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Entrepreneurial opportunities and the entrepreneurship nexus: A re-conceptualization

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ABSTRACT

The literature on "entrepreneurial opportunities" has grown rapidly since the publication of Shane and Venkataraman (2000). By directing attention to the earliest stages of development of new economic activities and organizations, this marks sound redirection of entrepreneurship research. However, our review shows that theoretical and empirical progress has been limited on important aspects of the role of "opportunities" and their interaction with actors, i.e., the "nexus". We argue that this is rooted in inherent and inescapable problems with the "opportunity" construct itself, when applied in the context of a prospective, micro-level (i.e., individual[s], venture, or individual–venture dyad) view of entrepreneurial processes. We therefore suggest a fundamental re-conceptualization using the constructs *External Enablers*, *New Venture Ideas*, and *Opportunity Confidence* to capture the many important ideas commonly discussed under the "opportunity" label. This re-conceptualization makes important distinctions where prior conceptions have been blurred: between explananda and explanantia; between actor and the entity acted upon; between external conditions and subjective perceptions, and between the contents and the favorability of the entity acted upon. These distinctions facilitate theoretical precision and can guide empirical investigation towards more fruitful designs.

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1. Executive summary

In a particular situation, a given individual may conclude that trying to start a new business is a worthwhile thing to do. In other situations that same individual may not be inclined to take entrepreneurial action. Now assume that this individual is a serial entrepreneur. If the career-long track record of this serial entrepreneur could be examined, an oscillating mix of aborted start-up attempts, some outright failures, some minor successes, and perhaps one or more great entrepreneurial triumphs would likely be found. Since the individual is the same, this suggests that knowledge about the person alone cannot explain entrepreneurial action and outcomes. There must be another part to the story. According to Shane and Venkataraman's (2000) seminal article, this other part is the "entrepreneurial opportunity" and to understand entrepreneurial processes, researchers ought to study both the individuals, the "opportunities" and their fit, i.e., the individual–opportunity nexus.

Whether triggered by Shane and Venkataraman (2000) or not, researchers have since paid considerable attention to "entrepreneurial opportunities". We perform a critical review of 210 papers published since 2000 in leading journals, which use "opportunity" in relevant ways in their title, keywords, or abstract. This review shows that this literature has grown very rapidly and that progress

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has been made on a range of topics. Conceptual distinctions between "discovery" and "creation" of "opportunities", and between "first-person" and third-person "opportunities" have achieved some traction. Progress has also been made regarding the sources of "opportunities" and the evolving nature of entrepreneurial processes. Experimental work has yielded a body of work on prior knowledge and other drivers of the identification of "opportunities" and their perceived attractiveness. Thus, increased attention to "opportunities" seems to have helped open up new and fruitful lines of inquiry.

However, despite its intuitive appeal and apparent early success, the "opportunity" construct may not provide a sound foundation for further progress in entrepreneurship research. Our review shows that the minority of works that offer a definition of "opportunity" have radically different ideas about what they essentially are (e.g., *sets of [objective] external conditions* vs. *individual cognitions* vs. *social constructions*) as well as when, where and why the "opportunity" label is deserved. Importantly, even with a stated definition authors struggle to apply a consistent view of "opportunity" within individual works. In short, "opportunity" is a very elusive concept.

We argue that this lack of construct clarity is a major reason why our review finds disappointingly little progress on several core questions pertaining to "opportunities" and the entrepreneurship nexus. There is very little solid knowledge about what the salient characteristics of "opportunities" are; how we can identify such entities and measure their characteristics in non-experimental settings, and what direct and actor-moderated effects they have on action and outcomes beyond initial attractiveness assessments. We also argue that many of the problems are inherent in any notion of "opportunity" and therefore inescapable in research under that label. In particular, the favorability connotation of "opportunity" is highly problematic in forward-looking research, i.e., when trying to argue at an early stage how the characteristics of the actor and the "opportunity" will affect action and outcomes. If the rationale for the "opportunity" label is the actor's perception of the entity as an "opportunity", then characteristics of "opportunities" cannot explain inaction and we would have to change labels when the actor stops pursuing the former "opportunity". If the rationale is instead "objectively" favorable outcome prospects, then characteristics of "opportunities" can explain neither inaction nor failure.

