

Dear Professor King

Please find enclosed the revised version of our paper (AMR-08-442), now titled “Imagining and rationalizing opportunities: Inductive reasoning and the creation and justification of new ventures”. We greatly appreciate your allowing us to further revise this paper. The thoughtful guidance you and the reviewers provided have made this a much better paper. We are really grateful for the expert comments and excellent advice we have received. We have taken your comments and those of the reviewers to heart. Let me explain how we dealt with the issues you raised in your letter. Please note that we have attached separate responses to each of the reviewers.

(1) Theoretical Development and Contribution. In the revised paper, we have made a number of significant changes designed to highlight the positioning and theoretical contribution of the paper.

(1.1) We have more carefully introduced our theoretical position, labelled as “thinking-for-speaking”, between the cognitive and institutional traditions. This has meant that we specified more clearly, first of all, how functionally thinking-for-speaking refers to acts of thinking whilst speaking to others with external speech reconfiguring ideas to fit the demands of spoken language (see Figure 1 for a positioning of the perspective we are proposing). We have also added more coherent reviews of the cognitive and institutional traditions in entrepreneurship and have positioned these traditions on the basis of their broad differences from and connections with thinking-for-speaking. Based on this more coherent formulation and positioning (see Figure 1), we argue that the thinking-for-speaking perspective is separate from, but connected to, the cognitive (“thought-without-speech”) and institutional (“speech without thought”) traditions. Based on these connections, we draw upon, combine and re-conceptualize the predictions of theory on entrepreneurial cognition (e.g., Mitchell et al., 2002) and institutional legitimacy (e.g., Lounsbury & Glynn, 2001) in the interaction model that we develop in the paper. In doing so, our goal here is to mediate between agency and structure in specific acts of speaking to others. We aim to conceptualize how language and thought interpenetrate in context (Slobin, 1987) and how meaning is not fixed but continually developing as a result of entrepreneurs interacting with others. Both the front and back ends of the paper have been rewritten in order to set up a much more coherent and convincing rationale for the thinking-for-speaking approach, its differences from and connections to the cognitive and institutional traditions, and its significant and added-value contribution to our understanding of entrepreneurship and new venture creation.

(1.2) Following this more coherent formulation and positioning, we develop an interaction model that captures and explains in an integrated manner how in social contexts of speaking entrepreneurs inductively reason about novel ventures and attempt to convince others to gain much needed support. To introduce the model in the paper, we first provide an introduction to the key concepts of analogy and metaphor, as primary forms of inductive reasoning, and then define two determinants (prior experience and the effectance motivation) which interrelate to predict and explain an entrepreneur’s analogical or metaphorical speech (and thinking) at different stages of the venture creation process (i.e., the stages of exploration, planning and the launch of a venture and the stage of (early) growth). These two determinants, as mentioned, are derived from and connect to the cognitive and institutional traditions. The influence of each determinant on inductive (analogical or metaphorical) speech is first discussed separately and specified in terms of propositions, before the two determinants are combined in the context of the interaction model and in relation to different stages of the venture creation process. We also specify integrated propositions for each stage. In Figure 2 we plot the activation and strength of both determinants (prior experience and the effectance motivation) at different stages of the venture creation process.

(1.2.a) As mentioned, we have revised the text and have added a figure (Figure 1) to position our theoretical perspective and another figure (Figure 2) to visualize our interaction model. In this way, we hope to introduce readers in a step-wise manner to our theoretical approach, its key assumptions and boundary conditions, followed by an elaboration of this approach in context; i.e., in relation to stages of the venture creation process. Structuring the argument in this way also allows us to mediate between the cognitive and institutional perspectives, and their underlying paradigms, to show how cognition is implied in acts of speaking and how such speech may lead to socially constructed understandings of a venture and may become the feedstock for institutionalization. Our interaction model mediates between the individual and social levels in context – it does not, as Figure 1 suggests, capture or objectify cognitive representations of an entrepreneur or institutionalized language outside of specific instances of entrepreneurs speaking to relevant others. For example, an entrepreneur’s speech may be connected to already institutionalized commitments and conventions in any given industry but may also involve creative comparisons or blends that are the very basis for the institutionalization of a novel venture (Weber, 2005; Weber & Glynn, 2006). Hence, we theorize about varieties of inductive reasoning in context and develop a number of integrated predictions and explanations as a means to begin studying processes of induction in the creation and institutionalization of new ventures.

