & Amabile, 2010). Second, the effect of time as a feature of the context in which individuals operate (e.g., time pressure, temporal distance), and as a personal construct has been extensively studied, but, by scholars interested in the generation of creative ideas (e.g., Antes & Mumford, 2009; Runco & Cayirdag, 2011).

Temporal research asserts that people display differences in their experiences of the past, the present and the future (Zimbardo & Boyd, 1999; Shipp et al., 2009) and, in particular, defines temporal focus as “the extent to which people characteristically devote their attention to perceptions of the past, present, and future” (Shipp et al., 2009, p. 1). Such works showed that temporal focus is associated with other personality traits. Specifically, with respect to the present focus, empirical results indicate that people with a stronger attention to the present neglect the consideration of future consequences, emphasize novelty seeking, and are more willing to take risk (Zimbardo & Boyd, 1999; Shipp et al., 2009). Based on this, we suggest that the individual temporal dimension of present focus is extremely relevant in shaping the recognition of novelty. More specifically, drawing on the prior argumentation, we propose that a strong present focus can favor novelty recognition: indeed, we expect evaluative audiences with a strong present focus to be more willing to bear the risk of investing in highly novel ideas.

In the subsequent two experiments, to explore our prediction that the recognition of novel ideas varies with evaluative audiences’ present focus, we manipulate the degree of novelty (low vs. high) of an idea holding its usefulness constant, measure audiences’ temporal focus and examine their interaction effect on novelty recognition (i.e., investment propensity). Study 1 tests our expectation using MTurk pool, whereas Study 2 is a replication study with a sample of subject students.

STUDY 1

Method

Participants. Three hundred participants (51.7% female, *M*_{age}=35.65 years, 84.7% Caucasian) were recruited using MTurk and received 1.50 dollars. We ensured data quality and removed inattentive responses by using catch questions (Mason & Suri, Denise Falchetti – Ph.D. Thesis

2011; Fiske, 2016; Curran, 2016; see the *Supplementary Material* for more details).

Material and Procedure. Participants were told that the study consisted of different surveys, administered together for convenience. Present focus was measured by using the 4 items of the present sub-dimension from the temporal focus scale (TFS; Shipp et al., 2009). Sample item includes “I live my life in the present” ($\alpha=.872$). We also used the remaining 8 items of the TFS to measure the participants’ past focus ($\alpha=.937$, a sample item includes “I replay memories of the past in my mind”), and future focus ($\alpha=.900$, a sample item includes “I think about what my future has in store”) in order to ensure completeness. The TFS asked participants to rate on a 7-point scale how often they thought about each time frame from 1 (never) to 7 (constantly). Subsequently, participants were randomly assigned to one of the two experimental conditions –lowly novel idea ($n = 147$) or highly novel idea ($n = 153$). The two ideas that differed in the degree of novelty were about the development of a folding bike: a high novelty and a low novelty bike (the scenarios were reported in the *Supplementary Material*). The novelty’s recognition was measured by asking participants their likelihood of investing in the idea on a 7-point scale (1 = “Extremely Likely”, 7 = “Extremely Unlikely”)¹.

We included a novelty manipulation check by asking participants to rate the novelty of the idea on a 7-point scale (1 = not at all, 7 = extremely) using the following items: novel, unique, original and creative ($\alpha =.905$). Finally, since we decided to keep the two key dimensions that define creativity – i.e., novelty and usefulness (Amabile, 1996; Hennessey & Amabile, 2010) – separate and focus only on the appreciation of novelty, we ensure to hold the usefulness of the two novel ideas constant by requiring participants to assess their perception of usefulness on a 7-point scale with these items:

¹ To make the results easily interpretable, we reversed the coding for *Investment Propensity*: higher values of *Investment Propensity* correspond to a higher probability of investing in the idea.

functional, useful, workable and practical ($\alpha = .891$)².

Results

Controls. The two groups differ in terms of age ($F(1, 298) = 6.85; p = .009; \eta^2 = .022$) and ethnicity ($F(1, 298) = 4.29; p = .039; \eta^2 = .014$). However, both variables were unrelated to the investment propensity (respectively, $r = -.007; p = .906$ and $r = .041; p = .482$). Thus, the differences in age and ethnicity could not explain any observed difference in the investment propensity's score. Below, we described the analysis run without age and ethnicity; yet, in Table 2, we reported all the models tested including controls (see Table 1 for correlations).

<Insert Table 1 about here>

Manipulation Check. The effectiveness of the novelty manipulation was tested running a one-way ANOVA. The results revealed that the difference on novelty between the two ideas was significant ($F(1, 298) = 13.55, p < .001, \eta^2 = .043$): participants perceived the high novelty idea ($M=5.42, SD= 1.12$) as more novel than the low novelty idea ($M=4.91, SD= 1.28$). In addition, an omnibus F-test showed that the highly novel idea was perceived as useful as the lowly novel idea, $F < 1, p = .98$ ($M_{\text{incremental}}=5.29, M_{\text{radical}}=5.30$). Finally, participants completed demographic questions.

Investment Propensity. To test whether present focus moderates the relationship between novelty and investment propensity, we regressed investment propensity on novelty, the present focus, and their interaction. The results revealed a significant interaction effect ($B = .51, SE = .18, p = .005, \beta = .80$), along with a significant main effect of novelty ($B = -2.48, SE = .92, p = .008, \beta = -.74$). These results suggest that

²The novelty and usefulness's items were adapted from the Creative Product Semantic Scale (O'Quin & Besemer, 1989).

the propensity to invest in a more or less novel idea vary depending on audiences' present focus. To decompose this interaction, we used the Johnson-Neyman technique to identify the ranges of the present focus where the simple effect of the manipulation was significant. This analysis revealed that there was a significant negative effect of novelty on investment propensity for any value of the present focus less than 3.69 ($B_{JN} = -.6$, $SE = .30$, $p = .05$); and, there was a significant positive effect of novelty on investment propensity for any value of the present focus more than 5.79 ($B_{JN} = -.47$, $SE = .24$, $p = .05$). Overall, Study 1 demonstrates that individuals with a stronger present focus have higher probability to invest in highly novel ideas with respect to less novel ideas. In Table 2, we reported the results of all the analysis that we run including controls. Figure 1 graphs the regression lines controlling for past focus, future focus, age and ethnicity.

<Insert Table 2 about here>

<Insert Figure 1 about here>

STUDY 2

Method

Participants. Two hundred and fifty-three participants were recruited from the online NYU subject pool for the chance of winning a \$25 Amazon.com gift card. The final sample consisted of one hundred and twenty-three participants (74.8% female, $M_{age}=23.46$ years, 38.2% Caucasian and 39.8% Asian) because we had to remove subjects who failed a catch question and one subject who dropped out of the survey³.

Material and Procedure. The procedure and the material used for this experiment was

³ Since 2 participants in the sample of 123 did not answer the demographic question on age, their responses when we run the analyses with age as a covariate were excluded.

the same as described for Study 1 and participants were randomly assigned to the high novelty (n = 59) or to the low novelty (n = 64) conditions. The TFS was used to measure present focus ($\alpha=.726$), past focus ($\alpha=.867$) and future focus ($\alpha=.829$). To ensure the novelty manipulation was effective holding constant the perceptions of usefulness, we used the novelty and usefulness scale of Study 1 (respectively, $\alpha =.929$ and $\alpha =.823$).

Results

Controls. The two groups were homogeneous between conditions with respect to the demographic variables. For consistency with Study 1, in Table 4, we reported the models run including controls (see Table 3 for correlations).

<Insert Table 3 about here>

Manipulation Check. A one-way ANOVA showed that participants in the high novelty condition rated the folding bike as significantly more novel ($F(1, 121) = 17.2, p < .001; \eta^2 = .124, M=4.96, SD= 1.22$.) than participants in the low novelty condition ($M=4.05, SD= 1.23$). The highly novel idea was perceived as useful as the less novel idea ($F < 1, p = .966$.; $M_{\text{incremental}} = 5.1, M_{\text{radical}} = 5.09$).

Investment Propensity. The moderating effect of present focus was tested running the same regression model of the prior study. The results revealed a significant interaction effect ($B = .8, SE = .35, p = .024, \beta = 1.09$), along with a marginally significant main effect of novelty ($B = -3.16, SE = 1.63, p = .055, \beta = -.92$). These results are consistent with the previous output, and showed that the audiences' present focus affected the propensity to invest in novel ideas. As in Study 1, we probed the interaction using the Johnson-Neyman technique: the analysis revealed that there was a significant positive effect of novelty on the investment propensity for any value of the present focus more than 4.74 ($B_{\text{JN}} = .61, SE = .31, p = .05$). In sum, Study 2 replicated the results that the

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likelihood to invest in the highly novel idea increased with strong present focus. Table 4 reported the output of the analysis with the control variables. Figure 2 graphs the regression lines controlling for past focus, future focus, age and ethnicity.

<Insert Figure 2 about here>

GENERAL DISCUSSION

Our findings confirmed the initial expectation that individual differences in temporal focus affect novelty recognition by showing the influence of evaluative audiences' *present focus* on their likelihood to support (i.e., invest in) a novel idea. In particular, a strong present focus leads audience members to appreciate high novelty. These results are consistent with prior research that suggests how a strong present focus makes people take risk and seize opportunities (Shipp et al., 2009). As high novelty is usually perceived as being riskier than low novelty, our study shows how people are more willing to invest in highly novel ideas when they are more focused on the present.

Our results offer a series of theoretical contributions. First, we address a call to investigate the "effects of general or specific personality dimensions on innovative behavior or implementation of creative ideas" (Anderson et al, 2014, p. 1303; see also Perry-Smith & Mannucci, 2017) by examining the influence of a critical personality dimension – i.e., temporal focus – on novelty appreciation. Second, holding the usefulness of novel ideas constant, we add to the recent work on creativity which emphasis the need to study novelty separately from creativity because "novelty recognition is conceptually different from creativity recognition" (Zhou et al., 2017). Finally, we contribute to the growing body of literature that investigates how the perception of novelty and its appreciation depends upon audiences' heterogeneity in terms of individual characteristics (i.e., regulatory focus in Zhou et al., 2017), ethnicity

(Loewenstein & Mueller, 2016) or decision-making roles (Berg, 2016; Mueller et al., 2017). Our findings have also relevant practical implications as they can inform the composition of evaluative committees. Since individuals focused on the present tend to favor high novelty, a committee composed of individuals with a strong present focus will evaluate highly novel ideas more positively. Another related implication is whether committees whose members are heterogeneous in temporal focus are more likely to recognize the *best* radical ideas than committee whose members are homogenous in temporal focus: differences in temporal focus lead individuals to value different information, behaviors and so make different decisions (Waller, Conte, Gibson & Carpenter, 2001; Shipp et al., 2009). Future research can probe this question by examining temporal focus at the group level. In general, our study suggests selecting individuals with strong present focus for evaluative roles when the goal is to foster and support innovation.

In sum, by showing that the recognition of novelty varies with audiences' *present focus*, we not only shed light on an important, yet understudied, condition favoring the recognition of novel ideas, but we also emphasize the need to further investigate the effect of personality traits in novelty recognition at different level of analysis.

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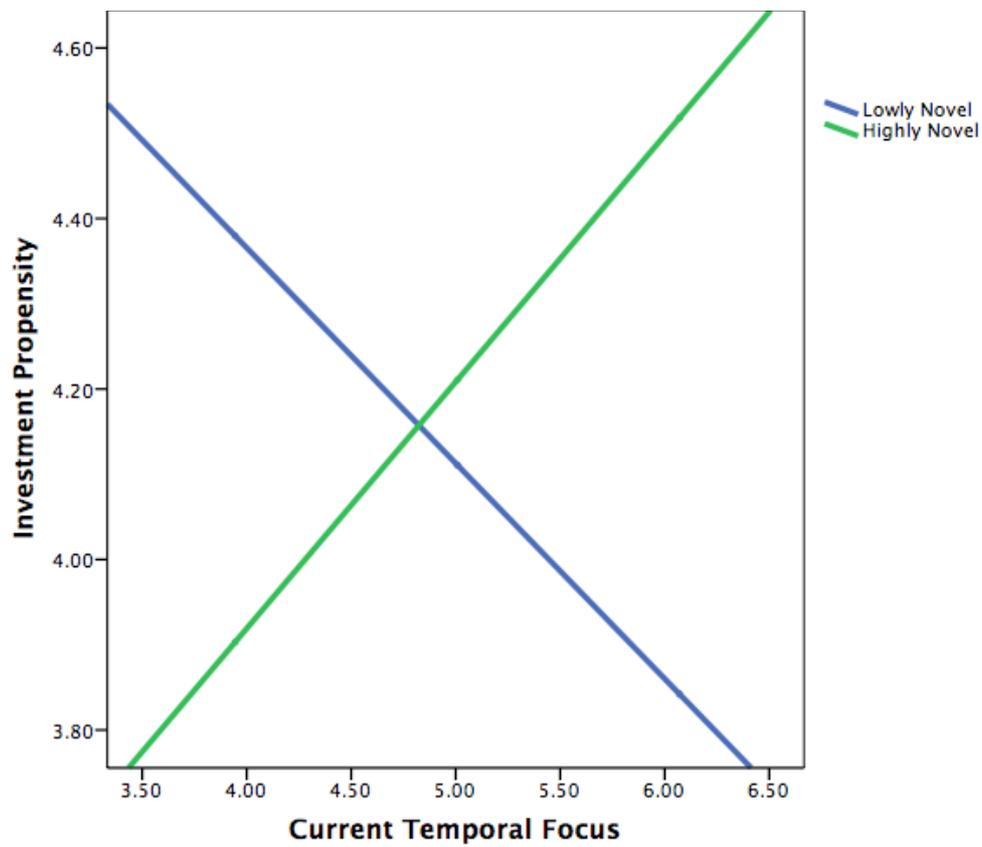
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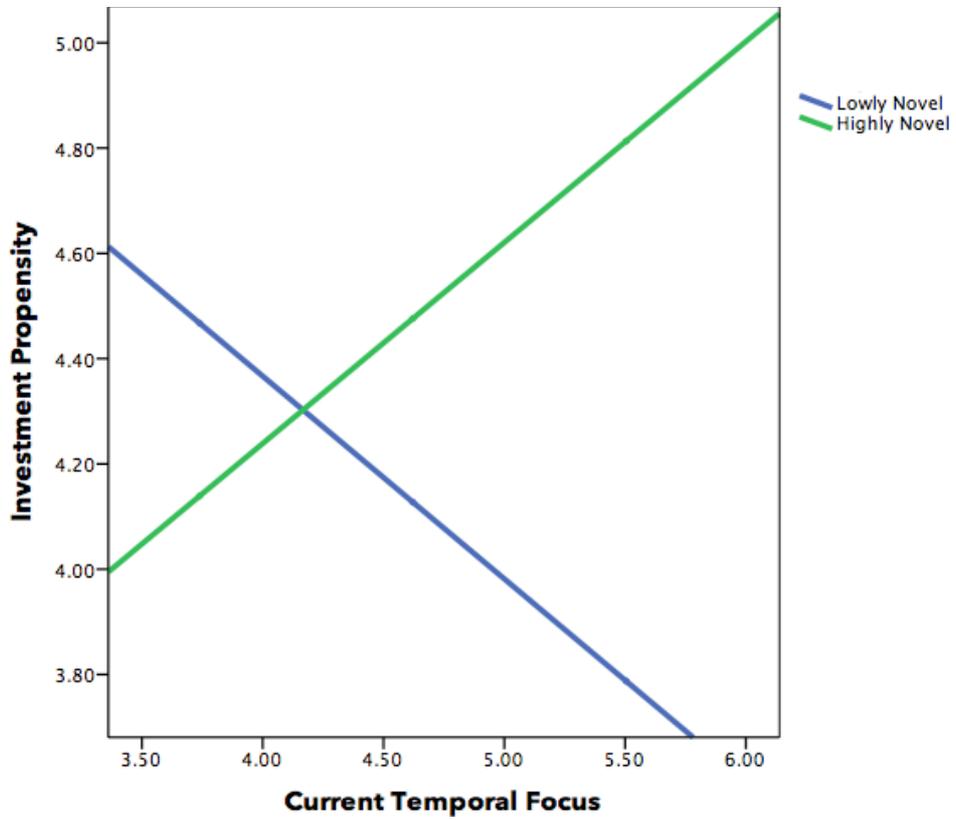
FIGURES AND TABLES

Figure 1.
The effect of Novelty and Present Focus on Investment Propensity
(Study 1)



Regression lines plotted using all the control variables (Model 3)

Figure 2.
The effect of Novelty and Present Focus on Investment Propensity
(Study 2)



Regression lines plotted using all the control variables (Model 3)

Table 1.
Pearson correlations (Study 1)

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|----------------------------------------------------|--------|--------|--------|---------|--------|------|----|
| 1. Novelty (0=Incremental; 1=Radical) | 1 | | | | | | |
| 2. Present TF | .017 | 1 | | | | | |
| 3. Past TF | .007 | -.086 | 1 | | | | |
| 4. Future TF | -.050 | .297** | .264** | 1 | | | |
| 5. Age | .150** | .136* | -.145* | -.192** | 1 | | |
| 6. Ethnicity | -.119* | -.103 | .104 | .113 | -.126* | 1 | |
| 7. Inv. Propensity | .022 | .073 | .067 | .193** | -.007 | .041 | 1 |

* $p < 0.05$

** $p < 0.01$

Table 2.
Regression Models for Investment Propensity (Study 1)

| | Model 1 | | | | Model 2 | | | | Model 3 | | | |
|------------------------------------------|-----------------------|-------|-------|---------|-----------------------|-------|------|---------|-----------------------|-------|------|---------|
| | <i>Unstandardized</i> | | | | <i>Unstandardized</i> | | | | <i>Unstandardized</i> | | | |
| | <i>Coeff.</i> | | | | <i>Coeff.</i> | | | | <i>Coeff.</i> | | | |
| | B | SE | p | β | B | SE | p | β | B | SE | p | β |
| Novelty (0=Incremental; 1=Radical) | - 2.477 | .922 | .0076 | -.741 | - 2.567 | .909 | .005 | -.768 | - 2.615 | .913 | .004 | -.782 |
| Present TF | -.146 | .129 | .259 | -.093 | -.244 | .132 | .064 | -.155 | -.253 | .134 | .060 | -.161 |
| Novelty x Present TF | .509 | .180 | .005 | .799 | .533 | .178 | .003 | .837 | .542 | .178 | .003 | .851 |
| Past TF | | | | | .029 | .078 | .713 | .022 | .029 | .078 | .708 | .022 |
| Future TF | | | | | .275 | .090 | .002 | .190 | .280 | .093 | .003 | .193 |
| Age | | | | | | | | | .005 | .009 | .544 | .036 |
| Ethnicity | | | | | | | | | .052 | .088 | .555 | .034 |
| N | | 300 | | | | 300 | | | | 300 | | |
| R ² _{change} | | .026 | | | | .028 | | | | .029 | | |
| Model R ² | | .032 | | | | .067 | | | | .069 | | |
| Johnson-Neyman moderator values: | | | | | | | | | | | | |
| Significance | | | | | | | | | | | | |
| region below | | 3.694 | | | | 3.721 | | | | 3.754 | | |
| Significance | | | | | | | | | | | | |
| region above | | 5.791 | | | | 5.617 | | | | 5.629 | | |