On the basis of our review we conclude that "opportunity" is not a suitable construct for the non-actor nexus component in prospective theory of entrepreneurial processes. Further, we conclude that to capture the many valuable ideas developed under the "opportunity" label more than one construct is needed. Therefore, in order to facilitate future theorizing and empirical testing we suggest three carefully defined and elaborated constructs be used. The first is *External Enablers* for the aggregate-level circumstances—such as regulatory changes, technological breakthroughs, and demographic shifts—which may affect a variety of new venture creation attempts by several, different actors. External Enablers are assumed to create room for new economic activities but cannot ensure success for particular ventures that are initiated in response to their occurrence. Neither need they be positive overall for the economy. The second construct is *New Venture Ideas*. This denotes "imagined future ventures"; i.e., imaginary combinations of product/service offerings, markets, and means of bringing these offerings into existence. These can be of any quality and may be evaluated differently by different individuals. New Venture Idea is our main alternative to accompany the actor under the nexus view. Third, we suggest that *Opportunity Confidence* has the important, supplementary role of eliminating perceived favorability from the other two constructs. Hence, Opportunity Confidence refers strictly to a particular actor's subjective evaluation of the attractiveness—or lack thereof—of a stimulus (External Enabler or New Venture Idea) as the basis for entrepreneurial activity.

This re-conceptualization makes clear distinctions where prior conceptions have been blurred: between external conditions and subjective perceptions; between actor and the entity acted upon; between the contents and the favorability of the focal entity, and between explanatory factors and that which is to be explained. These distinctions facilitate theoretical precision and can help develop more fruitful designs for empirical investigations. Using the three constructs, we outline ideas concerning theoretical gaps and empirical approaches for future theorizing and testing of phenomena in entrepreneurial processes. We hope that these ideas will encourage research on a range of theoretically and practically important questions by scholars representing a broad set of disciplines, philosophical convictions, and methodological preferences.

2. Introduction

There is growing consensus that entrepreneurship is the process through which new economic activities and organizations come into existence (Davidsson, 2003; Gartner, 1988; McMullen and Dimov, 2013; Shane and Venkataraman, 2000; Wiklund et al., 2011). Shane and Venkataraman (2000) argued that "opportunities" are central to this process and introduced the concept of the *individual–opportunity nexus*. This notion makes the point that micro-level[1] explanations of entrepreneurial action and outcomes should look beyond the individuals involved. Equally important is attention to qualities of the "opportunities" they pursue, and the fit between individual and "opportunity" (cf. Shane and Venkataraman, 2001; Venkataraman, 1997). Within this framework, a central task for entrepreneurship research is to develop and test theory about how characteristics of "opportunities", directly and in interaction with actor characteristics, give shape to entrepreneurial processes.

It only takes a disequilibrium assumption to allow for actors to try new ventures and achieve success with them. This suggests that "opportunity" in some sense exists. Most would also agree that it is individuals' subjective perception of (first-person) opportunity that makes them take entrepreneurial action (McMullen and Shepherd, 2006). It is therefore not surprising that the notion of "entrepreneurial opportunity" has achieved a central role in the academic discourses on entrepreneurship and that the associated

[1] Throughout this manuscript "micro" refers to the individual(s); the (emerging) venture (idea), or the individual-venture dyad; i.e., the "nexus", as opposed to aggregate entities such as industries; regions; populations, and economic systems.

literature has grown rapidly since the publication of the nexus framework (Busenitz et al, 2014). This also marks sound development in at least two ways. First, it is a move away from overly person-focused explanations. Second, it puts the emphasis on the early stages of creation of new economic activities, which is arguably where entrepreneurship research can make its most distinct contributions to the broader fields of economic and organizational studies.

The research stream has made progress on a range of topics such as the sources of "opportunities" (e.g., Eckhardt and Shane, 2003; Plummer, et al., 2007); different types of "opportunities" (e.g., Dahlqvist and Wiklund, 2011; Eckhardt and Shane, 2003; Sarasvathy et al., 2003), and the evolving nature of many entrepreneurial processes (e.g., Alvarez and Barney, 2007; Ardichvili et al., 2003; Dimov, 2007a; Wood and McKinley, 2010). In work that includes empirical testing, the progress has been most notable regarding prior knowledge and other drivers of the perception/identification/recognition of "opportunities" (e.g., Baron and Ensley, 2006; Grégoire, et al., 2010a; Grégoire and Shepherd, 2012; Shane, 2000).