(1.2.b) We have taken your advice on board and have developed an interaction model that is based on two determinants (prior experience and the effectance motivation) which interrelate to predict and explain an entrepreneur’s analogical or metaphorical speech (and thinking) at different stages of the venture creation process (i.e., the stages of exploration, planning and the launch of a venture and the stage of (early) growth). We specify integrated propositions based on the activation and strength of both determinants (see Figure 2).

(2) Conceptualization and Definition of Key Constructs. You raised a number of issues about the theoretical approach and the clarity of key constructs. Through a more coherent formulation of our theoretical approach, labelled as thinking-for-speaking, we present a clear and consistent conceptual formulation through the paper. In addition, we have added definitions of each construct and build up our message in a step-by-step manner – starting with a definition of the focal constructs of analogy and metaphor, the key determinants and their influence upon the use and elaboration of analogies and metaphors, the links between analogies and metaphors and elaborated frames and narratives, and how, finally, in the interaction model the determinants together influence the use and elaboration of analogies and metaphors in an entrepreneur’s speech to others and at different stages of the venture creation process. We have also added a definition of novel ventures on page 4 that is inclusive of novel, creative ventures and new, emerging industries as well as more conventional, me-too ventures in established industries. We have also related this to our discussion of conventional analogical and metaphorical extensions versus more creative or generative alignment models that may deliver emergent inferences that, when evaluated and verified in relation to the target of a novel industry, may turn out to be legitimate and useful (Cornelissen, 2005; Sternberg, 2004).

(3) Research Implications and Contribution to Future Learning. We have addressed this point through (a) a more coherent theoretical formulation of our theoretical approach (thinking-for-speaking) and how it relates to cognitive and institutional traditions (including Figure 1); (b) the specification of propositions and (c) the formulation of an interaction model tied to specific stages of the venture creation process (including Figure 2). Each of these specific steps was taken for two reasons. First, it demonstrates how the thinking-for-speaking approach provides a fertile area for the integration of the cognitive and institutional traditions, with its assumptions regarding the socially constructed nature of reality and its singular focus on the verbal speech acts through which entrepreneurs simultaneously envision and rationalize the potential for novel ventures and socially justify their ventures to relevant constituencies and resource providers. In developing our model, we have attempted to show not only

the common threads that cut across the areas of entrepreneurial cognition and institutional theory but also how systematic, empirically useful theory can be derived from their integration. Second, adding each of these elements draws out an important research agenda and signals how the ideas can be directly extended into empirical research. The constructs and propositions in our model can be readily connected to techniques for the identification and analysis of analogies and metaphors (e.g., Putnam & Fairhurst, 2001) and their use in the context of larger frames or narratives (e.g., Creed et al., 2002). We therefore believe that a key strength of our model and propositions is that it provides a potential foundation for empirical studies of the proposed links among an entrepreneur's prior experience and speech, social contexts of speaking, and institutionalized discourses and conventions in an industry, using either a qualitative or quantitative research design.

As a result of these revisions, it has been hard to reduce the length of the paper. We have tightened all of the paper's sections. However, we felt that the theoretical review and positioning of the overall thinking-for-speaking approach, the added definitions and propositions, and the outline of the interaction model were important to add to strengthen the paper's theoretical contribution and implications for research.

Again, we would like to express our gratitude to you and the reviewers for the extremely helpful comments and for your guidance in the revision. We hope that our efforts have succeeded in allaying your and the reviewers' concerns. We look forward to the next set of reviews and to learn about your decision.

## Letter to Reviewer #1

Thank you for a very thoughtful set of comments. In response to your concerns regarding a number of substantive issues, the implications for research, and about the overall structuring of the argument, we have made the following changes.