Table 3.
Pearson correlations (Study 2)

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. |
|---------------------------------------------|-------|--------|-------|-------|-------|---------|----|
| 1. Novelty (0=Incremental; 1=Radical) | 1 | | | | | | |
| 2. Present TF | -.078 | 1 | | | | | |
| 3. Past TF | -.156 | .038 | 1 | | | | |
| 4. Future TF | .071 | .377** | .226* | 1 | | | |
| 5. Age | -.094 | -.014 | -.164 | -.007 | 1 | | |
| 6. Ethnicity | .080 | .011 | .000 | -.083 | -.164 | 1 | |
| 7. Inv. Propensity | -.144 | .015 | .158 | .035 | -.048 | -.263** | 1 |

* p < 0.05

** p < 0.01

Table 4.
Regression Models for Investment Propensity (Study 2)

| | Model 1 | | | | Model 2 | | | | Model 3 | | | |
|------------------------------------------------------------------|-----------------------|-------|------|---------|-----------------------|-------|------|---------|-----------------------|------------------|------|---------|
| | <i>Unstandardized</i> | | | | <i>Unstandardized</i> | | | | <i>Unstandardized</i> | | | |
| | <i>Coeff.</i> | | | | <i>Coeff.</i> | | | | <i>Coeff.</i> | | | |
| | B | SE | p | β | B | SE | p | β | B | SE | p | β |
| Novelty (0=Incremental; 1=Radical) | 3.164 | 1.631 | .055 | -.925 | 3.189 | 1.632 | .053 | -.932 | 3.196 | 1.603 | .049 | -.935 |
| Present TF | -.351 | .229 | .129 | -.181 | -.334 | .242 | .170 | -.172 | -.385 | .239 | .110 | -.198 |
| Novelty x Present TF | .796 | .349 | .024 | 1.089 | .787 | .349 | .026 | 1.076 | .767 | .342 | .027 | 1.050 |
| Past TF | | | | | -.211 | .146 | .151 | -.134 | -.187 | .144 | .198 | -.119 |
| Future TF | | | | | -.013 | .161 | .936 | -.008 | .047 | .157 | .765 | .029 |
| Age | | | | | | | | | .039 | .036 | .276 | .098 |
| Ethnicity | | | | | | | | | .259 | .083 | .002 | .277 |
| N | | 123 | | | | 123 | | | | 121 ¹ | | |
| R ² _{change} | | .041 | | | | .040 | | | | .037 | | |
| Model R ² | | .062 | | | | .080 | | | | .156 | | |
| Johnson-Neyman moderator values: Significance region above | | 4.745 | | | | 4.876 | | | | 5.062 | | |

¹: Since 2 participants in the sample of 123 did not answer the questions about their Age, their responses were not included in Model 3 where we included Age as a covariate.

SUPPLEMENTARY MATERIAL

STUDY 1

Participants

To ensure that participants paid attention to the questionnaire, we included catch questions that participants had to pass for completing the study. If participants gave the wrong answer to these questions they were immediately not allowed to go on with the study and were automatically replaced with other respondents. We warned participants in the MTurk's recruitment message to carefully read all the questions for participating in the study. These procedures are strongly recommended to assure data quality and remove inattentive responses especially in online pools (Mason & Suri, 2011; Fiske, 2016; Curran, 2016).

NOVELTY STIMULI

Low Novelty Idea:

The **idea** is to make a **folding bike** with these characteristics:

- **Weight:** the bike weighs about **17 lbs** (8 kg), while existing folding bikes weigh on average between 22 and 31 lbs (10-14 kg).
- **Flexibility:** the bike can be folded in half and carried like a **suitcase** using the handlebar.
- **Headlights:** the bike is equipped with front and rear headlights. The cyclist can switch on and off the headlights, and **manually** adjust their direction.
- **Anti-theft Device:** the bike is equipped with an anti-theft mechanism integrated into the handlebar. The handlebar is **conformable:** the cyclist can extend the handlebar and turn it into a security lock. A key unlocks it.

High Novelty Idea:

The **idea** is to make a **folding bike** with these characteristics:

- **Weight:** the bike weighs about **9 lbs** (4 kg), while existing folding bikes

weigh on average between 22 and 31 lbs (10-14 kg).

- **Flexibility:** the bike has **no spokes**, can be folded and carried by putting the bike into a **backpack**.
- **Photosensitive Headlights:** the bike is equipped with front and rear **photosensitive** headlights. The headlights are switched on and off, and adjusted **automatically**.
- **Biometric Anti-theft Device:** the bike is equipped with a **biometric** anti-theft mechanism integrated into the handlebar. The handlebar is **conformable**: the cyclist can extend the handlebar and turn it into a security lock. The cyclist's **fingerprint** unlocks it.

Overcoming the Liability of Novelty: The Power of Framing

Abstract

When is novelty more likely to elicit a favorable evaluation? Building on social psychology research, which shows that mental construals influence evaluation and decision-making, we argue that the appeal of novel ideas and the willingness to invest in them vary with the mental processes through which audiences evaluate them. We conducted a series of experiments to study how different levels of mental construals shift the evaluation outcomes. Our findings show that evaluators appreciate more (i.e., like more and are more willing to invest in) highly novel ideas when those ideas are framed in concrete “How” terms; whereas the evaluator’s appreciation of incremental ideas increases with abstract “Why” framing. That is, which type of linguistic framing is more or less effective depends on the degree of novelty (high vs. low) of those ideas. Also, we find that when novelty is framed in “How” terms evaluators prefer more novel ideas over incremental ones, but when novelty is framed in “Why” terms this difference disappears, suggesting that an abstract framing decreases the appeal gap between the more novel and the less novel ideas. Finally, we unpack the underlying cognitive process by providing evidence of the mediating role of perceived usefulness. Focusing on the *framing* of novel ideas and marrying it with construal level theory offers a number of contributions to research on innovation and entrepreneurship and, more generally, social evaluation. In particular, we generate insights into how innovators can deploy linguistic strategies to shape audiences’ perceptions of their novelty claims.

Key words: Novelty; Language; Evaluation; Audiences; Innovation; Entrepreneurship; Construal Level Theory; Experiments.

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INTRODUCTION

When is novelty more likely to elicit support from relevant audiences? Novelty is a quality that emerges from actions that combine elements of otherwise disconnected categories. Many studies demonstrate that such novel combinations hold the potential for great impact and change, yet they also consistently find that categorical mixing commonly receives reproach rather than support (March, 2010, Chap. 4; De Vann, Stark & Vedres, 2015). This devaluation is intrinsic to the paradoxical nature of novelty. On the one hand, creating something genuinely new requires breaking out of existing categories, often by reconfiguring and recombining them in atypical ways. But the outcomes of atypical recombination are less likely to be meaningfully and positively recognized by relevant audiences (Uzzi, Mukherjee, Stringer, & Jones, 2013; Augier, March and Marshall, 2015), sometimes resulting in false negatives. As pointed out by Mainemelis (2010: 558) “when first proposed, new ideas are often rejected because they are perceived as weird, inappropriate, unworkable, or too risky, but these same ideas may later result in an outcome that the social context accepts as useful and breakthrough.” Creative industries in particular seem to abound with cases in which key resource providers passed over or even disparaged novel ideas that subsequently proved to be highly valuable. Notorious examples include such smashing hits as *Star Wars* (Bach, 1985), *Seinfeld* (Grant, 2016, Chap. 2), and *Harry Potter* (Licuanan, Dailey & Mumford, 2007), which were all turned down multiple times as cultural oddities before gaining recognition.

The challenge faced by innovators seeking to elicit support for their ideas is especially acute in those situations where evaluative feedbacks must be given before any tangible product is produced and/or before reputational information becomes available to relevant audiences (Elsbach & Krmaer, 2003). In fact, in many settings – including marketing, new product development, pitch contests, film production, and venture capital funding – assessing the potential of new ideas is

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done initially and primarily on the basis of subjective evaluations of oral or written narratives. One example of the oral mode is given by extemporaneous stories or “small narratives” (Hjorth & Steyaert, 2004: 4) that innovators may share in their conversations with clients, funders, patrons, or employers. The oral mode also includes the proverbial 5-minute verbal pitch to such audiences as media representatives, bankers, business angels or venture capitalists. Examples of the written mode include executive summaries, storylines, or “minimal narratives” (Czarniawska, 1998: 17) that appear in product packages, pitch decks, promotional brochures, as well as longer narratives like business plans or story plots that may be submitted to key audiences for evaluation (Martens, Jennings, & Jennings, 2007).

Despite the frequency with which audiences across creative fields are expected to evaluate novelty claims by creators who have not yet realized any tangible results and hence are most dependent on narratives, little research exists that attends to the structural properties of such narratives and their effect on the recipients’ evaluative responses. The work done so far highlights three primary classes of mechanisms affecting the reception of novelty. One approach is concerned with the network structures that enable creators to win social support for their ideas (Cattani & Ferriani, 2008; Baer, 2010; Perry-Smith & Mannucci, 2015). Another line of scholarship has focused on the role of socially derived individual signals, such as reputation, affiliations, status, and categorization cues (Elsbach & Kramer, 2003; Braden, 2009; Rossman, Esparza, & Bonacich, 2010). A third stream of inquiry has focused on particular features of the audiences that are presumed to shape their novelty evaluations, such as their heterogeneity (Cattani, Ferriani, & Allison, 2014; Criscuolo, Dahlander, Grohsjean, & Salte, 2017), the fit between their prototypic expectancies and the behavior of the innovators (Elsbach & Kramer, 2003), or the intellectual distance between the two (Boudreau, Guinan, Lakhani, & Riedl, 2016).

Although each of the previous approaches has produced crucial insights into

how novelty may elicit support, it also confronts the limitations arising from its specific theoretical concerns. Network oriented explanations fall short of accounting for situations where no social connections exist between creators and evaluating audiences. Explanations that focus on individuals' credentials overlook the simple fact that many innovators may not have significant markers of credibility, especially so if they are newcomers or outsiders to the field (Cattani, Ferriani & Lanza, 2017). Audience-based accounts provide valuable insights into the processes underlying the recognition of novelty, yet they are limited in their ability to offer actionable insights to innovators because audiences are typically exogenous to the evaluative process. Besides, innovators have usually no or only limited power over relevant audiences, and are unlikely to have detailed and accurate knowledge about the audience members' prototypic expectations.

To address these shortcomings and at the same time offer a more actionable perspective on the liability of novelty, we turn to insights drawn from research on framing (Tversky and Kahneman, 1981; Cornelissen & Werner, 2014) and construal level theory (Trope & Liberman, 2010) that allow us to examine the impact of different framing strategies on audiences' reception of novelty claims. Construal level theory (henceforth CTL) is particularly relevant for our purposes because it differentiates between concrete and abstract frames allowing us to probe the dilemma of idea's framing in novel idea recognition. Also, while CLT scholars have extensively studied and found evidence for the effect of mental construals on the generation of novelty (Wiesenfeld, Reyt, Brockner, & Trope, 2017), they have paid only limited attention to novelty evaluation, notwithstanding a few exceptions (Mueller, Wakslak & Krishnanet, 2014). We draw on evidence suggesting that people represent novelty claims differently in terms of abstractness or concreteness, depending on the degree of novelty encapsulated into those claims, and propose that claims that use framing strategies that are congruent with novelty-driven mental representations will be more effective in eliciting favorable evaluation and resource

commitment from relevant audiences. In other words, fit or misfit between the framing strategy of the novelty claim and the degree of novelty of such claim will result in differentially favorable attitudes among relevant audiences.

We examined these arguments in an experimental setting where we manipulated the novelty level (high vs. low) of innovators' ideas and the abstractness level (*why* vs. *how*) of the framing strategy used by innovators. In particular, we focused on the influence of idea framing on the following two evaluative outcomes: the appeal of novel ideas to relevant audiences (the extent to which audiences *like* them) and the propensity to invest in those ideas (the extent to which audiences are willing to bear the risk of *funding* them). These two evaluative outcomes differ in the level of commitment expected of evaluative audiences. The appeal of an idea is associated to its appreciation and no risk is involved: all interested audiences have to do is to say whether or not they like the idea; the propensity to invest in a novel idea, on the contrary, entails a higher level of commitment because of the risk implicit in an investment decision. We thus seek to address recent calls to shed more light on the evaluative process that underlies the recognition of novelty as well as the willingness to support its implementation (Anderson, Potočnik, & Zhou, 2014; Mueller et al., 2014; Perry-Smith & Mannucci, 2017). As Zhou, Wang, Song & Wu (2017: 180) pointed out: "Novelty recognition is the crucial starting point for extracting value from the ideas generated by others...[but] the phenomenon of novelty recognition has received little attention."

The experimental findings support our expectations: while a concrete, (*how*) framing increases the appeal of more novel ideas as well as audiences' propensity to commit capital in them, an abstract (*why*) framing increases the appeal and the propensity to invest in incremental (less novel) ideas. Our results further suggest that, when ideas compete for audience attention and resources (i.e., are contrasted and compared to other ideas), incremental ideas have a significantly higher chance of eliciting a positive evaluation when they are framed in abstract (*why*) terms:

abstraction significantly reduces the evaluative gap between highly novel and less novel ideas. We also offer exploratory evidence on the underlying cognitive mechanism that governs the evaluative process by exposing the mediating role of perceived usefulness. Our study makes three main contributions. First, we contribute to the literature on novelty recognition – an area of scholarly inquiry that, as previously noted, has received considerably less attention than the generation of novelty – by developing and testing a linguistics-informed micro approach to the analysis of the persuasive power of novelty claims. Second, we advance actionable insights into the use of strategic framing in shaping audiences’ evaluation of novel ideas (Navis & Glynn, 2011; Garud, Schildt, & Lant, 2014; Vaara, Sonenshein, & Boje, 2016). We also explore the role played by idea usefulness in this process. Third, and more generally, we offer original insights of interest beyond the innovative ideas context we examine. The implication that claims encapsulating novelty at varying degrees should be framed in congruent abstract terms is of significant value in the broader arena of persuasive communication, including politics, advertising effectiveness, consumer choices and many other settings where the confluence of novelty, audience characteristics and language abstraction can play a role in recognition and persuasion.

THEORY AND HYPOTHESES

The Framing of Novelty

Proponents of novelty often face strong resistance to gain acceptance from relevant audiences (March, 2010, Chapter 4; Mueller, Melwani & Goncalo, 2012; Perry-Smith & Mannucci, 2017) and the use of linguistic devices appears increasingly critical to deal with this challenge across many studies and settings (Aldrich and Fiol 1994; Czarniawska, 1998; Gabriel, 2004; Vaara, 2010). Thus, although it “took some time before the linguistic turn in the social sciences found its way into organization studies” (van Werven, Bouwmeester & Cornelissen, 2015: 629), growing research in

management and entrepreneurship now takes a framing approach to the study of innovation and change. It is important at this point to stress that we deliberately restrict our focus to language as a primary vehicle for the strategic framing of change, although we are aware that other modes of symbolization such as behavioral gestures or visuals also underpin acts of framing (see Bateson, 1955). Cornelissen and Werner (2014: 185) define *strategic framing* as “the use of rhetorical devices in communication to mobilize support and minimize resistance to a change”. Because frames can be thought of as cognitive orientations about the sorts of events that may be encountered in a given scenario, a framing-based notion of innovation accounts for the fact that individuals develop expectations when a particular cognitive mode has been activated. Thus, even seemingly inconsequential changes in the formulation of choice problems may sometimes cause significant shifts of preference (Tversky and Kahneman, 1981). As Goffman (1974: 38) famously wrote, “we can hardly glance at anything without applying a framework, thereby forming...expectations as to what is likely to happen”. In this respect, the notion of framing can be assumed to have a dual meaning, as it may refer “to the (implicit) frame of understanding that is present in a manager’s message with a specific content, and simultaneously to the interpretive frames that are primed, and that may guide and ground others’ interpretations” (Cornelissen & Werner, 2014: 199).

A conspicuous body of work where acts of framing have been approached from a rhetorics perspective is the stream of research on entrepreneurial storytelling. A key emphasis in these studies is that entrepreneurs, as skilled rhetoricians, are able – through their storytelling tactics – to shape the sense making process of key stakeholders. Within this line of scholarship, several studies have drawn attention to the role played by language, communication and narratives not only in reducing audiences’ perceived risk associated with the exploitation of novel entrepreneurial opportunities, but also in motivating them to committing capital to a venturing idea (Martens et al., 2007; Pollack, Rutherford, & Nagy, 2012; Garud et

al., 2014; van Werven et al., 2015; Manning & Bejarano, 2016). Studies in this vein have shed light on how the narratives innovators tell may help them acquire symbolic and material resources, as well as how the terms and categories they borrow from dominant discourse help them convince relevant audiences (Lounsbury, & Glynn, 2001; Navis, & Glynn, 2011). Yet, somewhat surprisingly, no research in this area has attended to the implicit structural properties of language, such as its level of abstraction, and the effect of those properties on audiences' responses to novelty claims. In particular, to the best of our knowledge, no experimental work to date has endeavored to elucidate how different framings of novelty can affect its appreciation. Construal Level Theory (CLT, Liberman, Trope & Stephan, 2007; Trope & Liberman, 2010; Liberman & Trope, 2014) offers a powerful toolkit to inform such effort.

CLT is premised on the central observation that individuals construe information, events or actions using different mental representations. Social theories of mental construal – CLT and also Action Identification Theory (Vallacher & Wegner, 1987, 1989) – distinguish between two levels of cognitive representations: abstract or high-level construals and concrete or low-level construals. According to CLT, individuals can think about the same action (e.g., “launching an entrepreneurial idea”) using abstract, high-level cognitive representations (e.g., “becoming an entrepreneur”), or using concrete, low-level cognitive representations (e.g., “finding investors”). High-level construals emphasize global, central and primary features of an action, and individuals in abstract mindsets focus on “Why” actions are performed. On the contrary, low-level construals emphasize local, peripheral and secondary features of an action, and individuals in concrete mindsets focus on “How” actions are performed (Vallacher & Wegner, 1987; Trope & Liberman, 2010). For instance, the same action “reading a book” could be construed in an abstract mindset if individuals think about the action by focusing on “enhancing knowledge;” or it could be construed in a concrete mindset if

individuals think about the action by focusing on “turning to the next page.” In the case of an idea, individuals in abstract mindsets will focus on its general meaning; whereas individuals in concrete mindsets on its local details.