However, a systematic review of the literature shows that disappointingly little progress has been made on several core questions pertaining to "opportunities" and the nexus. There is still very little solid knowledge about what the salient characteristics of "opportunities" are, and what direct and actor-moderated effects they have at different critical stages of the journey from non-existence to existence of new economic activities. We[2] argue that this relative paucity of theoretical and empirical progress is rooted in inescapable problems with the "opportunity" construct itself. Lack of *construct clarity* (Suddaby, 2010) across and within works and "conversations" has hampered the building of cumulative knowledge. This stems in large part from the dual nature of "opportunity" as consisting of both *contents* and (assumed, perceived, or proven) *favorability*. The favorability aspect of "opportunity" does not sit well in a prospective, process framework aiming to explain not only action and success but also inaction and failure. It is predominantly this aspect of "opportunity" rather than its contents that triggers debate as to its objective vs. subjective nature, and makes it hard to apply the construct consistently and comfortably across actors, space, time, and levels of analysis. Therefore, although the notion of "entrepreneurial opportunity" may appear intuitively appealing and theoretically exciting (Dimov, 2011; Short et al., 2010), our analysis suggests it is not a suitable construct for the non-actor nexus component in prospective theory of entrepreneurial processes.

In order to facilitate future theorizing and testing that can realize the intentions behind the nexus framework, we invite colleagues to consider using three carefully defined and elaborated constructs that capture more precisely the complex ideas that have been discussed under the opportunity label. The first is *External Enablers* for the aggregate-level circumstances—such as regulatory changes, technological breakthroughs, and demographic shifts—which may trigger and affect outcomes of a variety of new venture creation attempts across a range of actors. The second is our main alternative to accompany the actor under the nexus view: *New Venture Ideas*. This denotes "imagined future ventures"; i.e., imaginary combinations of product/service offerings, markets, and means of bringing these offerings into existence. Third, we suggest *Opportunity Confidence* strictly for the subjective evaluation of the attractiveness—or lack thereof—of a stimulus (External Enabler or New Venture Idea) as the basis for entrepreneurial activity. Building on insights from previous research, this re-conceptualization makes important distinctions where prior conceptions have been blurred: between explananda and explanantia; between actor and the entity acted upon; between external conditions and subjective perceptions, and perhaps most importantly, between the contents and the favorability of the entity acted upon. These distinctions facilitate theoretical precision and can help develop more fruitful designs for empirical investigations.

Our work makes three contributions. First, we offer a critique of prior research on "entrepreneurial opportunities", which goes beyond prior critiques and reviews (cf. Arend, 2014; Hansen et al., 2011; Korsgaard, 2013; Shane, 2012; Short et al., 2010) in terms of comprehensive assessment of construct clarity and the progress made so far on "opportunity" characteristics and their effects. Second, and most significant, is the development of a set of carefully defined and elaborately described constructs, which capture the ideas commonly associated with "entrepreneurial opportunities" in prior work. We argue that these—External Enablers, New Venture Ideas, and Opportunity Confidence—are much clearer and less susceptible to internal inconsistency, as well as being more operable and less philosophically contentious. This offers a stronger platform for future micro-level research on the nexus and its non-actor element. Third, we outline ideas concerning theoretical gaps and empirical approaches for future, prospective, micro-level theorizing and testing pertaining to entrepreneurial processes. We hope that these ideas will encourage research on a range of theoretically and practically important questions by scholars representing a broad set of disciplines, philosophical convictions, and methodological preferences.

Below, we first provide a quantitative review of the literature, focusing on progress related to Shane and Venkataraman's nexus idea. We then outline our assumptions and criteria for what a prospective, micro-level, nexus theory of entrepreneurial processes should achieve. This is followed by a section explaining why extant views of "opportunity" cannot meet those criteria. We then introduce our suggested, alternative constructs. Finally, we suggest guidelines for future research.