1. Thank you for your positive reaction to our paper. We have followed your suggestion of developing an interaction model that is contextualized in successive stages of new venture creation.
2. As mentioned above (comment 3), we have added (a) a more coherent theoretical formulation of our theoretical approach (thinking-for-speaking) and how it relates to cognitive and institutional traditions (including Figure 1); (b) specific propositions and (c) an interaction model tied to specific stages of the venture process (including Figure 2). These additions are meant to put our theorizing into better relief and to specify specific pathways for research.
3. Thank you for this suggestion – we have clarified our theoretical position on pages 8-10 and have taken out the unnecessarily strong assumptions that were there in the previous version. We took a lot of inspiration from your suggestion that the process is iterative with an entrepreneur's ideas developing over time and as a result of interactions with others. This point is at the centre of our interaction model (Figure 2).
4. We fully agree with this point and have sharpened our definition of being too bold – the idea is not that one can determine ex ante the likely success of a venture, but simply that there is a risk associated with creative alignment models that are built up from a similarity between isolated features rather than deep-level, structural similarities (that carry less risk). The liability is a basic boundary condition of alignment models.
5. Thank you for this observation; we have changed the text as a result.
6. This comment has been extremely helpful. First of all, it allowed us to sharpen our definition of novel ventures as including both novel, creative ventures in new, emerging industries as well as more conventional, me-too ventures in established industries. We have also related this to our discussion of conventional analogical and metaphorical extensions versus more creative or generative alignment models that may deliver emergent inferences that, when evaluated and verified in relation to the target of a novel industry, may turn out to be legitimate and useful (Cornelissen, 2005; Sternberg, 2004). In a nutshell, we argue that the rationale for a new venture may be built up in reference to prior experience and (institutionalized) industry commitments, or may be analogically or metaphorically created in the absence of any obvious parallels that can be drawn (e.g., in a new, emerging industry). Second, we have used the Global Reporting Initiative as a general example to illustrate the importance of institutionalized demand which did not exist at the start of the venture but was effectively created through effective communication (that likened environmental reporting to the established practice of financial reporting).
7. Thank you also for this suggestion; we have changed the text as a result.
8. We have followed your suggestion and have added propositions to the text as an alternative to the summary table.
9. We have restructured the text so that the argument is more coherently introduced and elaborated. In addition, the interaction model is now tied to specific stages or “milestones” of the venture creation process, as opposed to the rather sudden turn to the scene encoding hypotheses that was there in the previous version of the manuscript.
10. We are grateful for this suggestion and have structured the interaction model on the basis of four successive stages: entrepreneurial exploration, planning, launch and (early) growth. The influence of the two determinants (prior experience and the effectance motivation) varies at each stage and we have added integrated propositions to describe the iterative process by

which entrepreneurs articulate scenes for a venture and possibly thicken or extend such scenes as a result of interactions with stakeholders and resource providers.

11. We have tried to revise and shorten the text whilst incorporating further points in response to the reviewer comments.

Thank you so much for your comments. They have really helped in sharpening and clarifying the paper's basic argument and have led to the development of the interaction model that we're proposing. Whatever the outcome, we would like to express our gratitude to you (and the other reviewers) for helping us make this a much better paper.

## Letter to Reviewer #2

We thank you for your thoughtful comments on the paper. In response to your concerns regarding the theoretical positioning, conceptual clarity and overall contribution of the paper, we have made the following changes.