A significant body of empirical evidence suggests that mental representations influence evaluative responses and behavioral intentions (Liberman et al., 2007; Trope & Liberman, 2010). It therefore seems plausible that the appeal of an idea and the propensity to invest in it may vary with audiences’ mental construal. Mueller et al. (2014) have offered evidence consistent with this observation, showing that people’s tendency to think in narrow as opposed to abstract terms shape their assessment of creative ideas. Thus, to the extent that the different mental representations that individuals adopt to construe an idea affect the attitude toward the idea itself, innovators can deliberately select framing strategies to induce audiences to look at their ideas in more concrete or abstract terms. For instance, aspiring entrepreneurs can opt for an explanatory framing approach by emphasizing the reasons behind their ideas, thus priming a broader construal, or they can focus on how these ideas work, thereby triggering a concrete representation. An entrepreneur who wants to launch, say, a recycling bin can focus on “why using the recycling bin” (i.e., abstract framing) or “how using the recycling bin” (i.e., concrete framing). The mental construals primed by these choices will in turn shape audiences’ evaluative response. In the former case, audiences will process relevant information concerning the novel idea by employing high-level construals; while, in the latter, low-level construals. In sum, to the extent that framing activates broad or narrow processing orientation, innovators can make strategic linguistic choices to influence audiences’ assessment of their idea. We argue that the impact of these choices on audiences’ evaluation further depends on the degree of novelty encapsulated into the ideas under evaluation, to which we now turn.

Novelty Framing and Audience Appeal

Prior research on creativity has shown that construal levels affect creativity recognition, further suggesting that individual perceptions of creativity may benefit from abstract representations (Mueller et al., 2014). This finding is central to substantiate the link between idea framing and evaluative responses, a key observation on which our framework rests. Our particular focus, however, is on novelty, not creativity. The clarification is important to appreciate the significance of our contribution. It stems from the widely established understanding of creativity as the combination of two dimensions “conceptually and empirically distinct” (Montag, Maertz & Baer, 2012: 1371): novelty and usefulness (Amabile, 1996; Hennessey & Amabile, 2010). Our theoretical and empirical elaboration is premised on this distinction, accordingly we focus on the construal impact in the evaluation of novel ideas holding the two constitutive dimensions separate (Montag et al., 2012; Zhou et al., 2017). In addition, in keeping with recent findings alluding at the possibility that the construal impact may vary with the intensity of novelty (Förster, Marguc & Gillebaart, 2010), in our elaboration we distinguish between high and low levels of novelty. Scholars have noted that because high novelty entails the introduction of new and path-breaking frameworks or processes that differ substantially from established knowledge in a given domain, it triggers incongruity in one’s knowledge, arising confusion, frustration and negative emotions (Rindova & Petkova, 2007). This intense negative arousal induces individuals to process high novelty using narrower and concrete mental representations (Gasper & Clore, 2002; Forster et al., 2010). In contrast, as incremental novelty implies few changes in knowledge frameworks it is more likely to arise mild emotions (Rindova & Petkova, 2007) that are not sufficient to disrupt higher processing orientations (Gasper & Clore, 2002; Forster et al., 2010). Liu (2008) offers experimental evidence consistent with these arguments by showing that individuals change their information processing style when interrupted during evaluative tasks: they shift from a detailed,

concrete processing style (bottom-up processing in Liu's terms) to a high-level style (top-down processing in Liu's term). When the decision is suspended, upon returning to the decision task the information needed to orient the choice process appears less novel (because the individual has already processed that information before) and a different processing orientation ensues. In other words, different levels of information novelty (pre and post suspension) activate different processing orientations, with more novel information eliciting low-level construals and less novel information high-level ones. That is because a concrete thinking mode is naturally needed when individuals have to process highly novel information, whereas less novel information does not require a concrete thinking mode because in this case the information matches the individual's preexisting cognitive schemas.

It follows from the previous discussion that it is easier for individuals to process a highly novel idea if the idea is framed using concrete, low-level mental construals. The theoretical framework developed by van Werven et al. (2015) appears consistent with this view. In particular, in articulating their rhetorical typology, van Werven and colleagues (2015) note that the efficacy of a specific type of argument in eliciting audiences' commitment should vary with the degree of novelty of an idea. For example, they suggest that arguments by cause (*why* framing) are more effective for supporting incremental than highly novel ideas due to the inherent uncertainty associated with cause-effect relations in highly novel concepts. Because high-level causal relations in highly novel circumstances are typically unknown, arguments by cause are weak when the argument targets highly novel concept since it is more uncertain if the explanatory facts that are used as grounds for the argument will indeed have the expected effect. Accordingly, we predict that the congruence between the audience mental representation state induced by the strategic framing (abstract vs concrete) of a novel idea and that idea's level of novelty (high vs low) has an impact on audiences' evaluative response. Audiences' appreciation of highly novel ideas is enhanced when they are

primed to think in concrete terms, because a concrete thinking mode is congruent with the thinking mental mode typically used to process highly novel information. In contrast, an abstract thinking mode is more appropriate for processing less novel ideas. Accordingly, we hypothesize:

H1: In novel idea evaluation, high novelty ideas are more likely to appeal to evaluating audiences when a *how* as opposed to a *why* framing is used.

H2: In novel idea evaluation, low novelty ideas are more likely to appeal to evaluating audiences when a *why* as opposed to a *how* framing is used.

Our conceptual framework and hypotheses are depicted in Figure 1.

<Insert Figure 1 about here>

EXPERIMENTAL STUDIES: AN OVERVIEW

We conducted two experimental studies designed to probe the conditions under which novel ideas are more likely to receive a favorable evaluation (appeal and investment propensity). We first explored the effect of the mental construal on the appreciation of highly novel ideas using a manipulation already employed in prior experiments. In Study 1, we primed the participants using *How* or *Why* questions (Freitas, Gollwitzer, & Trope, 2004; Alter, Oppenheimer, & Zemla, 2010; Mueller et al., 2014). In Study 2, we induced the participants to think more concretely or abstractly by varying the content of the idea description, that is, its frame. The concrete framing emphasized “the ways” to use the idea; whereas, the abstract framing emphasized “the reasons” for using the idea. In both studies, we asked participants how much they liked the idea (appeal) and to what extent they were willing to invest in it (investment propensity).

STUDY 1

In the first experiment, we tested the prediction that the appeal of a highly novel idea and the propensity to invest in it increase when individuals adopt concrete, low-level construals to process such novel information.

Method

Participants. Three hundred and sixty participants were recruited online using Amazon's Mechanical Turk, and they received 1.50 dollars for completing the study. Potential participants were restricted to only those in the United States with a 95% or greater approval rating on MTurk. To ensure that participants paid attention to the questionnaire, we included catch questions that participants had to pass before taking the study. If participants gave the wrong answer to these questions they were immediately not allowed to go on with the study. The recruitment message of Mechanical Turk warned the participants to carefully read all the questions for participating in the study. We also included an attention check in the between of the questionnaire: all participants gave the correct answer. These procedures are strongly recommended to assure data quality and remove inattentive responses when online tools such as Mechanical Turk are used (Mason & Suri, 2011; Fiske, 2016; Curran, 2016). The final sample consisted of three hundred and sixty-one participants⁴ (52.6% female, *M*_{age}=34.86 years, 76.2% Caucasian. The samples were homogenous among conditions with respect to the demographic variables (e.g., age, race, gender, educational background, etc.).

Material and Procedure. Participants were randomly assigned to one of the three experimental conditions – control, concrete construal, and abstract construal. The participants of the two experimental conditions were asked to complete an ostensibly unrelated questionnaire to activate a concrete or an abstract mindset and, subsequently, were asked to evaluate the highly novel idea as another unrelated survey. Instead, participants in the control condition were directly asked to evaluate the highly novel idea. To prime the participants with a concrete or

⁴ One participant did not submit the HIT, so we ended up with one more response.

abstract mindset, we used a manipulation already employed in prior experiments (Freitas et al., 2004; Alter et al., 2010; Mueller et al., 2014). Participants were asked to answer *How* or *Why* questions for three different behaviors (i.e., backing up a computer, driving a car, and getting dressed in the morning) depending on whether they were assigned to the concrete or the abstract construal condition. Next, participants read a description of a highly novel idea and evaluated it: the idea was about a folding bike and was pretested in a pilot study to determine its level of novelty and perceived usefulness (see below for a description of the *Pilot Study 1* and *Appendix 1* for the highly novel idea's scenario used in *Study 1*).

Dependent Variables. The appeal of the idea was captured by asking participants how much they liked the idea on a 7-point scale (1 = "I liked it very much", 7 = "I disliked it very much")⁵. The propensity to invest in the idea was measured by using the following question: "Imagine that you have \$18,000. How much of the \$18,000 would you invest in the idea? Please select the option that corresponds to the amount (in Dollars) that you consider most appropriate." The options ranged from 1 (\$0) to 7 (\$15,001 - 18,000), with 4 (\$6,001 - 9,000) as the middle category.

Pilot Study 1. A pilot study with 101 MTurk workers had been run to determine the idea's level of novelty. Specifically, to ensure that the idea was perceived as highly novel, we tested the more novel idea versus another less novel idea. Both ideas were about a folding bike and varied only with respect to the content of the description (the scenarios used in the *Pilot Study* are reported in *Appendix 1*). Participants were randomly assigned to the incrementally novel or highly novel condition (the experiment was a between subject-design) and were asked to rate the idea's novelty on a 7-point scale (1 = not at all, 7 = extremely) using the following items: novel, unique, original, creative ($\alpha=.84$). Additionally, to

⁵ To make the results easily interpretable, we reversed the coding for the variable *Appeal*. Thus, higher values of *Appeal* correspond to a higher liking of the idea.

ensure that the highly novel idea was perceived as useful, we asked participants to rate four items associated with idea's usefulness (functional, useful, workable, practical; $\alpha=.78$) on the same 7-point scale. The items to measure idea's novelty and usefulness were adapted from the Creative Product Semantic Scale (CPSS; O'Quin & Besemer, 1989). A one-way ANOVA on novelty revealed that the difference between the two ideas of folding bikes was significant ($F(1, 99) = 27.06, p < .001$): participants perceived the highly novel idea ($M=6.00, SD=.82$) as more novel than the other idea ($M=5.04, SD=1.03$). In addition, an omnibus F-test revealed that the highly novel idea was perceived as *useful* as the less novel idea, $F < 1, n.s.$ ($M_{\text{less novel idea}} = 5.52, M_{\text{highly novel idea}} = 5.46$).

Results & Discussion

Pre-analysis. From an analysis of outliers on our two dependent variables, appeal and investment propensity, we identified twenty-six outliers based on the Z-scores threshold of 2.5 SD (Meyvis, Tom & van Osselaer, 2017). We removed these subjects from subsequent analysis. Table 1 presents the descriptive statistics for the dependent variables, appeal and investment propensity.

<Insert Table 1 about here>

Appeal. A one-way ANOVA revealed that the main effect of condition on appeal was marginally significant ($F(2, 332) = 2.52, p = .082$). However, supporting Hypothesis 1, a planned contrast analysis showed that the difference in idea linking between the concrete construal condition and the abstract construal condition was statistically significant, $t(332) = 2.21, p = .028$. Participants primed to think in a more concrete style liked the highly-novel idea more ($M=6.30, SD=.92$) than participants primed to think in a more abstract style ($M=6.01, SD=1.02$). No other contrasts reached significant levels.

Investment Propensity. A one-way ANOVA showed a significant main effect

on investment propensity ($F(2, 332) = 4.17, p = .016$). As we expected, a planned contrast analysis revealed that the difference in investment range between participants primed with a concrete construal and participants primed with an abstract construal was statistically significant, $t(332) = 2.52, p = .012$. Thus, hypothesis 1 was supported: participants induced to use a concrete mindset were willing to invest in the highly novel idea more ($M=2.68, SD=1.34$) than those induced to use an abstract mindset ($M=2.30, SD=1.04$). In this case, also the contrast between the control condition and the concrete one reached significance ($t(332) = -2.48, p = .014$): participants in the concrete condition invest more ($M=2.68, SD=1.34$) than participants in the control ($M=2.31, SD=1.00$). The difference between the control and the abstract condition was not statistically significant.

Overall, the results supported hypotheses 1, providing initial evidence that concrete construals increase audience members' appreciation of highly novel ideas. Individuals primed to think concretely regarded highly novel ideas as more appealing and were willing to invest more in them.

STUDY 2

In the second experiment, we used a different construal manipulation to activate a concrete or abstract thinking mode: we designed two different frames for championing the idea by varying the content of its description. We tested the moderating role of novelty on the effect of the construal frame in the evaluative process. We also conducted additional analyses to provide further evidence of the beneficial effect of the match between construal framing and novelty, and to explore the underlying mechanism.

Method

Participants. A sample of six hundred participants was recruited with Amazon's Mechanical Turk. For concluding the study, participants were

compensated 1.50 dollars. Consistently with the prior study, the recruitment was limited to only participants in the United States with a 95% or greater approval rating. Similar to Study 1, after warning the potential participants in the recruitment message, we used a catch question to drop inattentive participants from taking the survey. As in Study 1, another attention check was included in the middle of the survey: we had to exclude ten participants from our sample. However, these methods are recommended to remove inattentive responses from online surveys increasing data quality (Mason & Suri, 2011; Fiske, 2016; Curran, 2016).

In this second study, our manipulation concerns the evaluation of an idea for a novel recycling bin. The analyses include only those participants who, per their own admission, do recycle because unfamiliarity with an action (here recycling) could affect the individual level representation by disrupting the cognitive process (Vallacher & Wegner, 1987). This allowed us to rule out potential confounding effects due to participants' experience with recycling. Indeed, prior studies showed that evaluations are affected by both the subjects' prior experience and the construal level (Hong & Sternthal, 2010). Thus, in our study all the participants are familiar with the act of recycling. The final sample consisted of four hundred and seventy-three participants (51.2% female, $M_{age}=36.52$ years, 75.3 % Caucasian).

Material and Procedure. Participants were randomly assigned to one of the four conditions in a 2 (construal framing: concrete vs. abstract) x 2 (novelty: high novelty idea vs. low novelty idea) between-subjects experiment. The resulting four sub-samples were homogenous among conditions with respect to the demographic variables (e.g., age, race, gender, educational background, etc.). Participants were asked to evaluate an idea proposed by an innovator (here an entrepreneur) and were provided with a description of it: the idea was about the development of a recycling bin. The novelty manipulation was pretested in a pilot study to identify two ideas that differed in novelty, but were perceived as useful. Also, the pilot test revealed that the novel ideas were equally appreciated: those ideas did not differ in

appeal and investment propensity without introducing the framing manipulation (see below for a complete description of the *Pilot Study 2*). Participants in the low novelty condition read the following description:

The idea that you are expected to evaluate is the development of a **recycling bin**. The entrepreneur explains to you that the **recycling bin** has an egg-shaped design, and separate color-coded containers in which you can store your garbage by pressing push-buttons to open their lids.

Participants in the high novelty condition read the following description:

The idea that you are expected to evaluate is the development of a **smart-recycling bin**. The entrepreneur explains to you that the **smart-recycling bin** has an egg-shaped design, and automatically sorts your garbage into one of its containers by using an ultrasensitive detection camera to identify the chemical composition of your garbage.

After reading about the lowly novel or highly novel idea, participants received more information about the entrepreneur's narrative to manipulate the construal level of the idea framing. Following prior research (Freitas et al., 2004; Kim, Rao, & Lee, 2009; White, MacDonnell, & Dahl, 2011), we varied the content of the idea description to manipulate the framing. While the concrete framing emphasized "the ways to use the recycling bin" focusing on "how" people might use the bin, the abstract framing emphasized "the reasons to use the recycling bin" focusing on "why" people might use the bin. Participants in the concrete framing condition read the description below (if assigned to the high novelty idea condition participants read the text in bold and italic):

The entrepreneur wants you to think about the **ways** in which this bin can be used by wondering: "**How** people should use this **recycling bin** (*smart-*

recycling bin)?”

Here are the **ways** that the entrepreneur suggests:

- If you have something to throw away, you can place it into this bin.
- You can simply open the lid and put your garbage into the bin.
- This recycling bin stores paper, plastics, metal cans and also organic waste.
- Please, remember to empty the containers of the recycling bin when they are full.

Finally, the entrepreneur tells you that when you recycle with this bin, you will easily appreciate all the suggested **ways** in which it can be used!

Participants in the abstract framing condition read the description below (if they were assigned to the high novelty idea condition participants read the text in bold and italic):

The entrepreneur wants you to think about the **reasons** for using this bin by wondering: “**Why** people should use this **recycling bin (smart-recycling bin)?”**

Here are the **reasons** that the entrepreneur suggests:

- This bin increases the amount of materials that you can recycle.
- You don’t have to waste time on sorting your garbage into different bins.
- The compartments of the bin make recycling much more organized.
- This bin contributes to keeping your home clean and saving space in your kitchen.

Finally, the entrepreneur tells you that when you recycle with this bin, you will easily appreciate all the suggested **reasons** for using it!

Dependent Variables. The same questions from *Study 1* were used to measure the idea's appeal⁶ and the propensity to invest.

Additional Variables. Participants were asked to rate the idea's novelty on a 7-point scale (1 = not at all, 7 = extremely) using the same items of the other studies (novel, unique, original, creative, $\alpha=.93$). In addition, they indicated the perceived usefulness of the idea employing the same scale of the prior studies (functional, useful, workable, practical; $\alpha=.91$).

Pilot Study 2. We conducted a pilot study with 120 participants from MTurk to identify a highly novel and an incrementally novel idea. To ensure that the incremental idea was still perceived as novel, we included also a third, more familiar idea. All the three ideas concerned the development of a recycling bin. Participants were randomly assigned to evaluate one of the three ideas (consistently with a between-subjects design). In the familiar condition, they read the following description:

The idea that you are expected to evaluate is the development of a **recycling bin**. The entrepreneur explains to you that the **recycling bin** has a vertical design, which allows you to separately store different types of recyclables in one of the compartments located on top of one another.

For the incrementally novel condition and the highly novel condition, the ideas were those reported in the material and procedure section above. Participants evaluated the idea's novelty and usefulness on the same scale used in the *Pilot Study 1* (respectively, $\alpha=.93$ and $\alpha=.94$). We verified the effectiveness of the novelty manipulation performing a one-way ANOVA: the analysis confirmed a significant difference in participants' novelty evaluation among the three ideas, $F(2,117) =$

⁶ As in *Study 1*, we reversed the coding for the variable appeal: higher values of appeal correspond to a higher liking of the idea.

16.1, $p < .001$. Contrasts analyses showed that the familiar idea ($M=3.8$, $SD= 1.48$) was evaluated significantly lower than the incremental idea ($M=4.55$, $SD=1.23$, $t(117) = -2.63$, $p = .01$) and the highly novel idea ($M=5.41$, $SD=1.08$, $t(117) = -5.67$, $p < .001$). The evaluation of the incremental idea was also significantly lower with respect to the highly novel idea ($t(117) = -2.99$, $p < .01$). Since there was no significant effect of the novelty manipulation on idea usefulness ($F < 1$, n.s., $M_{\text{familiar idea}} = 4.47$, $M_{\text{less novel idea}} = 4.6$, $M_{\text{highly novel idea}} = 4.8$), we concluded that each of the three ideas was perceived as being useful. We also tested for differences in preferences among the three ideas by asking participants how much they liked the idea and whether they were willing to invest in it. We found no significant difference in the appeal of the idea ($F < 1$, n.s., $M_{\text{familiar idea}} = 4.88$, $M_{\text{less novel idea}} = 4.9$, $M_{\text{highly novel idea}} = 5.25$) and the propensity to invest in the idea ($F = 1.62$, n.s., $M_{\text{familiar idea}} = 1.73$, $M_{\text{less novel idea}} = 2.00$, $M_{\text{highly novel idea}} = 2.05$).