3. Prior use of the opportunity construct in entrepreneurship research: a review

Our examination of the "entrepreneurial opportunities" literature took Short et al.'s (2010) review as vantage point, excluding eight articles published before year 2000. Adopting their journal and article inclusion criteria we added all relevant articles published

[2] After much deliberation, I decided to continue to refer to the author as "we" as I had during the peer-review process. This "we" includes—where applicable, and at their discretion—not only those mentioned in the formal Acknowledgements but also all those colleagues whose prior conceptual and empirical work on "entrepreneurial opportunities" were indispensable inputs to developing the ideas expressed in this article.

subsequently. Detailed coding criteria were developed by the author and a PhD qualified assistant. The consistency of the coding was independently cross-checked by another research assistant.[3] All 210 articles included in the review are included and marked "*" in the reference list. Summary results are displayed in Table 1.

An initial observation is that the literature has almost tripled in volume since Short et al.'s (2010) review (cf. Busenitz et al, 2014). Further, the proportion of conceptual articles is high, albeit decreasing. Turning to our core issues, we note that only a minority provide a definition of "opportunity". In the empirical stream the proportion doing so is under 20%, meaning the vast majority fails to meet Suddaby's (2010: 347) "bare minimal standard" of construct clarity. We provide elaboration further below on the lack of clarity that pertains also to those who do provide definitions.

Further, the data indicate limited progress on the nexus idea and the mechanisms by which "opportunities" influence entrepreneurial processes. Despite our criteria intentionally biasing the selection heavily towards articles with an "opportunity" focus, the propositions and hypotheses (Table 1, entries *b* and *j* vs. *c* and *k*) reflect a much stronger emphasis on actor effects. The number of explicit attempts to theorize and test the nexus is very small (*g*–*h*) and (*o*–*p*). The proportion of empirical articles citing the nexus idea or hypothesizing "opportunity" effects remains small, albeit increasing (*i*; *k*). This is remarkable considering that Shane and Venkataraman (2000) was the most cited entrepreneurship article of the last decade, and the "dominant" or "consensus" position in entrepreneurship research authors ascribe to "opportunities" and the "nexus" (Busenitz et al., 2014; Korsgaard, 2013:130; Plummer et al., 2007: 354; Shane, 2012:18; van Burg and Romme, 2014: 372; Suddaby et al., 2014: 2; Venkataraman et al., 2012: 22).

Returning to definitions,[4] Table 2 demonstrates wide variation in the essential properties assigned to "entrepreneurial opportunities". Some view them as a *set of [objective] external conditions* while others portray "opportunities" as *individual cognitions* or *social constructions*. They are thus variously described as *a confluence of (pre-existing or created) external circumstances*; *imagined future ventures*; *future action paths*, or *imagined future states*. The usage also demonstrates varying or vague scope conditions (cf. Suddaby, 2010), especially regarding the supposed actor; the organizational/market/industry context; spatial and temporal boundaries, and the required novelty or profit intent.

Different definitions may reflect justifiable variation across theoretical lenses and philosophical perspectives, so variation across works does not suggest that individual papers fail to define and apply the construct in a consistent manner that achieves their purpose. Different definitions, and perhaps even the low and diminishing proportion providing a definition at all, would also be less of a problem if the literature were divided into distinct streams, each of which adhered to a common and consistent view. However, publication and citation patterns do not support such an interpretation; individual journals publish "opportunity" papers representing varying theoretical lenses and works frequently cite several other works representing varying views of "entrepreneurial opportunity". More importantly, vagueness and inconsistency in the use of "entrepreneurial opportunity" also abound within works. Examples are given in Table 3. Moreover, authors who provide a definition typically do not stick to the same definition in subsequent works (see Table 4).

Some authors come up with rather convoluted definitions in an effort to cover all bases (see Table 2: 5, 6, 12; Table 4: 14) whereas others appear to deliberately avoid defining the concept while being careful to define other central constructs. In short, reflective authors appear to struggle with the term "entrepreneurial opportunity". It is worth reiterating that this is the image that emerges from works published in *leading* journals with particular attention to those that actually *do* provide definitions. Variability and ambiguity in the understanding of "opportunity" is likely to be even greater in works published in less prestigious outlets and among the majority who do not define "opportunity".