Par. 1-5 and 8: Thank you for your comments in relation to the broad positioning and grounding of our theoretical approach. We have now more carefully introduced our theoretical approach, labelled as “thinking-for-speaking”, between the cognitive and institutional traditions. We have specified more clearly, first of all, how functionally thinking-for-speaking refers to acts of thinking whilst speaking to others with external speech reconfiguring ideas to fit the demands of spoken language (see Figure 1 for a positioning of the perspective we are proposing). We have also added more concise reviews of the cognitive and institutional traditions in entrepreneurship. Based on this more coherent formulation and positioning, we argue that the thinking-for-speaking perspective is separate from, but connected to, the cognitive (“thought-without-speech”) and institutional (“speech without thought”) traditions. These connections led us to draw upon, combine and re-conceptualize the predictions of theory on entrepreneurial cognition (e.g., Mitchell et al., 2002) and institutional legitimacy (e.g., Lounsbury & Glynn, 2001) in the interaction model that we develop in the paper. In doing so, our goal here is to mediate between agency and structure in specific acts of speaking to others. We aim to conceptualize how language and thought interpenetrate in context (Slobin, 1987) and how meaning is not fixed but continually developing as a result of entrepreneurs interacting with others. Both the front and back ends of the paper have been rewritten in order to set up a much more coherent and convincing rationale for the thinking-for-speaking approach, its differences from and connections to the cognitive and institutional traditions, and its significant and added-value contribution to our understanding of entrepreneurship and new venture creation. This particular approach, we argue, provides fertile area for the integration of these traditions, with its assumptions regarding the socially constructed nature of reality and its singular focus on the verbal speech acts through which entrepreneurs simultaneously envision and rationalize the potential for novel ventures and socially justify their ventures to relevant constituencies and resource providers. We argue that the position of this theoretical approach is separate from, but connected to, the other two paradigms or traditions. As such, we are able to extend theorizing and research in both traditions as well as highlight how systematic, empirically useful theory can be derived from their integration.

Par. 6: It is now, hopefully, much clearer that we follow a social constructionist ontology but with an analytical focus on the entrepreneur who thinks about and designs ventures whilst, and because of, speaking to others (see also Alvarez & Barney, 2007). Thank you for your suggestions on narrative theory. We have added more details on narratives (pages 24-25 and 32) and provide an account of how metaphorically constructed scenes are often extended and elaborated into narratives with details on actors, outcomes, timeline and (moral) evaluations – consistent with work in linguistics (e.g., Talmy, 2000; Goldberg, 1995; Lakoff, 1993; Robichaud et al., 2004) and sociology and entrepreneurship (e.g., Martens et al., 2007; Tilly, 2006).

Par. 7: We really appreciate this comment. Instead of referring to a process model, we now formulate an interaction model that consistent with our ontological approach (see above) is based on two determinants (prior experience and the effectance motivation) which interrelate to predict and explain an entrepreneur’s analogical or metaphorical speech (and thinking) at different stages of the venture creation process (i.e., the stages of exploration, planning and the launch of a venture and the stage of (early) growth). The model does not present a process theory, in the tradition of Van de Ven and Poole or Tsoukas and Chia, but relates to stages in the venture creation process; i.e. to different points in time and to different phases of commercializing a venture.

Par. 9: we have added definitions of key constructs and have structured and streamlined the basic arguments in the paper. After a more coherent formulation and positioning, we first provide an introduction to the key concepts of analogy and metaphor, as primary forms of inductive reasoning, and then define two determinants (prior experience and the effectance motivation) which interrelate to predict and explain an entrepreneur's analogical or metaphorical speech (and thinking) at different stages of the venture creation process (i.e., the stages of exploration, planning and the launch of a venture and the stage of (early) growth). We first formulate propositions for each determinant separately before we combine them together and specify integrated propositions for different stages of the venture creation process.

Par 10: We have sharpened our definitions of analogy and metaphor. We have also, following your suggestion, sharpened the differences between familiar and conventional versus novel, creative and potentially generative analogies or metaphors (Cornelissen, 2005). We argue that analogies or metaphors may be straightforward extensions of past experience – e.g., projecting a conventional description (of another industry) or a conventional idiom – or more creative alignments of descriptions of isolated features (in analogy) or of argument constructions that are elaborated into a scene (in metaphor) (pages 15-21). This distinction between projections and more creative alignments is consistent with recent work in cognitive science and cognitive linguistics (e.g., Gentner et al., 2001; Fauconnier & Turner, 2002) and progresses on prior research on analogy and metaphor in management, entrepreneurship and strategy research (e.g., Gavetti et al., 2005; Tsoukas, 1991; Ward, 2004) which has often been partial in focusing on either analogical extensions and projections or more creative alignments (e.g., Cornelissen, 2005). The mentioned references have been added and we use more extensive examples to illustrate these different forms of analogical and metaphorical reasoning.