Results & Discussion

Pre-analysis. As in Study 1, we conducted an analysis of outliers on our two dependent variables, appeal and investment propensity, and identified twenty-three participants as outliers using the 2.5 SD threshold (Meyvis, Tom & van Osselaer, 2017). We conducted all the analyses on the resulting sample. Table 2 presents the descriptive statistics for the two dependent variables.

<Insert Table 2 about here>

Manipulation checks. The manipulation check confirmed that the high novelty idea was perceived to be significantly more novel than the incremental idea ($M_{\text{less novel idea}} = 3.95$, $SD_{\text{less novel idea}} = 1.46$; $M_{\text{highly novel idea}} = 5.01$, $SD_{\text{highly novel idea}} = 1.3$; $t(448) = 8.09$, $p < .001$). As an additional check, we ran a 2 (construal framing: concrete vs. abstract) \times 2 (novelty: highly novel idea vs. incremental idea) between-subjects ANOVA on the rating of novelty. The analysis showed a significant main effect for

novelty ($F(1, 446) = 66.06, p < .001$), a marginally significant main effect for construal framing ($F(1, 446) = 3.77, p = .053$), and a marginally significant interaction ($F(1, 446) = 3.36, p = .067$). Because the construal framing factor and the interaction are marginally significant, we checked for the existence of a confounding effect in the novelty manipulation. Accordingly, we followed the procedure by Perdue & Summers (1986) who suggested comparing the magnitude of the effect sizes (the same procedure was also followed by Hennig-Thurau, Groth, Paul & Gremler, 2006, and Bellezza, Gino, & Keinan, 2013). The effect size of the novelty manipulation ($\eta^2_{\text{novelty}} = .129$) was, respectively, 16 and 18 times larger than the effect size of the construal framing factor ($\eta^2_{\text{construal framing}} = .008$) and of the interaction ($\eta^2_{\text{interaction}} = .007$). As the effect sizes of both the construal framing factor and the interaction were very small, their statistical significance “should not be of great concern” (Perdue & Summers, 1986: 323). Thus, in line with the results of the *Pilot Study 2*, we concluded that our novelty manipulation worked well.

Appeal. A 2 (construal framing: concrete vs. abstract) x 2 (novelty: highly novel idea vs. incremental idea) between-subjects ANOVA on idea’s appeal showed the predicted two-way interaction ($F(1, 446) = 18.89, p < .001$). In support of our first hypothesis, simple effects tests revealed that in the case of a highly novel idea participants evaluated the idea as more appealing in response to the concrete framing ($M = 5.76$) than in response to the abstract framing ($M = 5.24; F(1, 446) = 7.07, p < .01$). Conversely, when the idea was incrementally novel, participants evaluated the idea as more appealing in response to the abstract framing ($M = 5.24$) than in response to the concrete framing ($M = 4.58; F(1, 446) = 12.29, p = .001$). These results replicated hypothesis 1 and provided support for hypothesis 2. The main effect of novelty was significant ($F(1, 446) = 18.99, p < .001$), whereas the main effect of construal framing did not reach significance ($F < 1, n.s.$). See Figure 2 for a graphical representation.

<Insert Figure 2 about here>

Investment Propensity. A 2 (construal framing: concrete vs. abstract) x 2 (novelty: highly novel idea vs. incremental idea) between-subjects ANOVA on investment propensity revealed the predicted two-way interaction ($F(1, 446) = 5.69, p = .017$). The simple effects test approached significance when the novel idea was highly novel: participants indicated a higher propensity to invest in response to the concrete framing ($M = 2.57$) than in response to the abstract framing ($M = 2.28; F(1, 446) = 3.47, p = .063$). Thus, hypothesis 1 was supported also for the propensity to invest. When the novel idea was incremental, participants tended to exhibit a higher propensity to invest in response to the abstract framing ($M = 2.21$) than in response to the concrete framing ($M = 1.98; F(1, 446) = 2.26, p = .133$). The results only partially supported hypothesis 2 with respect to the investment propensity. The main effect of novelty was significant ($F(1, 446) = 9.43, p < .01$); however, the main effect of construal framing did not reach significance ($F < 1, n.s.$). See Figure 3 for a graphical representation.

Overall, these findings confirmed our hypotheses that concrete framings increase audiences' appeal and propensity to invest in highly novel ideas; whereas abstract framings increase audiences' appeal and propensity to invest in incremental ideas.

<Insert Figure 3 about here>

Additional Analysis. To provide further evidence of the beneficial effect of a correct match between framing and idea novelty, we also tested the other set of simple effects. These analyses allowed us to explore whether evaluators preferred the highly novel idea or the incremental idea at each level of construal framing (concrete or abstract). This exploration is meaningful because the two ideas were

equally appreciated without manipulating the construal framing: the highly novel and the incremental idea did not differ with respect to audience appeal and investment propensity (see the results in *Pilot Test 2*). Using the construal framing manipulation, the analyses conducted on *appeal* as the dependent variable revealed that, in the concrete framing condition, participants preferred the highly novel idea to the incremental idea ($F(1, 446) = 38.23, p < .001$). However, in the abstract framing condition, the appeal gap between the highly novel idea and the incremental idea disappeared: the simple effect was no longer significant ($F < 1, n.s.$). Consistently, the analysis of the simple effects conducted on the *investment propensity* dependent variable produced similar results: in the concrete framing condition, participants were willing to invest more money in the highly novel idea than in the incremental idea ($F(1, 446) = 15.02, p < .001$). As before, in the abstract framing condition, the investment propensity gap between the more novel idea and the less novel idea disappeared ($F < 1, n.s.$).

By exploring this second set of simple effects, our study has the potential to inform the choice of the framing that is more suitable for describing an idea when other ideas that differ in their level of novelty compete for audience attention. Contrasting the more and less novel ideas allowed us to show that high novelty has a significantly higher chance of eliciting a positive evaluation if it is framed in concrete terms. The results thus provide evidence that abstraction drastically reduces the evaluative gap between more and less novel ideas.

Mediated Moderation. To unpack the underlying cognitive process, we also measured the perceived usefulness of the idea and we ran a mediated moderation analysis. Since CLT studies found that congruent processing styles between messages and consumers' timeframe influence product evaluations via the *perceived usefulness* of the message (e.g., Zhao & Xie, 2011; Jin & He, 2013), we expected perceived usefulness of novel ideas to mediate the interactive effect of construal framing and novelty on audiences' evaluation. Accordingly, we proposed

that a congruent match between idea's framing and novelty enhances the perceived usefulness of the idea, which in turn would lead to more positive evaluations.

First, a 2 (construal framing: concrete vs. abstract) x 2 (novelty: highly novel idea vs. lowly novel idea) between-subjects ANOVA on perceived usefulness showed a two-way interaction ($F(1, 446) = 7.4, p < .01$). Both simple effects tests approached significance. In the case of incremental novelty, the idea was rated higher on usefulness in the abstract ($M = 5.09, SD = 1.39$) than in the concrete ($M = 4.77, SD = 1.33$) framing condition ($F(1, 446) = 3.72, p = .055$). In the case of high novelty, the idea was rated higher on usefulness in the concrete ($M = 5.19, SD = 1.18$) than in the abstract ($M = 4.85, SD = 1.28$) framing condition ($F(1, 446) = 3.69, p = .056$). The main effects for both novelty ($F < 1, n.s.$) and construal framing ($F < 1, n.s.$) did not reach significance. These results confirmed our expectations that congruent process styles increased the perceived usefulness of novel ideas.

To examine the mediated moderation model, we applied the Preacher and Hayes' (2008) technique that uses bootstrapping to test the indirect effects. Mediation occurs when the 95% confidence interval of the indirect effects does not include zero. The mediation analysis revealed that the indirect effect of construal framing x novelty was significant on appeal (95% CI using 5,000 bootstrap: -.94 to -.14) suggesting that the perceived usefulness acted as a mediator. Results also showed that when the perceived usefulness was included in the model, the direct effect of construal framing x novelty on appeal remained significant ($\beta = -.65, t = -3.41, p < .001$). This suggested a partial mediation of perceived usefulness on appeal (Zhao, Lynch & Chen 2010).

The mediated moderation model was confirmed also for the investment propensity: the indirect effect of construal framing x novelty was significant (95% CI using 5,000 bootstrap: -.44 to -.07) providing support for the mediation effect of perceived usefulness on investment propensity. In this case, when the mediator was included in the model, the direct effect of the construal framing x novelty on

investment propensity was no longer significant ($\beta = -.27$, $t = -1.35$, $p = .176$). These results indicated that perceived usefulness acted as a full mediator of the relation between construal framing and novelty on investment propensity.

These findings shed light on the underlying cognitive mechanism through which construal framing influences novel idea appreciation and investment propensity – i.e., the mediating role of perceived usefulness. In addition, since our results indicated a full mediation model for the investment propensity dependent variable, we concluded that participants' willingness to materially support (i.e., invest in) a novel idea was largely guided by their perceptions of the ideas as useful. On the other hand, the partial mediation model for the idea's appeal suggests that there could be also additional mediators that explain the effect of construal framing and novelty on audiences' appeal.

DISCUSSION

Research on creativity and innovation has long been catalysed by the 'romantic' view according to which major creative achievements are sparked by imaginative and uniquely gifted individuals who succeed in bringing novel ideas, categories, projects or organizational forms to life. Several scholarly contributions have supported this 'heroic' view leading to a vibrant body of work that has enhanced our understanding of the individual dispositions, talents and agency that underlie the emergence of novelty. Yet, by focusing primarily on the 'supply side' of novelty generation, this research has left largely underexplored another key dimension: the need for recognition, namely the process by which the new and unaccepted is rendered valid and accepted through the attainment of material and/or symbolic resources from relevant social audiences. Indeed, novelty generation and novelty recognition correspond to two distinct phases of the journey of novelty, from the moment it emerges to the moment it takes root and propagate. While previous research has mostly focused on the generation phase, this paper focused on the

recognition phase, an area rarely investigated. We did so by integrating CLT with the growing stream of research that takes a linguistic approach to the study of innovation.

Specifically, we developed a conceptual framework for examining the role of a novel idea linguistic framing in shaping the recognition of such idea by interested audiences. Key to our framework is the proposition that a congruent processing style between the audience's mental construal triggered by the novelty of the idea and the degree of abstraction ("why") or concreteness ("how") of the idea framing improves audience's appreciation for the idea itself. In particular, ideas framed in high-level, "why" terms will be more likely to elicit favorable evaluation when the idea's level of novelty is low, while framings that emphasize concrete, "how to" actions will be more likely to elicit favorable evaluation when the idea's level of novelty is high. We conducted two experimental studies to support our predictions and found audiences' evaluations to be sensitive to this fit between novelty content and processing style. In the following sections, we elaborate on some of the theoretical and practical implications of these findings.

Implications for Theory

Our findings contribute to a growing body of work that incorporates a linguistic focus into innovation and entrepreneurship research (Navis, & Glynn, 2011; Garud et al., 2014; Vaara et al., 2016). Scholars in this area have called attention to the rhetorical strategies – communication, narratives or storytelling – innovators can deploy to attract symbolic and/or material resources to their endeavors (Lounsbury, & Glynn, 2001; Martens et al., 2007; Navis, & Glynn, 2011; Pollack et al., 2012; Manning & Bejarano, 2016). Various studies have shed light, for instance, on the role of projective stories in setting the cognitive and pragmatic expectations of resource holders as well as how different type of arguments can help entrepreneurs garner support from stakeholders (Garud et al., 2014; van Werven et al., 2015; Manning & Bejarano, 2016). Our study joins this conversation by elaborating new

insights into how the framing of an idea can be strategically construed to facilitate its reception. While scholars debate over the appropriateness of couching novelty into symbolic and abstract narratives (Aldrich & Fiol, 1994) or anchoring them in concrete details (Hargadon & Douglas, 2001), our theory and experimental evidence suggests that this choice should be informed by an understanding of how individual mental construals interact with the degree of novelty. Specifically, we demonstrated that abstract framings focused on “Why to use the idea” enhance audiences’ appreciation of incremental novelty; whereas, concrete framings focused on “How to use the idea” are more appropriate for fostering audiences’ appreciation of high novelty. In so doing, we added granularity and micro-foundations to prior language-informed perspectives on innovation and entrepreneurship that have largely and primarily focused on broader rhetorics approaches such as discourse, storytelling and narrative. Also, we believe that applying construal level theory to the context of novelty evaluation through an experimental research design is an important excursion for the entrepreneurship and innovation field that is in keeping with Garud et al.’s (2014: 1488) call for “controlled experiments wherein real or simulated projective stories are pitched to research subjects to see if they would lend their support”.

The present study extends prior research on creativity by focusing on the cognitive process of novelty evaluation which “has been underemphasized in the creativity literature” (Perry-Smith, 2014: 832, but see also Elsbach and Kramer, 2003; Criscuolo et al., 2017; Zhou et al., 2017). We address this limitation by exposing the importance of the congruence in processing style between the degree of novelty and its framing. The finding that idea framing significantly affects its appreciation (i.e., appeal and investment propensity) via perceived usefulness sheds additional light on the role of cognition in creativity and innovation (Wiesenfeld et al., 2017). Importantly, to the best of our knowledge, this is the first research investigating the effect of a novelty claim’s linguistic abstraction on the

respondents' appreciation for that claim. Previous findings in social psychological research have shown that claims composed of concrete language are perceived as more "true" than those composed of abstract terms (Hansen & Wanke, 2010). The impact of language abstraction on recipient behavioral intentions has also been examined in a simulated courtroom setting, where the subtle linguistic strategies employed by lawyers in their speeches affect the juries' orientation about the final verdict (Schmid and Fiedler, 1998). However, no research was conducted to simultaneously examine how individuals can strategically tailor the abstraction of their claims to the degree of novelty inherent in those claims to elicit audiences' favorable orientation and whether this strategy is effective in provoking resource commitment.

Finally, our findings address recent calls for more research on the implementation phase of the idea journey (e.g., Baer, 2012, Anderson et al., 2014; Perry-Smith & Mannucci, 2017; Zhou et al., 2017). Most of the work done so far in this area has focused on the role of the social structure – such as the status (Merton, 1965), network (Perry-Smith and Mannucci, 2015), audience (Cattani et al., 2014) or role structure (Berg, 2016) - in which innovators are embedded in determining whether and how innovators can win support for their novelty claims. Likewise, studies that have highlighted the relationship between construal levels and people's views of creative ideas have not examined the downstream consequences of such assessments. As noted by Mueller et al. (2014: 86): "construal levels may affect people's views of creative ideas, but we do not know whether this translates into support for implementing the ideas". Our study complements this line of scholarship by addressing how framing strategies may shape whether novel ideas win audiences' decision to invest in them.

Implications for Practice

Although audiences in control over resources crucial to support innovation (e.g., venture capitalists, angel investors, funding organizations, managers, users, and so

on) strive to select the best ideas, it is somehow puzzling to find out how often they erroneously reject novel ideas, thereby curtailing innovation (Staw, 1995; Elsbach & Kramer, 2003; Berg, 2016; Boudreau et al., 2016). Championing a novel idea is challenging because the risk of rejection usually is very high (Mainemelis, 2010; Perry-Smith & Mannucci, 2017), as a result novelty “most of the time [...] does not happen, even under the most favorable circumstances” (Augier et al., 2015, p. 1141). When, then, is novelty more likely to succeed? In a popular TED talk and book, Simon Sinek argues that if we want to mobilize people and resources, we should start with why (Sinek, 2011). If we communicate the purpose behind our ideas, it will be easier to garner support and resources. But what if that purpose challenges the established way of doing things? What if those ideas deviate from established standards and categories? Under such conditions, as recently pointed out by Grant (2016), starting with why may not be excellent advice. When innovators championing profound changes “explain their why, it runs the risk of clashing with deep-seated convictions. When...non conformists explain their why, it may violate common notions of what’s possible” (Grant, 2016: 124). This type of debate illustrates the dilemma that innovators face, as they ponder over the right framing for presenting their projects. Consider the example of the Segway, a self-balancing scooter (Golson, 2015), at the time of launch widely heralded as a “technological marvel”. The Segway was advertised as a product that aimed to change the way people move, but this positioning was so generic that people could not understand how the product fit into their existing lifestyle. Most people “admired what the Segway could do” (Barringer & Ireland, 2012: 103), however, they could not answer many questions regarding the self-balancing scooter: “How do you take it with you in your car? How do you park it? How and where can you ride it? Sidewalks or roads? How do you get it up or down stairs?” (Barringer & Ireland, 2012: 103, emphasis added). Users failed to appreciate the value of the Segway because the advertising campaign only focused on the abstract vision of

changing urban transportation. Would a focus on “How” the Segway works have made this technological marvel successful? Is a highly novel idea more appealing when it is framed in “Why” or “How” terms?

By demonstrating that the framing of an idea and its degree of novelty jointly affect audiences’ preferences and investment propensity, our findings may offer guidance to innovators striving to address this dilemma. Innovators who are planning to launch new projects should be aware of the power of strategic framing in shaping audience preferences. Indeed, they will be more persuasive if they frame highly novel ideas using a “How” framing and concrete arguments; in contrast, incremental innovation has a better chance of appealing to relevant audiences and attracting resource commitments when it is championed using a “Why” framing and abstract arguments. In sum, innovators should be savvy of the rhetorical strategies at hand – and their potential effect on relevant audiences. Kahl and Grodal’s (2106) recent analysis of IBM’s and Remington Rand’s attempts to introduce the computer (a highly novel technology) into the insurance market during the period 1947-1958 provides a compelling qualitative illustration of this point. Specifically, the authors suggest that IBM’s use of *how* framing in computers’ presentations was a strategic choice that contributed to IBM’s success over Remington Ran – which, on the contrary, adopted a *why* framing. By framing its computers’ presentations in “how” terms and focusing on “*how* computers might solve insurance-related problems” (Kahl & Grodal, 2016: 161) IBM outcompeted Remington Rand that, on the contrary, communicated abstractly without framing the computers’ presentations “within the context of the insurance companies” (Kahl & Grodal, 2016: 160).

Limitations and Future Directions

We are aware of some limitations of our experimental work, though we believe that they represent avenues for future research. First, we did not employ ‘real’ investors in our experiments and this begs the question of whether our findings can be extended to actual professional contexts. For instance, no prior empirical studies

have shown whether abstract and concrete framings shape novelty appreciation when audiences coincide with venture capitalists, angel investors, or other professional decision-makers. While future work could further explore this important aspect, we believe that our findings can be applied to a great variety of settings where non-expert individuals make evaluations and small investments. For instance, by taking a consumer perspective, recent studies in entrepreneurship and innovation have devoted greater attention to the “crowd” (Anderson et al., 2014; Manning & Bejarano, 2016; Chan & Parhankangas, 2017). This has coincided with the growing popularity of crowdfunding – which allows innovators to raise funds from a larger audience (i.e., the “crowd”) by posting ideas on internet platforms (Belleflamme, Lambert, & Schwienbacher, 2014; Mollick, 2014). Our experimental work offers insight into how crowdfunders evaluate novel ideas and make investment decisions: MTurk workers are in fact representative of actual visitors and investors of crowdfunding platforms (Kanze, Huang, Conley, & Higgins, 2017; Chan & Parhankangas, 2017). Focusing on the relationship between the construal level of crowdfunding campaigns for innovative projects and their funding success is another interesting avenue for future research (Wiesenfeld et al., 2017).

The present paper proposes a stylized characterization of what in fact is a more complex process through which innovators present their ideas in real-worlds settings. Yet the use of vignette is common in experimental research and has been employed in prior studies (e.g., Tumasjan, Welp, & Spörrle, 2013). Future research could analyze real situations by using coding procedures that have been applied to compute the level of abstraction in communication – e.g., in political speeches (Menegatti & Rubini, 2013). Also, we did not directly assess actual behaviors in investment decisions. However, our results are consistent with non-experimental research that examines the narrative of successful and unsuccessful crowdfunding campaigns in the real context of Kickstarter (for a recent example see Manning & Bejarano, 2016). Finally, several other interesting directions are worthy of further

investigation in future research. For instance, one might wonder whether the *strategic framing* of novel ideas is more important for novice entrepreneurs, as these individuals have not yet realized any tangible results and are therefore most dependent on argumentation to convince stakeholders (van Werven et al., 2015). Because factors such as status, social ties or reputation tend to affect the outcomes of the evaluative process, they are also likely to interact with idea framing and novelty appreciation. Future research can also explore whether the effect of idea framing and novelty depends on the type of audience evaluating the ideas (e.g., Cattani et al., 2014). For instance, whereas some might be skeptical of committing to such ideas, other may exhibit a “strong affective congruence to...newness” (Choi and Shepherd, 2005: 579). It may therefore be that innovators tailor their language not only to the type of novelty they seek to further but also to match specific features of the audiences they address (Elsbach & Kramer, 2003). Probing the role that differences such as individual and social characteristics or personal traits among audience members play in the evaluation process of novel ideas might help further elucidate differences in evaluative outcomes.

CONCLUSION

Growing scholarly attention has been devoted to the emergence of novelty (e.g., Padgett & Powell 2012). Yet several questions pertaining to the recognition and support of novelty are still puzzling scholars. This study develops and tests a conceptual framework for understating how different *strategic framings* affect audiences’ appreciation of novel ideas. By showing the impact of idea framing on evaluative outcomes, our results suggest that innovators can shape the likelihood of gaining support from relevant audiences for their ideas by framing them differently, depending on the degree of novelty of those ideas. While our experimental evidence on novelty recognition adds primarily to the innovation, entrepreneurship and creativity literature, it has the potential to speak to a much broader literature

and inform a variety of evaluative contexts in which language may be used to translate new ideas into reality by exerting influence on the audiences that have control over crucial symbolic and material resources. Since the time of the Greek poleis, when sophists taught their students how to use rhetorics to win an audience attention, language has been the privileged means for social influence and, as such, the object of vast interest and research. We hope our findings will provide renewed impetus to this fascinating and fundamental area of scholarly inquiry.

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FIGURES AND TABLES

FIGURE 1

Conceptual Framework: How Idea Framing and Novelty affect Audiences' Evaluation

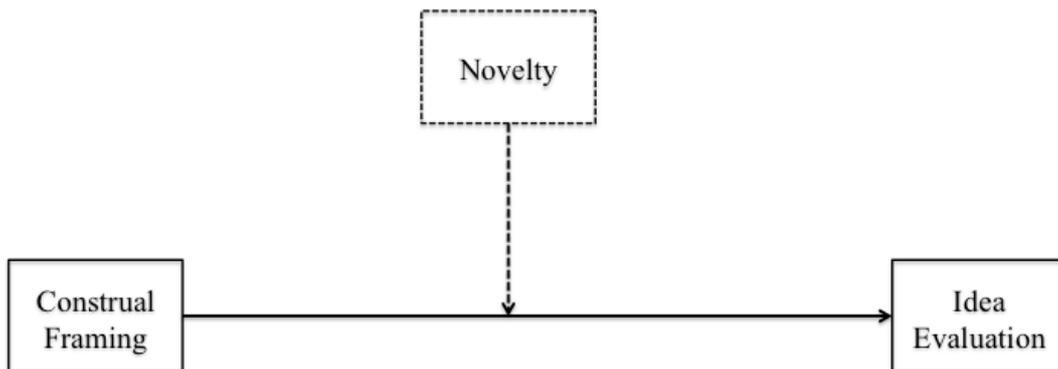


FIGURE 2

The effect of an idea's framing and novelty on Appeal (Study 2)

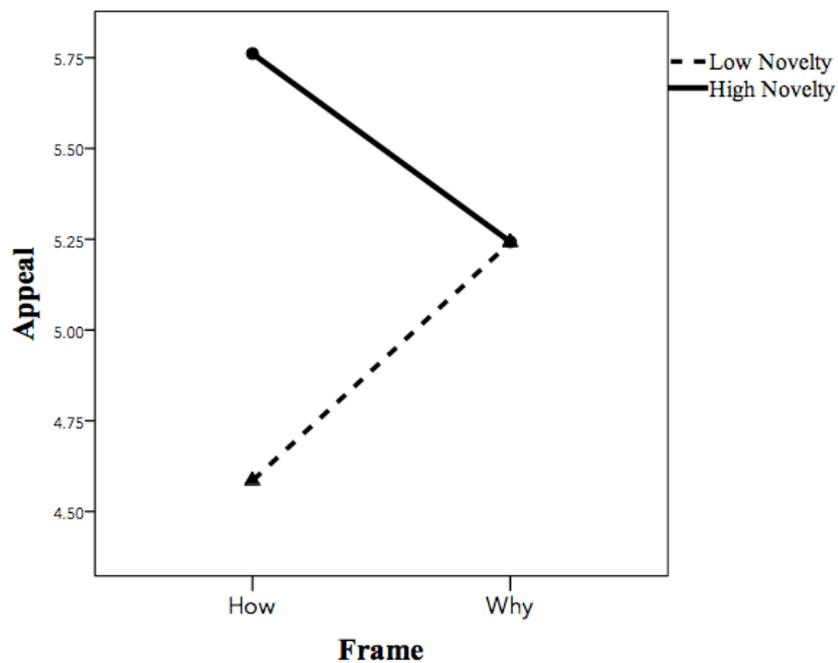


FIGURE 3

The effect of an idea's framing and novelty on Investment Propensity (Study 2)

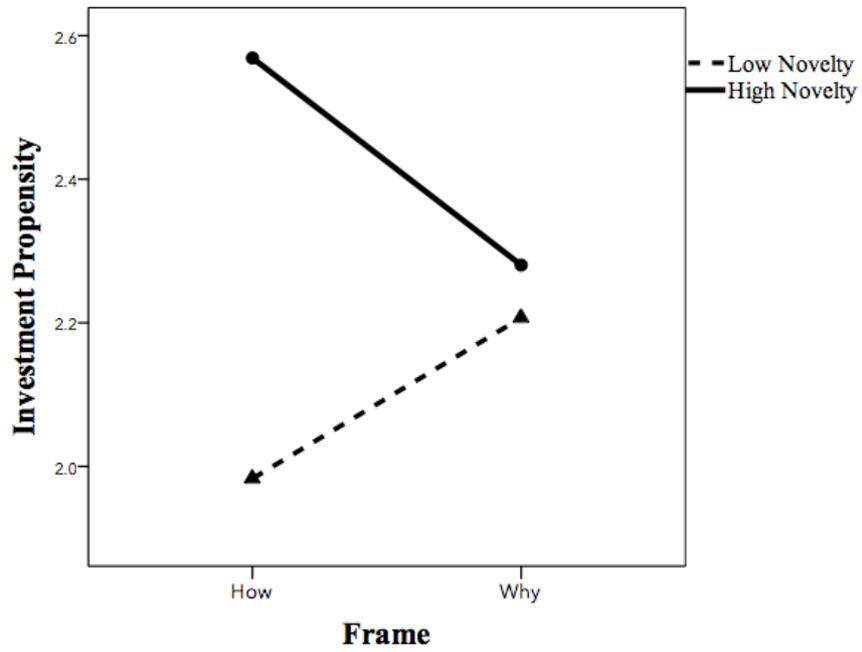


TABLE 1 - Means, Standard Deviations per Condition (Study 1)

| | How Mindset (A) | Why Mindset (B) | Control Condition (C) | F (2, 332) | Pairwise Comparisons ^a |
|--------------------------|-----------------------|-----------------------|-----------------------------|------------|-----------------------------------|
| Appeal | | | | | |
| M | 6.30 | 6.01 | 6.20 | 2.52 | A > B (p = .028) |
| SD | (.92) | (1.02) | (1.00) | (p = .082) | |
| Investment Propensity | | | | | |
| M | 2.68 | 2.30 | 2.31 | 4.17 | A > B (p = .012) |
| SD | (1.34) | (1.04) | (1.00) | (p = .016) | A > C (p = .014) |
| N | 113 | 108 | 114 | | |

^a Reported only significant or marginally significant t-tests

TABLE 2 - Means, Standard Deviations per Condition (Study 2)

| | How Frame | | Why Frame | | Interaction | Simple Effects ^a |
|--------------------------|---------------------------|----------------------------|----------------------|-----------------------|---------------------------|--------------------------------------|
| | Low Novelt y (A) | High Novelt y (B) | Low Novelt (C) | High Novelt (D) | Interaction F (1, 446) | |
| Appeal | | | | | | |
| M | 4.58 | 5.76 | 5.24 | 5.24 | 18.89 | C > A (p = .001) |
| SD | (1.56) | (1.03) | (1.48) | (1.57) | (p < .001) | B > D (p < .01) B > A (p < .001) |
| Investment Propensity | | | | | | |
| M | 1.98 | 2.57 | 2.21 | 2.28 | 5.69 | C > A (p = .133) |
| SD | (1.01) | (1.34) | (1.10) | (1.08) | (p = .017) | B > D (p = .063) B > A (p < .001) |
| N | 118 | 109 | 116 | 107 | | |

^a Reported only significant or marginally significant simple effects

APPENDIX 1 – PILOT STUDY 1

Lowly Novel Idea:

The **idea** is to make a **bike** with these characteristics:

- **Weight:** the bike weighs about 26 lbs (12 kg), while existing folding bikes weigh on average between 22 and 31 lbs (10-14 kg).
- **Flexibility:** the bike can be folded through a single, easy movement and can be carried with you.
- **Headlights:** the bike is equipped with front and rear headlights. The cyclist can switch on and off the headlights, and manually adjust their direction.
- **Anti-theft Device:** the bike is equipped with an anti-theft lock that is stored in a little compartment built into the frame.
- **Wheels:** the bike is equipped with wheels and spokes that can be customized. The cyclist can choose their colors and dimensions.

Highly Novel Idea:

The **idea** is to make a **bike** with these characteristics:

- **Weight:** the bike weighs about **9 lbs** (4 kg), while existing folding bikes weigh on average between 22 and 31 lbs (10-14 kg).
- **Flexibility:** the bike has **no spokes**, can be folded and carried by putting the bike into a **backpack**.
- **Headlights:** the bike is equipped with front and rear **photosensitive** headlights that also project two **red lasers** onto the ground generating a **virtual bicycle lane** visible for over a mile away.
- **Anti-theft Device:** the bike is equipped with a **biometric** anti-theft mechanism integrated into the handlebar. The cyclist's **fingerprint** unlocks it.
- **Wheels:** the wheels incorporate **solar panels** that can **fuel** an electric motor by absorbing energy from the **sun**.

Value Recognition: The Jointly Effect of Status & Social Ties

How status and social ties affect rewards allocation in the evaluation of novel works? Do status and social ties interplay in shaping evaluative process and outcomes? Research on social evaluation has devoted great attention to study the effect of status on rewards allocation decisions, yet few studies have explored how social proximity between evaluators and candidates affects evaluative outcomes. Using an online experiment, this paper examines the influence of status, social ties and their interplay on affecting the recognition of novel cultural products. The experimental findings as expected show that social ties moderate the effect of status on awards allocation: when audiences had prior collaborations with the creators of the cultural products they were asked to evaluate, audiences exhibit a higher probability to assign an award to low status creators. The paper findings contribute to the growing research on social evaluations in management by focusing on the underlying causal mechanism that shapes awards allocative outcomes.

Key words: Social Evaluation; Allocation, Awards, Status, Social ties, Experiments.

Manuscript under preparation

INTRODUCTION

“Professional editors, studio executives and talent managers, many of whom have a lifetime of experience in their businesses, are so bad at predicting which of their many potential projects will make it big. How could it be that industry executives rejected, passed over or even disparaged smash hits like Star Wars, Harry Potter and the Beatles, even as many of their most confident bets turned out to be flops? It may be true, in other words, that “nobody knows anything,” as the screenwriter William Goldman once said about Hollywood.” (Duncan, 2007).

Novel contributions are uncertain and ambiguous undertakings: “all hits are flukes” (Bielby & Bielby, 1994) and “nobody knows” whether a new cultural product will become successful or not (Caves, 2000). As also the vignette above illustrates, the recognition of novel cultural products is challenging and, often the allocation of worth results in false negative. If at first glance no one knows what is worth, a spontaneous question emerges: “Which are the mechanisms that govern the allocation of worth to novel contributions?”.

Because novel contributions are surrounded with high uncertainty, evaluative audiences relay upon various criteria to decide whether allocating worth or not to new projects, product or ideas (Elsbach & Kramer, 2003). The recognition of worth should be based on objective criteria that account for quality, performance, and innovativeness; yet, researches on social evaluation have shown that other criteria serve as allocation mechanisms. Some of those criteria are associated with the features of the creator, whereas others have origins in the creator’s structural network (Perry-Smith & Mannucci, 2017). A large body of work has focused on socially derived criteria as key factors in shaping allocation of symbolic and material resources. Some scholarship suggests that individual signals, such as reputation, affiliations and status govern the recognition of novelty (Merton, 1968; Podolny

1993, 2005; Braden, 2009; Lamont, 2009; Karpik, 2010; Simcoe & Waguespack, 2011). Instead, other scholarship attributes the allocation of worth to individual social positions in their network structures (Cattani & Ferriani, 2008; Cattani, Ferriani, & Allison 2014). Yet, research on social evaluation has devoted scant effort to explore the effect of another dimension of social networks - the relational component - in affecting audiences' evaluative decisions.

Social networks study taking a relational perspective puts emphasis on the relationships' quality between individuals (Perry- Smith and Mannucci, 2015) by focusing on tie strength that accounts for the recurrence of interaction between individuals, the extent of the relation, and the degree of closeness (Granovetter, 1973). In other words, the relational perspective focuses on social proximity among individuals and their relations rather than on the network structure. In this vein, scholarship has explored how relationships among individuals affect the generation of creative ideas, the identification of entrepreneurial opportunity (Perry- Smith and Mannucci, 2015); yet how relational ties shape evaluation processes has been largely neglected so far (Perry- Smith and Mannucci, 2017).

We believe that this shortcoming is critical in social evaluation research since in evaluative settings it is extremely likely that social ties between audiences and candidates exist. For instance, in peer-to-peer evaluation, such as panels for R&D selection within firms (Reitzig & Sorenson, 2013; Criscuolo et al., 2017), academic panels for research grants (Lamont, 2009), peer-review process (Wennerås & Wold, 1997) or labor market procedure (Kilduff, Crossland, Tsai & Bowers, 2016), evaluative audiences can directly or indirectly know candidates. In all these cases, studying evaluation by focusing only on the status mechanism and overlooking the effect of social proximity limits our understanding of the evaluative process. In sum, we believe that to completely understand the underlying mechanisms that determine evaluative outcomes, research have to start to account for the jointly effect of status and social proximity in shaping audiences' evaluations.

To address these shortcomings, we draw on evidence suggesting that status act as a signal of quality for judges who evaluate under conditions of uncertainty (e.g. Podolny, 1993; 2005; Simcoe & Waguespack, 2011; Azoulay, Stuart & Wang, 2014), and propose that social proximity between audiences and candidates moderate the effect of status on evaluative outcomes. Indeed, while prior studies suggest that status drives the allocation of worth to novel contributions originated by high standing individuals (Piazza & Castellucci, 2014), we suggest that social ties jointly influence the recognition of worth. In particular, we expect that social proximity encapsulating familiarity between audiences and candidates serves to reduce uncertainty associated with quality evaluations, and make status signals less effective. Figure 1 reports our conceptual framework.

Proposition 1: In peer-to-peer evaluation, social proximity between audiences and candidates reduces the positive effect of status in the allocation of worth to novel contributions.

<Insert Figure 1 about here>

We examined these arguments in an experimental setting where we manipulated the status level (high vs. no-status) of candidates, and the existence of social ties (social tie vs. no-social tie) between judges and candidates. In particular, we explored how social proximity affects the award allocation to novel commercials in a fictitious advertising competition. Thus, by using an experimental approach, we seek to address recent calls to shed more light on the evaluative process, and, especially on the “underlying causal mechanisms that operate within social evaluations” (George, Dahlander, Griffin & Sim, 2016, p. 8).

The experimental findings support our expectations that social proximity moderates the effect of status on rewards allocation of novel cultural products: specifically, social ties between audiences and candidates increase the likelihood of

receiving awards for low status candidates. Our results offer insights on the jointly effect of status and social proximity in shaping the allocation of worth, and contribute to the growing body of research on social evaluations in management by adding to the “emergent literature that uses lab experiments as a tool to identify and delineate underlying causal mechanisms that operate within social evaluations.” (George et al., 2016, p. 8).

STUDY 1

We conducted an experimental study designed to probe the conditions under which novel cultural products are more likely to receive an award depending on the creator’s status and social ties with evaluative audiences. In the experiment, we manipulated the status of the creators and the social proximity between the creators and the audience’s members by varying the content of the vignettes designed to describe the creators of the cultural products. Overall, we tested the moderating role of social proximity on the effect of the creator’s status in the allocative process of awards.

Method

Participants. One hundred and ninety-nine participants were recruited online using Amazon’s Mechanical Turk, and they received 1.50 dollars for completing the study. Potential participants were restricted to only those in the United States with a 95% or greater approval rating on MTurk. To ensure that participants paid attention to the questionnaire, we included an attention and an instructional manipulation check. We included in our analysis only responses of participants who gave the correct answer. In addition, since we required participants to watch a commercial that was 55 seconds long before making their allocative decision, we had to remove both the participants that did not watch the all video and the ones that spent too much time for watching the commercial. To follow this procedure, we recorded the time each

participant spent in the page with the commercial and, then, before running our analysis, we computed the percentiles relative to the time variable. We took in our analysis the data of the participants that were included in the 10th and the 90th percentile, respectively 53.92 and 95.31 seconds. All these procedures are strongly recommended to assure data quality and remove inattentive responses when online tools such as Mechanical Turk are used (Mason & Suri, 2011; Fiske, 2016; Curran, 2016; Meyvis, Tom & van Osselaer, 2017). Thus, the final sample consisted of one hundred and fifty-seven participants (43.9% female, $M_{age}=34.45$ years, 75.2% Caucasian).