Par 11: As mentioned above, we focus on the verbal speech acts through which entrepreneurs simultaneously envision and rationalize the potential for novel ventures and socially justify their ventures to relevant constituencies and resource providers. Hence, processes of sensemaking to oneself and sensegiving to others are closely related, and as the interaction model suggests, cannot be separated and formulated with a linear logic.

Par 12: Thank you also for this comment. We have sharpened our definition of novel ventures as including both novel, creative ventures in new, emerging industries as well as more conventional, me-too ventures in more established industries. We have also related this to our discussion of conventional analogical and metaphorical extensions versus more creative or generative alignment models that may deliver emergent inferences that, when evaluated and verified in relation to the target of a novel industry, may turn out to be legitimate and useful (Cornelissen, 2005; Sternberg, 2004). In a nutshell, we argue that the rationale for a new venture may be built up in reference to prior experience and (institutionalized) industry commitments, or may be analogically or metaphorically created in the absence of any obvious parallels that can be drawn (e.g., in a new, emerging industry). We use the Global Reporting Initiative, a new venture around environmental reporting, as a general example to illustrate (a) how sensemaking and sensegiving were both implied in the entrepreneur's evolving speech and (b) the lack of institutionalized demand which did not exist at the start of the venture but was effectively created through effective communication (that likened environmental reporting to the established practice of financial reporting). There is now a whole industry of "me too" ventures that meet the institutionalized demand and expectations regarding environmental reporting.

Par 13-16: As mentioned above, the interaction model mediates between agency and structure and captures and explains in an integrated manner how in social contexts of speaking entrepreneurs inductively reason about novel ventures, create and envision opportunities and attempt to convince

others to gain much needed support. Although we first present propositions relating to each determinant separately, the interaction model focuses on their combined influence and explains how an entrepreneur's speech (and thought) may develop as a result of interactions with stakeholders and resource providers. We use the two main examples (CareerBuilder and Global Reporting Initiative) to demonstrate that the evolving speech was consequential not only as a basis for the design, enactment and success of these ventures but also for the institutionalization of expectations regarding their industries. In both examples, the initial (analogically or metaphorically) constructed scene for a venture was elaborated and extended with further (metaphorical or analogical) elements as a result of speaking with others. These elaborated visions for these ventures also became, as a result of these interactions, "social constructs that guide[d] subsequent actions of these entrepreneurs and others associated with an industry or market – including customers and suppliers" (Alvarez & Barney, 2007: 15).

Par. 17: Based on your feedback, we have restructured and streamlined the text – we have clarified the overall thinking-for-speaking approach before we define the key constructs of analogy and metaphor and develop specific propositions in relation to the two determinants (prior experience and the effectance motivation) and at different stages of the venture creation process.

Par 18: Thank you for this suggestion. We have read DeCerteau. Although it has some bearing on our theoretical position (page 9), we feel that the thinking-for-speaking (Slobin, 1987) approach connects more readily and analytically with the context of new venture creation and the existing cognitive and institutional traditions (see Figure 1).

Thank you so much for your helpful suggestions and comments. They have certainly helped a great deal in terms of motivating, developing and strengthening the paper's theoretical contribution. We sincerely hope that you like the changes we have made to the manuscript.



### Letter to Reviewer #3

Thank you for your detailed and supportive review. You expressed concerns about the exposition of our basic argument, about key terminology, and about the positioning of the paper's theoretical perspective and contribution. Below, we respond to your comments and suggestions in the order they appeared in your review.