Material and Procedure. Participants were randomly assigned to one of the four conditions in a 2 (status: high vs. no-status) x 2 (social ties: social tie vs. no-social tie) between-subjects experiment. The resulting four sub-samples were homogenous among conditions with respect to the demographic variables of age, gender, country, educational background and industry experience. Yet, the groups marginally differ in terms of ethnicity ($F(3,152) = 2.52$; $p = .060$; $\eta^2 = .047$). However, ethnicity was unrelated to our dependent variable (respectively, $r = .012$; $p = .885$). Thus, the differences in ethnicity could not explain any observed difference in the allocative decision. Below, we described the analysis run without ethnicity; yet, in Table 2, we reported all the models tested including ethnicity as a control variable.

In the online experiment, at first, all participants read a vignette that informed them about a competition in digital advertising where they had to serve as jury members. Additionally, they were asked to assign an award to a commercial after evaluating its aesthetic beauty and animation features. We explicitly used these two evaluative criteria to offer participants a clear and common base for judging the commercial. Specifically, the subsequent vignette was used to describe the evaluative setting:

Advertising Digital Competition:

In your community, there are always many initiatives, including an annual Competition in Digital Advertising. Everyone in the community can participate in the competition by submitting a commercial. Each commercial is judged and has the opportunity to win an award.

Since you have always submitted a commercial to the Digital Advertising competition, this year the organizers of the competition have asked you to become a **jury member**. As a jury member, you have to assign an award to a commercial after evaluating the **aesthetic beauty** and **animation features**.

After reading about the evaluative setting, participants received more information about the commercial's creators (*authors* in the vignettes) in order to manipulate status and social tie. Indeed, all participants were told that they would receive additional information about the creators of the commercial they were asked to judge. The creators were both described in terms of their status and their social proximity with the judge. Specifically, we design the manipulation of status by varying the degree of the creators' expertise. This manipulation was developed in line with the observation that expertise assessment is essentially a status-organizing process (Bunderson, 2003): "those members who are seen as more competent have higher status (i.e., higher prestige and esteem) and those members who are seen as less competent have lower status" (Bunderson & Barton, 2011, pp. 216). In sum, in the high-status condition, the authors of the commercials were described as well-known expert, whereas in the no-status condition they were described as not experts. Whereas, we designed the social proximity manipulation in order to explore how specific tie of prior direct contacts shapes evaluative outcomes by introducing familiarity between audiences and commercials' authors. We developed the social tie manipulation by informing the participants that they had collaborated

with some of the commercial's creators in the past (i.e. social ties), or that they had never collaborated with the creators in the past (i.e. no-social tie). Participants in the high status and known condition read the description below (if assigned to the no-status and unknown condition participants read the text in bold and italic):

In addition to the video, the organizers provide you with some information about the authors of the commercial that you are expected to evaluate. Looking at this information, you find out that all the authors of the commercial are **well-known experts (not experts)** in advertising, and that you **collaborated with** some of them (*never collaborated with them*) on commercials that you submitted to the same competition in the past.

Please, watch the commercial that you are expected to judge in the next page.

After reading the vignette, participants of all the four conditions watched and evaluated the same commercial that was about a financial service. We selected this commercial from an actual Internet contest that takes place every year, and expert judges assign awards to the commercials in competition. The commercial we deployed in this experiment was recognized as the *Best Computer: Software Online Video*⁷. To avoid confounds we asked participants of our study whether they had already watched the commercial before: just one of the participant give a positive answer, yet he/she was removed from the analysis for the criteria we used to ensure data quality (see the above section).

Dependent Variables. The allocation of the award was captured by asking participants the following question: "Would you assign an award to the

⁷ Link to the competition site: <http://www.iacaward.org/iac/medium/Online-Video/best-online-video.html#>

Link to the commercial: <https://www.youtube.com/watch?v=JHpVhEjufyA>

commercial?”. The options ranged from 1 = “Definitely no” to 7 = “Definitely yes”.

Manipulation Checks. We included both a status and social tie’s manipulation check. For the status manipulation check, we asked participants to answer the question: “How much prestige do you think the authors have in advertising?”. They rated the authors’ prestige on a 7-point scale (1 = very low prestige, 7 = very high prestige). Instead, the effectiveness of the social tie’s manipulation was measured by using the following question: “How familiar do you feel with the authors?”. Participants reported an answer on a 7-point scale (1 = not at all familiar, 7 = extremely familiar).

Results & Discussion

Pre-analysis. From an analysis of outliers on our dependent variable, award allocation, we identified one outlier based on the Z-scores threshold of 2.5 SD (Meyvis, Tom & van Osselaer, 2017). We removed this subject from subsequent analysis. Table 1 presents the descriptive statistics for the dependent variable, award allocation.

<Insert Table 1 about here>

Manipulation checks. First, to assess whether the participants perceived the status manipulation, we ran a 2 (status: high vs. no-status) x 2 (social ties: social tie vs. no-social tie) between-subjects ANOVA on the rating of the creators’ prestige. The analysis showed a significant main effect for status ($F(1, 152) = 27.86, p < .001$): participants in the high status condition rated the commercial’s creators as more prestigious than participants in the no-status condition ($M_{\text{high status}} = 4.65, SD_{\text{high status}} = 1.25$; $M_{\text{no status}} = 3.54, SD_{\text{no status}} = 1.32$). No other significant effects were observed in the result. Similarly, to test the social tie’s manipulation, we ran a 2 (status: high vs. no-status) x 2 (social ties: social tie vs. no-social tie) between-subjects ANOVA on

the rating of the creators' familiarity. The analysis showed a significant main effect for social tie ($F(1, 152) = 5.02, p = .026$): participants in the social tie condition rated the commercial's creators as more familiar than participants in the no-social tie condition ($M_{\text{social tie}} = 2.56, SD_{\text{social tie}} = 1.44; M_{\text{no social tie}} = 2.06, SD_{\text{no social tie}} = 1.28$). No other significant effects were observed in the result. Thus, we concluded that the manipulation of our two independent variables was successful.

Award Allocation. A 2 (status: high vs. no-status) x 2 (social ties: social tie vs. no-social tie) between-subjects ANOVA on award allocation showed the predicted two-way interaction ($F(1,152) = 5.54, p = .020$). In support of our expectation, simple effects tests revealed that in the case of social tie participants are more willing to assign an award to commercials with no status creators ($M = 4.77$) than to commercials with high status creators ($M = 3.91; F(1, 152) = 7.24, p < .01$). No other effects reached significance in the model.

Overall, these findings confirmed our expectation that social proximity increases the audiences' propensity to assign awards to creators who have no status signals. Figure 2 graphs the lines.

<Insert Figure 2 about here>

In Table 2, we reported the results of all the analysis that we run including also ethnicity as control variable.

<Insert Table 2 about here>

GENERAL DISCUSSION

Our initial expectation that social ties between audiences and candidates could serve as quality signals for cultural products' creators that cannot benefit from their status position found confirmation in the experimental findings. Social ties

encapsulating familiarity reduce the uncertainty that evaluators of cultural products face in expressing their judgments, when they cannot rely upon candidates' status driven signals of quality. The empirical evidence that social ties exert a moderating role in awards allocative choices also documents a downside of status, since the effect of social proximity between audiences and candidates becomes negative as status increases. Recognizing that social proximity can alter the status benefit in evaluative setting suggests that there are conditions under which status has detrimental effects. Overall, in contrast with the common views that consider status as the primary signals of quality in setting characterized with high uncertainty (Piazza & Castellucci, 2014), these findings highlight that evaluators also deploy social ties as an important judgment device (Karpik, 2010) for gauging cultural products' quality. This study is one of the few attempts to elucidate how status and social proximity interact in shaping allocative decisions and, to the best of our knowledge, the first to experimentally test the causal mechanism.

Our results offer a series of theoretical contributions to the social evaluation literature. First, by exploring the jointly effect of status and prior collaborations in allocative dynamics, we start responding to the "urgent need for more systematically cumulative work [on] ... the impact of previous network contacts on evaluative process and outcomes" (Lamont, 2012, p. 214). Second, we advance insights into the potential negative fallout of status, an area of scholarly inquiry that has received considerably less attention than the benefit of status in social evaluation (George et al., 2016). Third, we deploy a methodological approach – experiments – that is emergent in social evaluation literature to investigate underlying casual mechanisms (e.g., Pettit & Sivanathan, 2012; Fast, Halevy & Galinsky, 2012). Finally, and more generally, we offer original insights of interest beyond the allocative awards context we examined. The implication that claims encapsulating signals of familiarity between audiences and candidates alter the beneficial effect of status is of significant value in the broader arena of social

evaluation, including employee selection and promotion, new ventures funds, research grants, R&D projects selection and many other settings where the confluence of candidates' characteristics and direct or indirect relationship with audiences can play a role in recognition of worth.

The present work proposes a stylized characterization of what in fact is a more complex evaluative process where candidates present their projects, ideas to judges in real-worlds settings. Yet the use of vignette is common in experimental research and has been employed in prior studies (e.g., Fast, Halevy & Galinsky, 2012). Future research could analyze real awards competitions that take place in cultural fields by using qualitative and quantitative methodologies. For instance, studies can identify an advertising contest, track the collaborative networks of judges and candidates to obtain information on prior working relations, and collect data on the numbers of awards candidates had previously won for advertising projects as a measure of status. Also, interviews with field-industry professionals, judges can serve to strengthen the findings from quantitative data (field or experiments).

To conclude, we believe that probing the role that social characteristics – candidates' status and social ties - play in the allocative process of awards help further elucidate the dynamics that govern recognition of worth to novel contributions.

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FIGURES AND TABLES

FIGURE 1

Conceptual Framework: How Status and Social Ties affect Audiences' Allocative Choice

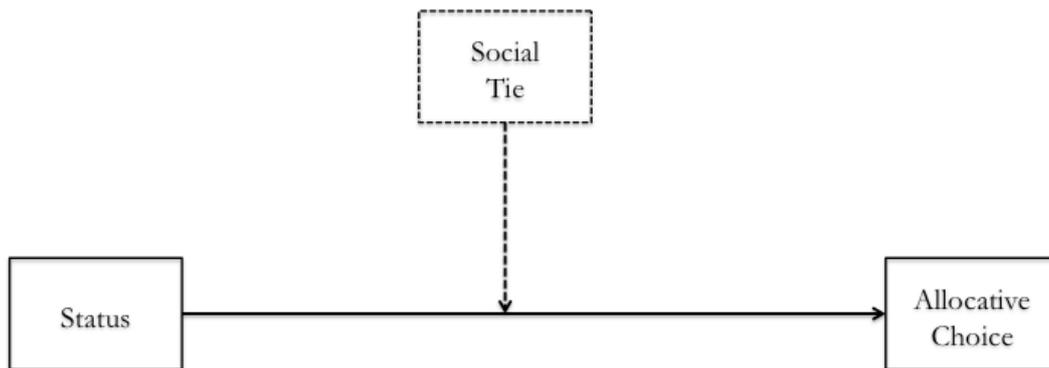


FIGURE 2

The effect of status and social tie on Award Allocation

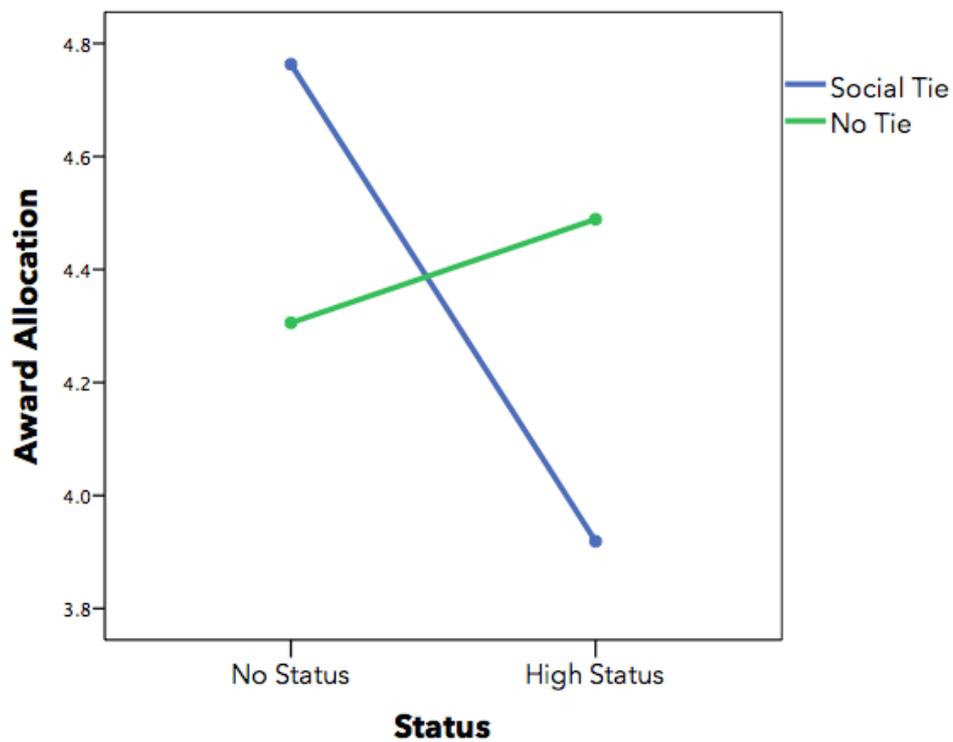


TABLE 1 - Means, Standard Deviations per Condition

| | No Status | | High Status | | Interaction | Simple Effects ^a |
|-------|-------------------|----------------------|-------------------|----------------------|---------------------------|-----------------------------|
| | Social Tie (A) | No Social Tie (B) | Social Tie (C) | No Social Tie (D) | Interaction F (1, 152) | |
| Award | | | | | | |
| M | 4.76 | 4.31 | 3.92 | 4.45 | 5.54 | A > C (p = .008) |
| SD | (.22) | (.22) | (.22) | (.20) | (p = .02) | D > C (p = .061) |
| N | 38 | 36 | 37 | 45 | | |

^a Reported only significant or marginally significant simple effects without ethnicity as control variable

Table 2.
Analysis of Variance and Covariance for Award Allocation

| | ANOVA | | | | ANCOVA | | | |
|--------------------------------------------|-------|-------|------|------------------|--------|-------|------|------------------|
| | Df | F | p | Partial η^2 | Df | F | p | Partial η^2 |
| Status (0=no-status; 1=high status) | 1 | 2.29 | .132 | .015 | 1 | 2.295 | .132 | .015 |
| Social Ties (0=social tie; 1=no-tie) | 1 | .066 | .797 | .000 | 1 | .087 | .769 | .001 |
| Status X Social Tie | 1 | 5.537 | .020 | .035 | 1 | 5.474 | .021 | .035 |
| Ethnicity | | | | | 1 | .042 | .838 | .000 |
| Error | 152 | | | | 151 | | | |
| N | | | 156 | | | | 156 | |
| Model R ² | | | .048 | | | | .048 | |

The Journey of Novelty: An Attention Space Perspective

Abstract

We propose to critically review the current body of research on novelty recognition because the literature has remained rather fragmented despite the growing scholarly attention to the topic and a consensus that novelty recognition matters for understanding the journey of novel ideas. In our assessment of the literature, we have identified a problem that is critical for the recognition of novelty: “entering the attention space” of the evaluating audience(s). Accordingly, we aim to synthesize and integrate the existing literature into a coherent perspective that, building on the attention space problem, establishes connections across the different research traditions and delineates viable future research directions by asking the following fundamental question: “How can novel ideas gain the attention of relevant audiences and then progress in their journey towards recognition?”

Key words: Novelty; Recognition; Innovators; Audiences; Radical; Incremental; Review.

A short version of this manuscript submitted to *Academy of Management Annals*

INTRODUCTION

"The good will not be successful unless novelty and amazement are experienced by a large and attentive audience" (Hutter, 2011, p. 215)

Research on creativity and innovation has long been catalyzed by the 'romantic' view according to which major creative achievements are sparked by imaginative and uniquely gifted individuals who succeed in bringing novel ideas, categories, projects or organizational forms to life. Several scholarly contributions have supported this 'heroic' view leading to a vibrant body of work that has enhanced our understanding of the individual dispositions, talents and agency that underlie the emergence of novelty. Yet, by focusing primarily on the 'supply side' of novelty generation, this research has left largely underexplored another key dimension: the need for recognition, namely the process by which the new and unaccepted garners attention and elicits support from relevant social audiences. We believe this is a significant shortcoming as innovators are rarely recognized as creative until relevant audiences such as critics, peers or users evaluate, recognize and endorse their novel claims. Focusing on the role of these audiences reveals some puzzling aspects of the recognition of novelty. While evaluating audiences are more likely to reject radical than incremental ideas, they also tend to perceive a contribution to knowledge being as valuable precisely because it is highly novel.

Consider, as an example, the ground-breaking work on mobile genetic elements by Barbara McClintock who was turned down by top biology journals for many years before being recognized and honored with a Noble prize (Adarves-Yorno et al., 2007). Early in the 19th century, young mathematician Niels Henrik Abel demonstrated the impossibility of solving the general equation of fifth degree, a classical mathematical problem (Stubhaug 2000). He sent his breakthrough work to various illustrious foreign mathematicians, the great Gauss among them, without

eliciting any attention: “Gauss merely filled the leaflet away unread, and it was found uncut after his death, among his papers”. Antonio Meucci’s invention of the telephone was credited to Alexander Graham Bell because he was the first to patent the invention, while Meucci struggled to find financial supporters for filling a patent (Carroll, 2002). Myriad investors rejected Steve Jobs’ visionary idea about home computers or did not even agree to meet with him before he received funding by a venture capital who empathized with that idea (Isaacson, 2011). These short vignettes underscore the importance of accounting for the processes that underpin the recognition of novelty within audiences that may or may not embrace it. Under what conditions does novelty take root and propagate? What is required for highly novel contributions to earn evaluating audiences’ recognition rather than neglect or skepticism? When does novelty win the attention of relevant audiences and then progress in its journey towards recognition?

To be sure, there are hints at answers to these questions across a variety of disciplinary fields including organizational theory (e.g., Cattani, Ferriani & Lanza, 2017; Boudreau, Guinan, Lakhani, & Riedl, 2016; Berg, 2016; Mainemelis, 2010; Padgett & Powell, 2012), entrepreneurship (Huang & Pearce, 2015; Johnson & Powell, 2015), sociology (e.g., Cattani, Ferriani & Allison, 2014; Goldberg, Hannan & Kovács, 2016; De Vaan, Stark, & Vedres, 2015; Sgourev & Althuizen, 2014; Phillips, 2011), and psychology (e.g., Zhou et al. 2017; Le Mens et al., 2016; Muller et al., 2014; Adarves-Yorno et al., 2007). But while there is growing consensus that the process of novelty’s recognition is key to understanding the journey of novelty from the moment it arises to the time it takes hold, scholarly contributions remain rather fragmented. Our main goal is to critically review the current body of research on the novelty recognition, organize the existing literature, expose the main insights and uncover underexplored research areas. To do so, we organize our framework around the notion of attention space, first introduced by Collins (1975, 1998) and further elaborated within the sociology of ideas (e.g., Camic & Gross, 2001). This

will allow us to synthesize and integrate the existing literature into a coherent perspective that builds on what we call the “*attention space problem*.” We will also establish connections across the different research traditions and delineate viable recommendations for future research.

Relevant Literatures

The definition of novelty is not straightforward. For instance, according to Berlyne (1960), atypicality and ambiguity are two important attributes of novelty in addition to other attributes discussed in the literature. Likewise, Budner (1962) included novelty in his definition of ambiguity. Given the similarity of these constructs, we do not distinguish novelty from ambiguity or atypicality in our review. Furthermore, we define novelty quite broadly so as to encompass several types of innovation: new ventures, projects, cultural products, technologies, and so on. This conceptualization builds upon Dewar and Dutton (1986) who define “an innovation as an idea, practice, or material artifact perceived to be new by the relevant unit of adoption” (p. 1422). We use the approach of not distinguishing between novelty and innovative solutions since the boundaries between the two conceptualizations are really blurry in our perspective.

Finally, we want to clarify that in our review we focus on *valuable* novelty, that is, the types of innovation that encapsulate value for audiences. In this regards, the matter of novelty recognition is about getting attention of audiences who could understand its underlying value. Indeed, if an innovation is highly novel but completely lacks value, it neither deserves to get the first audiences’ attention. Our perspective of novelty and value fits with sociologists, management and creativity scholars’ view: as Mumford & Gustafson pointed out (1988) “the ultimate concern ...is the production of novel, socially valued products” (p. 27).

We embed our review into four relevant dimensions related to the journey of

novelty: 1) the degree of novelty (radical vs. incremental); 2) the characteristics and skills of the innovators; and, 3) the attributes of the evaluating audiences.

First, extant research suggests that novelty lies on a continuum that ranges from incremental to radical. Incremental novelty originates from an established body of knowledge and typically entail only minor changes that refine but do not call into question an existing paradigm; by contrast, radical novelty stems from original re-combinations of existing and/or new knowledge that unravel the *status quo* and may even foster the emergence of a new paradigm (Sgourev, 2013; Rindova & Petkova, 2007). The rejection rate is higher for radical than for incremental novelty (Boudreau et al., 2016; Trapido, 2015) because, initially at least, radical ideas are often perceived as uncertain, risky, unworkable or too weird (Mainemelis, 2010).

Second, the challenge in novelty recognition stems not only from the degree of novelty, but also from the characteristics of its proponent (e.g., the creator, the entrepreneur or, more generally, the innovator). The innovator can be a field insider (i.e., located in the core) or an outsider (i.e., located on the periphery). This distinction is important because often proponents of the most radical ideas are outsiders (Harman & Dietrich, 2013; Merton, 1972). Indeed, "it's rare that originality comes from insiders" (Grant, 2016, p. 58). The recognition of novelty is especially challenging when novelty is radical and furthered by outsiders: the very social position that typically renders outsiders more innovative also makes them less credible. A compelling illustration of this paradox is the case of John Harrison, the inventor of the marine chronometer, who struggled to receive attention and support for his chronometer (Cattani et al., 2017). To deal with this challenge, social network scholars have pointed out that occupying an intermediate position between the core and the periphery of an existing field may favor the recognition of radical novelty (e.g., Cattani & Ferriani, 2008). Another line of scholarship has focused on the role of socially derived signals or judgment devices (Karpik, 2010; Lamont,

2012), such as reputation, status or other credibility markers (Sgourev & Althuizen, 2014; Nagy et al., 2012; Braden, 2009; Zott & Huy, 2007). In addition, other scholars have focused on the role of individual characteristics, such as communicative skills (Brooks et al., 2014; Huang et al. 2013). In this regard, significant research has been devoted to studying the role of rhetorical strategies – e.g., the use of framing, storytelling, sense-making, narrative devices, or robust design (Manning & Bejarano, 2016; Garud, Schildt, & Lant, 2014; Navis & Glynn, 2011; Cornelissen & Clarke, 2010; Doganova & Renault, 2009; Elsbach & Kramer, 2003; Hargadon & Douglas, 2001) – innovators can adopt to win audiences’ attention.

Third, since the value of novelty can only be defined with reference to its evaluators (Johnson et al., 2006; Burt, 2004; Zuckerman, 1999; Wijnberg, 1995) and their willingness to support it, scholars have increasingly attended to the structure of the social audiences in charge of channeling critical material and symbolic resources (Padgett & Powell, 2012). Work in this vein treats audiences as homogeneous entities who share cultural codes and are homogeneously averse to novelty, but recent research has started to consider situations where multiple heterogeneous audiences coexist and may vary in their receptiveness to novelty (Cattani, Ferriani, Negro & Perretti, 2008; Pontikes, 2012; Cattani et al., 2014; Goldberg et al., 2016). At the same time, psychological research has increasingly focused on how audience members’ culture and roles (e.g., decision-making roles) alter the recognition of novelty (Mueller et al., 2017; Loewenstein & Mueller, 2016; Berg, 2016).

We draw on this vast literature to synthesize the main insights that could inform avenues for future research (see Table 1).

<Insert Table 1 about here>

New perspectives on the problem

In our assessment of the literature (see Tables 1), we have identified a common

problem that tends to undermine the recognition of novelty: “gaining entry into the attention space” of the evaluating audience(s). Because novelty must win audience’s attention in order to advance in its legitimation journey, we propose to structure our review on novelty’s recognition by focusing on this puzzling process. Thus, we ask: “which are the mechanisms that influence the entry of novelty into the attention space?” First, building on extant research on attention (Kahneman 1973; Payne & Bettman, 2004), we propose that one key mechanism affecting the likelihood that a novel idea will enter an audience’s *attention space* is its degree of novelty (i.e., radical vs. incremental). Differentiating between two types of attention, voluntary and involuntary, Kahneman (1973) surmised that novelty favors attention capture, but requires more mental effort. Indeed, “Novel and surprising stimuli which spontaneously attract attention also require greater effort of processing than do more familiar stimuli” (Kahneman, 1973, p. 4). Second, drawing on entrepreneurship and institutional theory we distinguish between agentic and non-agentic mechanisms that can help ideas to gain attention space (Hardy & Maguire, 2008; Garud et al., 2007; Aldrich & Fiol, 1994). Agentic mechanisms refer to actions, decisions or strategies that are (more or less) under an individual’s control. Specifically, agentic efforts include: the use of individuals’ social positions (e.g., status, reputation or network position; Sgourev & Althuizen, 2014; Cattani & Ferriani, 2008), communicative skills, rhetorical framing and narratives (Vaara et al., 2016; Elsbach & Kramer, 2003), networking ability or lobbying with specific audiences (e.g. the ability to establish connections with relevant audiences or some of their members, Perry-Smith & Mannucci, 2017; Baer, 2012). Non-agentic mechanisms refer to exogenous factors, such as, audiences’ characteristics, structural features, that are not under an individual’s direct control but can make fields more or less permeable to the reception of novelty and their subsequent reconfigurations (Padgett & Powell, 2012). Studies pointing at these mechanisms have drawn attentions to such factors as the structural fragmentation of the field

(Sgourev, 2013; Phillips, 2011; Cattani et al., 2008); the extent to which the social audiences in charge of channeling critical material and symbolic resources are receptive to new offers by virtue of their composition (Cattani et al., 2014) or turnover (Anand & Watson, 2004). Figure 1 shows a model that represents the key enabling mechanisms in the attention space problem that will be covered in our review.

<Insert Figure 1 about here>

To summarize, in this review we hope to (1) understand how the attention space problem can be addressed by systematically reviewing the micro-, meso- and macro-level mechanisms that influence the entry into the attention space along the aforementioned dimensions; (2) carefully assess how studies on novelty recognition fall into these categories (or fail to do so); and (3) bring to the attention of scholars interested in novelty fresh insights as well as opportunities for future work.

NOVELTY

Different Conceptualizations

What is novelty? Its conceptualization is not straightforward in the literature; for instance, in an early definition, Berlyne (1960) views novelty as unexpectedness, complexity, atypicality, obscurity, uncertainty, and ambiguity. In the creativity literature, scholars conceptualize novelty as a fundamental dimension of creativity and agree that novelty entails originality and uniqueness (Amabile, 1996; Hennessey & Amabile, 2010, Mueller et al., 2012; Anderson et al., 2014; Zhou et al., 2017)⁸. In

⁸ Recent work advocates to study novelty separately from the other key dimension that defines creativity – i.e., usefulness (Amabile, 1996; Hennessey & Amabile, 2010) – since the two aspects are “conceptually and empirically distinct” (Montag et al., 2012, p. 1371). Our review is premised on the distinction between novelty and usefulness; accordingly we focus on novelty recognition, not on

addition, they also recognize that the expression of novelty can often “introduce ambiguity or uncertainty... because by definition, novel ideas involve deviations from the status quo and are not yet proven” (Mueller, Goncalo & Kamdar 2011, p. 494).

In organizational theory, innovation and sociology, early conceptualizations of the nature of novelty go back to Schumpeter (1939) and Nelson and Winter (1982). In Schumpeter’s (1939) view, “innovation combines components in a new way, or that it consists in carrying out New Combinations” (p. 88); similarly, Nelson and Winter (1982, p. 130) argues that “the creation of any sort of novelty in art, science, or practical life - consists to a substantial extent of a recombination of conceptual and physical materials that were previously in existence”. These conceptualizations of novelty has become widespread among scholarship who considers novelty as a quality that emerges from actions that combine elements of otherwise disconnected categories (Hargadon & Sutton, 1997; Fleming, 2001; Uzzi, Mukherjee, Stringer, & Jones, 2013; Augier, March and Marshall, 2015; De Vaan et al., 2015; Trapido, 2015; Boudreau et al., 2016; Goldberg et al., 2016). Many studies demonstrate that such novel combinations hold the potential for great impact and change, yet they also consistently find that novelty commonly receives reproach rather than support (Rindova & Petkova, 2007; Mainemelis, 2010; De Vaan, et al., 2015; Boudreau et al., 2016; Goldberg et al. 2016). This devaluation is intrinsic to the paradoxical nature of novelty. On the one hand, creating something genuinely new requires deviation from existing categories, often by reconfiguring and recombining them in atypical ways. But the outcomes of atypical recombination are less likely to be meaningfully and positively recognized by relevant audiences (Uzzi et al.; Augier et al., 2015) sometimes resulting in false negatives. Evaluative audiences find difficulties to recognize the value of high novelty because novel contributions are surrounded

creativity recognition. The clarification of our particular focus is important to appreciate the originality of the review and the significance of our contribution.

with high uncertainty (Rindova & Petkova, 2007). As pointed out by Mainemelis (2010, p. 558) “when first proposed, new ideas are often rejected because they are perceived as weird, inappropriate, unworkable, or too risky, but these same ideas may later result in an outcome that the social context accepts as useful and breakthrough.”

Building on the above micro-, meso- and macro- works, in the attempt to reconcile the various definitions of novelty, in this review, we conceived novelty as a combination of elements that encapsulates uniqueness, originality, uncertainty and ambiguity.

Novelty: Incremental vs. Radical

Extant scholarships focused on different level of analyses (micro-, meso- and macro) consistently distinguish between two types of novelty: incremental and radical novelty. For creativity scholars (e.g., Baer, 2010; Madjar, Greenberg, & Chen, 2011; Anderson et al., 2014), radical novelty “suggests new and set-breaking frameworks or processes.... [and] diverges from already established practices” (Madjar, et al., 2011, p. 731). On the contrary, incremental novelty “implies few changes in frameworks and offer only minor modifications to existing practices and products” (Madjar et al., 2011, p. 731). In a similar way, organizational theorists and sociologists suggest that radical novelty develops from the recombination of existing knowledge or an entirely original knowledge base, and introduces disruptive changes into the established paradigm. Whereas, on the other hand, incremental novelty derives from established knowledge and introduces small changes relative to the existing paradigm (Dewar & Dutton, 1986; Hill & Rothaermel 2003; Perry-Smith & Shalley, 2003; Rindova & Petkova, 2007; Stark, 2009; Sgourev, 2013; Boudreau et al. 2016).

Thus, as the above definitions make clear, different scholarships agree on

distinguishing novelty in term of its radical or incremental newness. In addition, psychological, sociological and organizational works argue that radical and incremental novelty “pertain to distinctions along a theoretical continuum of the level of new” (Dewar & Dutton, 1986, p. 1423) and, consider novelty a question of degree (Anderson et al. 2014; Boudreau et al., 2016). However, despite this consistent conceptualization of novelty as a continuum, very often micro-, meso- and macro- research focus on the two extremes types of novelty – i.e., radical and incremental (e.g., Dewar & Dutton, 1986; Henderson & Clark, 1990; Rindova & Petkova, 2007; Madjar et al., 2011; van Werven, Bouwmeester & Cornelissen, 2015) – because intermediate levels of novelty are more difficult to be analyzed.

Novelty: Recognition Biases

Novelty recognition is challenging because evaluative audiences assessing ideas, projects, cultural products or other artifacts, attempt to identify the *best* and *most* novel proposals, but difficulties prevent such recognition. As we explained above, this challenge is inherent into the definition of novelty, which entails uncertainty and ambiguity (Rindova & Petkova, 2007; Mainemelis, 2010). Uncertainty and ambiguity are two aspects of novelty that are usually seen in opposition to others dimensions of novelty – i.e., value and usefulness. In this line, recent work has shown that individuals hold implicit biases against novel ideas especially when evaluators feel motivations to decrease and avoid uncertainty, which is a negative state (Mueller et al. 2012). Thus, this suggests that the tension in novelty recognition is driven, on one side, by the individual experience of uncertainty and ambiguity, and, on the other side, by the audiences’ need to perceive its value and usefulness. This tension is central to our understating of the processes and biases that govern novelty recognition. Indeed, although gatekeepers, managers and organizations strive to select the *best* novel and appropriate ideas, researches have long been puzzled by the evidence that very often people erroneously reject novelty limiting scientific

breakthroughs (Staw, 1995; Mainemelis, 2010; Mueller et al. 2012; 2014). This paradox is not new because many evidences show that people reject novelty even if their goal is to innovate (Staw, 1995). For instance, already in the 1962, Thomas Kuhn, in his book "The Structure of Scientific Revolutions" argued about the existence of an intrinsic bias against novelty in science. This challenging paradox is noteworthy both for scholars and practitioners because unless novelty received positive evaluations, it could not be transformed into new products, services or scientific theories.

A challenge in novelty recognition lays in the fact that novelty depending on its degree generates different feelings on individuals, and, as scholars suggest, these emotional reactions can be positive or negative. In particular, distinguishing between incremental and radical novelty, Rindova and Petkova (2007) highlight that incremental novelty, fitting relatively easily with available schemas, is likely to be perceived as congruous generating low-intensity positive feelings. On the contrary, radical novelty, producing a misfit with existing schemas, is likely to trigger severe incongruity that induces high-intensity emotional responses. More specifically, when the novelty's incongruity arises confusion and frustration, emotions would be highly negative; yet, if the incongruity is successfully solved, then the value of the novel solution is recognized and emotions could become positive (Rindova & Petkova, 2007).

In line with this argumentation, in a research on proposals evaluation, Boudreau et al. (2016) document a discount associated with highly novel proposals, and suggest that biases are consisted with "boundedly rational evaluation of new ideas" (Boudreau et al., 2016, p. 1). Specifically, they argue that high novelty could be *misconstrued* when the uncertainty that encompasses novelty leads to interpret it in terms of evaluators' established knowledge and mental schemas. This view is similar to the one of Rindova and Petkova (2007), since both perspectives share the idea that "established knowledge and mental models are *brittle*" (Boudreau et al.,

2016, p. 14): the pre-existing knowledge schemas of individuals generate misfit with novelty and prevent evaluative audiences to completely understand, recognize its value. Thus, a question spontaneously emerges when and how novelty is recognized? Which are the mechanisms that can favor novelty recognition? Does novelty recognition depend on the types of evaluative audiences?

By distinguishing between agentic and non-agentic mechanisms that can shape the recognition process of novelty, we attempt to answer the above questions elucidating under what conditions social audiences can recognize novelty. In our review, agentic mechanisms refer to actions, decisions or strategies that are (more or less) under an individual's control. Thus, agentic efforts include: the use of individuals' social positions, communicative skills, rhetorical framing and narratives, networking ability or lobbying with specific audiences. While, non-agentic mechanisms refer to exogenous factors, such as audiences' characteristics, structural features or field fragmentation, that are not under an individual's direct control but can make fields more or less permeable to the recognition of novelty.

AGENTIC MECHANISMS

Social Signals

A large body of work has focused on socially derived criteria as key factors in shaping evaluative outcomes. Scholarship suggests that individual signals, such as reputation, affiliations and status are crucial for allocating attention during evaluations of novelty (Merton, 1968; Podolny 1993, 2005; Braden, 2009; Simcoe & Waguespack, 2011). Indeed, in settings characterized with high uncertainty, which is typical in novelty evaluation processes, social derived criteria works as the primary signals of value and quality (Piazza & Castellucci, 2014) and, "the outputs of highly recognized producers receive better audience evaluations" (Trapido, 2015, p. 1489). Merton (1968), who identified this tendency as the Matthew effect, shows

that authors' social standing within academic communities shape the recognition of novel contribution in science. Similarly, in a natural experiment, Simcoe & Waguespack (2011) found that status helps authors to receive attention for their novel ideas, and suggest that this attention can serve to further develop the ideas and get them published. In an analysis of status shock in the career of life scientists, Azoulay, Stuart & Wang (2014) explores the effect of scientists receiving the status-award of Howard Hughes Medical Institute Investigator on recognition growth – i.e, the number of citations for prior articles. The authors find evidence of a post-award citation boost, and, in line with the previous theories of status, they showed that the effect of the award is bigger when articles are more novel, and so, their quality more uncertain.

Entrepreneurship scholars have found similar impact of reputation and credentials on facilitating new ventures recognition (Tyebjee & Bruno, 1984; Zott & Huy 2007; Franke et al., 2008). For instance, Tyebjee and Bruno (1984), who studied the criteria that venture capitalists use to evaluate new venture, identify various factors that affect new ventures' evaluation. Among these criteria one factor labeled the managerial capabilities of founders includes favorable references regarding the entrepreneur. More recently, in an inductive study, Zott & Huy (2007) show that entrepreneurs who perform symbolic management can get more resources for their new ventures. Specifically, in their categorical classification, they show that entrepreneurs' credibility facilitates resources acquisition and, the effect is greater when uncertainty is higher.