1. Thank you for this point. We now include a more structured and coherent review of the cognitive and institutional traditions and introduce more carefully our own theoretical position, labelled as “thinking-for-speaking”, between the cognitive and institutional traditions. In response to your comments, we have added a figure (Figure 1) to position more clearly the perspective we are proposing. On page 11, we have added a full paragraph to outline our basic assumptions (i.e., “models of man”) regarding individual entrepreneurs. Entrepreneurs are “theorists of a pragmatic sort” who self-consciously and through interactions with others develop notions about cause and effect, thus “theorizing” their world and the relationships and opportunities within it (Alvarez & Barney, 2007; Tetlock, 2000).
2. We have taken your comment to heart and have worked on the basic exposition of our theoretical argument. We now start with a more coherent review and positioning of our theoretical perspective (thinking-for-speaking) highlighting its theoretical underpinnings including differences from, and connections with, the cognitive and institutional traditions (pages 8-11). Following this more coherent formulation and positioning, we now develop in a structured manner an interaction model that captures and explains in an integrated manner how in social contexts of speaking entrepreneurs inductively reason about novel ventures and attempt to convince others to gain much needed support. To introduce the model in the paper, we first provide an introduction to the key concepts of analogy and metaphor, as primary forms of inductive reasoning, and then define two determinants (prior experience and the effectance motivation) which interrelate to predict and explain an entrepreneur's analogical or metaphorical speech (and thinking) at different stages of the venture creation process (i.e., the stages of exploration, planning and the launch of a venture and the stage of (early) growth). These two determinants, as mentioned, are derived from and connect to the cognitive and institutional traditions. The influence of each determinant on inductive (analogical or metaphorical) speech is first discussed separately and specified in terms of propositions, before the two determinants are combined in the context of the interaction model and in relation to different stages of the venture creation process. In Figure 2 we plotted the activation and strength of both determinants (prior experience and the effectance motivation) at different stages of the venture creation process. Finally, we have also added propositions and figures to streamline the exposition of our theoretical arguments.
3. Thank you also for this suggestion. We have added definitions of key constructs in the paper. We have also limited our use of technical terms that may be unfamiliar to AMR readers. The embodiment and scene encoding hypotheses have been taken out. The main ideas are also defined and discussed without relying on specialized jargon or sources outside of the management domain.
4. We have added general examples to illustrate our main points. Two examples (CareerBuilder and the Global Reporting Initiative) are used to illustrate the effects of prior experience and the effectance motivation on how entrepreneurs encode scenes for their ventures, in and through their language, and elaborate, adjust and reinforce these scenes in their continued communication to others in order to decrease uncertainty and attain acceptance and legitimacy for their ventures.
5. Thank you for this suggestion. As we mentioned above in response to the editor (comment 3 above), we have added (a) a more coherent theoretical formulation of our theoretical approach (thinking-for-speaking) and how it relates to cognitive and institutional traditions

(including Figure 1); (b) specific propositions and (c) an interaction model tied to specific stages of the venture creation process (including Figure 2). Each of these specific steps was taken for two reasons. First, it outlines how the thinking-for-speaking approach provides a fertile area for the integration of the cognitive and institutional traditions and how it extends our understanding of the determinants and variety of analogical and metaphorical reasoning in venture creation processes. Whilst induction is recognized as central not only to how entrepreneurs envision and identify novel opportunities (e.g., Baker & Nelson, 2005; Baron & Ward, 2004; Shackle, 1979; Sternberg, 2004) but also to how they legitimize those opportunities to others (e.g., Lounsbury & Glynn, 2001), very little of the existing research on entrepreneurship has provided a theoretical specification of when and how entrepreneurs use specific analogical or metaphorical comparisons as an inductive anchor to reason about a venture in a novel, unfamiliar industry. We address this shortcoming and in doing so contribute directly to central questions about how opportunities for a novel venture are identified or created (e.g., Alvarez and Barney, 2007; Baron & Ward, 2004) and how the institutionalization of a novel venture occurs over time (e.g., Lounsbury & Glynn, 2001; Phillips et al., 2004). Second, adding each of these elements draws out an important research agenda and signals how the ideas in the paper can be directly extended into empirical research. The constructs and propositions in our model can be readily connected to techniques for the identification and analysis of analogies and metaphors (e.g., Putnam & Fairhurst, 2001) and their use in the context of larger frames or narratives (e.g., Creed et al., 2002). We therefore believe that a key strength of our model is that it provides a potential foundation for empirical studies of the proposed links among an entrepreneur's prior experience and speech, social contexts of speaking, and institutionalized discourses and conventions in an industry, using either a qualitative or quantitative research design. The discussion section summarizes the paper's main theoretical contributions and implications for research.

Thank you so much for all your suggestions and comments. We hope you appreciate the changes we have made and feel that the paper's positioning and contribution is now as a result much stronger.