In sum, it emerges that the various scholarships, which have dealt with social signals by taking different theoretical lens, attribute to status, reputation or credential a signaling role of quality that in evaluative settings of novelty translates into its recognition. However, what is seems lacking in this stream of the literature is an understating of the underlying mechanisms that govern the relations between social signals and novelty recognition. As Koppman (2016) pointed out, in creativity,

psychologists “neglect the social factors that shape perceptions of individual difference” (p. 292). Thus, more micro-experimental research should start to address this shortcoming: for instance, scholars can explore whether factors such as trust, positive emotions or similarity between audiences and innovators impact on the status-novelty recognition relation in evaluative settings where social signals are uncovered.

Communicative Skills

A conspicuous body of work that has shed light on how different type of arguments can help innovators garner support from stakeholders is the stream of research on entrepreneurial storytelling. A key emphasis in these studies is that entrepreneurs, as skilled rhetoricians, are able – through their storytelling tactics – to shape the sense making process of key stakeholders. Within this line of scholarship, several studies have drawn attention to the role played by communication and narratives not only in reducing audiences’ perceived risk associated with the exploitation of novel entrepreneurial opportunities, but also in motivating them to committing capital to a venturing idea (Martens, Jennings & Jennings, 2007; Pollack, Rutherford, & Nagy, 2012; Garud et al., 2014; van Werven et al., 2015; Manning & Bejarano, 2016). Studies in this vein have shed light on how the narratives innovators tell may help them acquire symbolic and material resources, as well as how the terms and categories they borrow from dominant discourse might enable them to convince relevant audiences (Navis & Glynn, 2011). This suggests that innovators, even the ones who stand outside the focal field, can deploy rhetorical strategies for pitching their ideas and increase the probability that these ideas will be recognized.

In a recent rhetorical typology, for instance, van Werven and colleagues (2015) argued that the strength of a specific rhetoric in convincing audiences varies

with the degree of novelty of an idea. For example, stories by cause are more effective for incremental than radical ideas due to the inherent uncertainty associated with cause-effect relations in highly novel situations (van Werven et al., 2015). Suggesting that the appropriate framing for successfully championing novel ideas is a function of their level of novelty. In line with this argument, Manning and Bejarano (2016) offer exemplar findings. Specifically, Manning and Bejarano (2016) explored how entrepreneurial stories are construed to appeal to audiences in various crowdfunding campaigns. They identified two main styles to frame stories – the results-in-progress frame and the ongoing journey frame – and found the effectiveness of the style to be a function of a coherent combination of three features of an entrepreneurial idea: the tangibility of outcome, the sophistication of technology, and the social orientation. With respect to the second feature, their findings revealed that “projects based on sophisticated technology, such as 3D printers and software, are typically presented as results-in-progress, whereas projects relying on more basic technology, such as food or clothing, are predominantly presented as ongoing journeys” (Manning & Bejarano, 2016, p. 20). As they suggested, ideas focused on new technologies benefit from a results-in-progress frame that allows audience members to appreciate the immediate value of their utility; by contrast, to appeal to audience members, an ongoing journey frame has to contextualize the idea “as part of a larger concern, for example, healthy eating, the environment, and so on” (Manning & Bejarano, 2016, p. 19) because the utility of familiar technologies is easily appreciated.

The argumentation that rhetorical strategies can make evaluators understand novelty and, that this is critical to its successful introduction drives also prior research on the robust design by Hargadon & Douglas (2001). Hargadon & Douglas (2001) demonstrate that “by designing the incandescent light around many of the concrete features of the already-familiar gas system, Edison drew on the public's preexisting understandings of the technology, its value, and its uses” (Hargadon &

Douglas, 2001). In addition, in the Edison's case, they suggested that although inventors have to focus their claims on both novelty and usefulness of the proposed ideas, the emphasis should be balanced: "innovations that distinguish themselves too much from the existing institutions are susceptible to blind spots in the public's comprehension and acceptance, particularly those innovations viewed as radical or discontinuous. But innovations that hew too closely to particular understandings and patterns of use may incite resistance or assimilation into the current technological environment" (p. 493).

In sum, these studies shows that innovators can deploy their communicative skills to gain support for their novel ideas: indeed, due to the inherent uncertainty associated with novelty, "the framing of an issue, rather than its actual content, often determines whether it is seen as a *foolish* risk, especially in the absence of objective standards" (Aldrich & Fiol, 1994, p. 651). Thus, it's well established in the literature that communicative skills are essential in eliciting novelty recognition; but how these skills jointly interact with other agentic and non-agentic factors in the novelty's evaluative process is not straightforward. Future researches that combine communicative skills with other factors can offer relevant insights to the understanding of novelty recognition.

Network Position and Social Ties

A stream of inquiry has investigated the recognition of novelty by taking a social network perspective. Much of these works attributes novelty recognition to individual social positions in the network structures (Cattani & Ferriani, 2008; Cattani et al., 2014); yet, more recent research has started to put effort to explore the impact of social relations between candidates and audiences on resulting evaluative outcomes and, also, the role of individuals networking ability on idea recognition is attracting growing scholarly attention (Perry-Smith & Mannucci, 2017; Baer, 2012).

A long tradition on sociology focuses on the effect of social network structures on the individual propensity to undertake innovative acts (Simmel, 1971) and classifies innovators “into incumbents and dissidents, insiders and outsiders, orthodox and heretics, and core and peripheral players” (Cattani et al. 2014, p. 1). This scholarship suggests that core, central actors (or in-groups, insiders) have higher chances to access resources and produce more orthodox ideas (Perry-Smith & Shalley, 2003; Sgourev, 2013, Cattani et al. 2014) since “incumbents work to defend and reproduce their views and impose consensus” (Cattani et al. 2014, p. 1). On the contrary, peripheral, marginal actors (or out-groups, outsiders) that are not constrained by the pressure of their field are more likely to champion dissenting ideas threatening the current paradigm (Cattani & Ferriani 2008; Sgourev, 2013; Cattani et al., 2014). However, because peripheral actors are stranger relative to the target field, in-groups perceived these peripheral, marginal actors as a threat for their field (Perry-Smith & Shalley, 2003; Sgourev, 2013; Cattani et al., 2014). In this line, sociological research has shown that outsiders face more difficulties to promote their innovative ideas and gain acceptance of them because of their social distant position in the target field (Cattani & Ferriani 2008; Sgourev, 2013; Cattani et al., 2014; 2017).

In the attempt to solve the tension between insiders vs. outsider and novel contributions, sociological work has explored the role played by core-periphery mechanisms, and advocates that intermediate positions are the most appropriate for novelty recognition. In particular, Cattani and Ferriani (2008), who studied core-periphery mechanisms in the Hollywood context, suggest that individuals who are in an intermediate position are in an advantageous social position that can be deployed to gain resources and approval for novel ideas. Indeed, “by being close to the core, they [individuals in intermediate positions] can benefit from being directly exposed to sources of social legitimacy and support crucial to sustaining creative performance; at the same time, by not losing touch with the periphery, they

can access fresh new inputs that are more likely to blossom on the fringe of the network while escaping the conformity pressures that are typical of a more socially entrenched field” (Cattani & Ferriani, 2008, p. 838).

Overall, this line of work agrees that innovators’ likelihood of receiving a favorable evaluation for their novel ideas depend upon their positions in the network structure, and that out-groups who are in the position to produce more radical ideas suffer a negative discount (Sgourev, 2013, Cattani et al., 2017).

More recently, work on social network and novelty recognition has started to take into account the effect of the relational dimension in influencing audience’s evaluative processes. This scholarship that puts emphasis on the quality of the relationships between audiences and innovators (Perry-Smith and Mannucci, 2015) focuses on the strength of social ties – i.e., the recurrence of interaction between individuals, the extent of the relation, and the degree of closeness (Granovetter, 1973). These works have studied setting in which evaluative audiences can directly or indirectly know candidates, such as, the case of peer-to-peer evaluation. For instance, Reitzig & Sorenson (2013) have found evidence of an in-group bias in novel idea evaluation process. Specifically, by empirically investigating idea selection in a multinational firm, they show that audiences favor novel ideas that belong to insiders – i.e., individuals who work in the same organizational subunit - and, that this bias is reduced in the subunit where the likelihood of a direct tie between evaluators and proponents becomes lower. In a similar vein, Criscuolo, Dahlander, Grohsjean & Salter (2017) investigate panels for R&D selection within a multinational firm; yet, they suggest that shared locations help proponents to find support for their ideas only when novelty is low. In other words, they argue that as novelty increases, “panels are more tolerant of projects proposed by applicants from different locations” (Criscuolo et al., 2017, p. 455). While the explanatory mechanisms of these findings are only tentative due to the empirical nature of the field study, they contradict the study by Reitzig & Sorenson (2013). In our view, both

works offer an important contribution to the understanding of novelty recognition because, by providing opposing findings, they suggest the need for studying more deeply the social ties' mechanisms within evaluative setting. As Criscuolo et al. (2017) state, experimental research can add granularity and offer insight to clarify the underlying operative mechanism.

Finally, in a study on novel idea implementation, Baer (2012) investigates the relevance of employees' networking ability and strong *buy-in* ties in affecting the likelihood that ideas receive approval and support by supervisors. Baer (2012) defines networking ability "as the extent to which people are skilled in developing and using social networks to effect change at work" (p. 1106) and refers to strong *buy-in* ties as ties close to colleagues or friends "whose backing may allow successful pursuit of initiatives within their organization" (p. 1107). His findings show that employees have higher chances of seeing their ideas receiving support when they have networking ability or a group of strong *buy-in* ties. The contribution of this study with respect to novelty recognition derives from its effort to theorize and shed light on the effect of social ties' strength distinct from the effect of structure: indeed, to date "tie strength has been relegated to "stepchild" status relative to structure" (Perry-Smith & Mannucci, 2017, p. 71).

In sum, so far, scholarship has devoted much more attention to explore the structural mechanisms in shaping novelty recognition; yet, works to uncover and clarify the role of social ties are still in an emergent phase. Specifically, it seems necessary to call for more experimental research that allows to account for the social ties' features (e.g., strong vs. weak, direct vs. indirect) and to better understand the underlying causal mechanisms that govern novelty recognition.

NON-AGENTIC MECHANISMS

Multiple Audiences and Field Fragmentation

An emergent sociological and organizational stream of inquiry focuses on particular features of evaluative audiences that are presumed to shape novelty recognition, such as heterogeneity and fragmentation (Sgourev 2013; Cattani et al., 2014). So far research has treated audiences as homogeneous entities with the same cultural codes and adversity to novelty, but recent work has started to account for situations where multiple heterogeneous audiences coexist and may vary in their evaluation of novelty since each audience has distinct codes and standards (e.g., Cattani et al. 2008; Pontikes, 2012; Cattani et al., 2014; Goldberg et al., 2016). For instance, Pontikes (2012) examines how ambiguous organizations are differently evaluated by two types of audiences: “*market-takers*, who consume or evaluate goods and *market-makers*, who construct markets by developing new niches and enforcing boundaries” (Pontikes, 2012, p. 82). Specifically, his findings show that the appeal of ambiguous organizations depends on the audience’s type: *market-takers* – i.e., consumers, critics or gatekeepers – like less organizations that use ambiguous labels; whereas, *market-makers* – i.e., venture capitalist, manager, analyst or business media – like more such organizations. In the Hollywood film industry, Cattani et al. (2014) contribute to this line of scholarship by exploring how different type of audience - peers and critics – assign awards to professionals for their cultural products. They found empirical evidence that peers favor professionals who are in the core of the field with respect to professionals who occupy peripheral positions; but this favoritism for core-professionals doesn’t exist in the awards allocated by critics.

In sum, these recent works emphasize that distinguishing among types of audiences in novelty recognition is critical since heterogeneous groups of evaluators can show different preferences and, therefore, recognize as valuable different novel contributions. In addition, it seems plausible that multiple audiences can mitigate the novelty bias because of the distinct set of standards and codes that each audience employs to make evaluations, and, also, can reduce the disadvantage of

actors that occupy marginal, peripheral position in the target field (i.e., out-groups, outsider). Consistent with this perspective, in an inductive study, Sgourev (2013) analyses the rise of Cubism and shows that the fragmentation of the Parisian art market in the 20th century was fundamental for encouraging experimentations among critical audiences that become also less hostile to the radical novelty introduced by Cubism, which has its origins in the periphery of the French art field.

Overall, this line of inquiry suggests that novelty can receive recognition from relevant audiences because of factors that are not under the direct control of proponents – i.e. non-agentic mechanisms. In sum, “actors may be successful in innovation not because of the specific actions that they undertake but because of the favourable interpretation of these actions by members of the audience” (Sgourev, 2013, p. 1611).

Finally, with respect to the relevance of both agentic and non-agentic mechanisms in shaping novelty recognition, Cattani et al. (2017) offer interesting findings in their recent work on John Harrison’s radical idea. The research investigates how the marine chronometer originated by John Harrison – an outsider of the target field – obtain approval among relevant social audiences and, shows that the recognition of Harrison’s radical idea is affected by three processes: “(1) the outsider’s agency to further a new offer, (2) the existence of multiple audiences with different dispositions towards this offer, and (3) the occurrence of an exogenous jolt that helps create a more receptive social space” (Cattani et al, 2017, p.1). Thus, they explore the journey of the marine chronometer’s recognition by using a multilevel model that accounts for the joint effect of micro-, meso- and macro-mechanisms. To the best of our knowledge, to date, this is the first attempt to employ a multi-level of analysis to understand the process by which novelty receives audience recognition. Yet, more multilevel research are needed to better clarify the mechanisms at work: for instance, future research could investigate whether this findings hold or not for different innovators – i.e. insiders -, whether one of the

mechanisms is more relevant than the others in explaining novelty recognition, whether the effectiveness of these mechanisms depends upon the characteristics of the proposed idea. To conclude, we think that this exciting research area still deserves much more scholarly effort.

Audiences' Culture and Roles

A growing scholarship of psychological research that focuses on audiences' characteristics has started to explore how audience members' culture and roles (e.g., decision-making roles) alter the recognition of novelty (Berg, 2016; Loewenstein & Mueller, 2016; Mueller et al., 2017). For instance, Berg (2016) in his investigation of *creative forecasting* – i.e. “the skill of predicting the outcomes of new ideas” (Berg, 2016, pp. 2) – concentrates on two different organizational roles: creators and managers. The results show that the prediction of success for others' novel proposals is estimated more accurately by creators rather than by managers. Berg (2016) suggests that creators are better in estimating novel ideas' success since their role make them to focus on divergent and convergent thinking; whereas, because of their role in organizations managers focus merely on convergent thinking. Indeed, organizations demand managers to evaluate ideas and, thus, they are involved in convergent thinking; while, creators are required to both generate and evaluate ideas and, so, are involved in divergent and convergent thinking (Berg, 2016).

In line with the argumentation that organizational roles matter in novelty recognition, a recent work by Mueller et al. (2017) shows that decision-making roles elicit in individuals an economic mindset, which lower the novelty ratings of ideas with minimal social approval. While these results are interesting and provide new insights to the stream of inquiry in novelty recognition, we think that future research should examine whether economic mindsets lead individuals, not only to give lower

novelty evaluation, but also to be more hostile in supporting novel ideas. In addition, as Mueller et al. (2017) suggest, future works can identify and explore other cues that by interplaying with economic mindsets can alter novelty recognition.

Finally, Loewenstein and Mueller (2016), in their work on culture, implicit theories and creativity, offer fresh insights to scholars interested in novelty recognition. Their results focused on Chinese and Americans show that U.S. individuals employ a narrow implicit theory in creativity judgment since they tend to associate positive evaluation of creativity with a small number of cues; while, Chinese individuals employ a broad implicit theory since they tend to associate positive evaluation of creativity with a large number of cues. More specifically, “members of both cultures found cues such as *breakthrough*, *surprise*, and *potential* to indicate creativity. In contrast, cues such as *easy to use*, *feasible*, and *for a mass market* were indicators of creativity for most Chinese and non-creativity for most Americans” (Loewenstein & Mueller, 2016, p. 320). In sum, this study emphasizes that differences in culture alter creativity evaluation because individuals use different implicit theories. In our view, this work generates fruitful research questions for psychologists, sociologists and organizational theorists that aim to uncover how novelty is recognized among heterogeneous audiences.

To conclude, the fascinating world of novelty recognition and the relevant social audiences, who are expected to work as gatekeepers of novel proposals, represent an emergent and growing stream of inquiry that interests a large range of scholars.

IMPLICATIONS FOR FUTURE RESEARCH

We believe this paper has the potential to influence future research in several ways. First, we hope that the analytic framework we propose in our literature review will

offer a lens to explore future research directions. We have no doubt that studies will continue to focus on different levels of analysis (micro-, meso- or macro-). Our review of the literature, however, reveals the urgent need to conduct more multilevel investigations into the process by which novelty gains audience attention. Second, we hope to prompt a dialogue among the several literatures and perspectives that scholars have used to study novelty reception in order to stimulate new research questions and contributions on this important yet underexplored topic.

By elucidating the conditions that shape how and why novelty is recognized, this paper not only advances an original approach for analyzing the journey of novelty from the moment it arises to the time it takes hold, but also promises to have a significant impact on how we think of and study innovation. This is a fascinating yet fragmented area of inquiry, with significant ramifications into fields as diverse as innovation and entrepreneurship, sociology, organizational theory and psychology.

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FIGURES AND TABLES

Table 1 – Literatures and Perspectives considered in the review

| Literatures and Perspectives | Focus | Selected References |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Novelty | <ul style="list-style-type: none"> • Definition of novelty • Incremental & radical novelty • Biases in novelty evaluation | Berlyne (1960) Budner (1962) Dewar & Dutton (1986) Ettlíe et al. (1984) Chan & Parhankangas (2017) Anderson et al. (2014) Van Werven et al. (2015) Rindova & Petkova (2007) Boudreau et al. (2016) Mainemelis (2010) Diedrich et al. (2015) |
| Innovators' Characteristics and Skills | <ul style="list-style-type: none"> • Insider vs. outsider (or core vs. periphery) • Social signals: status, reputation or credibility • Communicative skills & rhetorical strategies: farming, storytelling, sense-making, narratives | Merton (1972) Cattani & Ferriani (2008) Cattani et al. (2014, 2017) Reitzig & Sorenson (2013) Lamont (2012) Sgourev & Althuizen (2014) Criscuolo et al. (2017) Zott & Huy (2007) Shane & Cable (2002) Elsbach & Kramer (2003) Garud et al. (2014) Navis & Glynn (2011) Cornelissen & Clarke (2010) Hargadon & Douglas (2001) |
| Evaluating Audiences' Attributes | <ul style="list-style-type: none"> • Audiences' culture and roles • Homogeneous and heterogeneous audiences • Structural features of the field | Berg (2016) Loewenstein & Mueller (2016) Huang & Pearce (2015) Cattani et al. (2014; 2017) Goldberg et al (2016) Sgourev (2013) Pontikes (2012) Anand & Watson (2004) Wijnberg (1995) Phillips (2011) |

Figure 1 – Enabling mechanisms in the attention space problem