The complexity of the meaning of "opportunity" has been a major theme in the conceptual stream, featuring diverging philosophical perspectives on the nature of "opportunities" and their relationship to actors (e.g., Alvarez and Barney, 2007; Alvarez et al., 2013; Chiasson and Saunders, 2005; Dimov, 2007a; 2011; Eckhardt and Shane, 2013; Klein, 2008; Mole and Mole, 2010; Sarason, et al., 2006; 2010; Vaghely and Julien, 2010; Wood and McKinley, 2010; cf. also Alvarez and Barney, 2010; Foss and Klein, 2012: 75; Korsgaard, 2013; Sarasvathy et al., 2003; Shane, 2012). One contrast that has achieved some traction is that by Alvarez and co-workers (references above) between "discovery" and "creation" of "opportunities". Another notable distinction is "first-person" vs. "third-person" opportunities (McMullen and Shepherd, 2006; Haynie et al., 2009; Shepherd et al., 2007; cf. Autio et al., 2013; Wood et al., 2014).

[3] Specifically, we included articles which according to ABI/Inform had "opportunity" or "opportunities" in the title, keywords, or abstract and were published in the 2000-2014 (inclusive) period in the following journals: *Administrative Science Quarterly*; *Academy of Management Journal*; *Academy of Management Review*; *Entrepreneurship Theory and Practice*; *Journal of Applied Psychology*; *Journal of Business Venturing*; *Journal of Management*; *Journal of Management Studies*; *Journal of Organizational Behavior*; *Management Science*; *Organization Science*; *Organization Studies*, *Organizational Behavior and Human Decision Processes*; *Personnel Psychology*; *Strategic Entrepreneurship Journal* and *Strategic Management Journal*. We excluded articles where "opportunity" clearly did not refer to "entrepreneurial opportunities" (e.g., investment opportunities; research opportunities). All quantitative results of our review build on this selection of papers. For the broader preparation of this manuscript we also engaged other sources, e.g., the 2007 special issue of *Small Business Economics*; additional works by key contributors (e.g., Alvarez and Barney, 2010; Foss and Klein, 2012; Sarasvathy et al., 2003; Shane, 2003; 2012) and review/critique articles evaluating aspects of this research stream (Arend, 2014; Hansen et al., 2011; Korsgaard, 2013). Coding procedures and criteria were developed interactively between the two coders. When reliable criteria had been worked out the remaining coding was completed by the author (some categories were deemed not possible to code reliably, and left out). A research student/assistant cross-checked the completed coding for two sizable sub-samples totaling 57 papers or 30% of the articles. This check resulted in over 90% agreement despite follow-on effects inflating the number of apparent discrepancies. Rare instances of error in the original coding were corrected. Remaining discrepancies mainly represented genuine ambiguity due to the original work either conceptualizing the phenomena very differently or providing insufficient or inconsistent information. These instances were carefully examined on a case-by-case basis, predominantly resulting in the original coding being retained. For the final version an additional batch of 25 recently published papers were identified and coded by a research assistant and the author, following the same type of procedures. In this final round we noted an increased occurrence of difficult-to-code cases, which may either be stochastic or due to the increased use of models with more complex contingencies.

[4] To identify definitions we searched all manuscripts for instances of "define*"; "defini*"; "concei*"; "*unity is", and "*unities are" and also examined the text surrounding the first 10 occurrences of "opportunity/ies" in Introduction and Theory sections.

Table 1
Summary statistics for 210 articles on “entrepreneurial opportunities”.

	Before ~2010[a]		2010–14		Total	
Conceptual	42	65%	51	35%	93	44%
– Thereof in broader, mainstream/disciplinary journals	13	31%	23	45%	36	39%
– Thereof with definition of “[entrepreneurial] opportunity”	15	36%	13	24%	28	30%
Empirical	23	35%	94	65%	117	56%
– Thereof in broader, mainstream/disciplinary journals	9	26%	39	41%	48	41%
– Thereof with definition of “[entrepreneurial] opportunity”	5	12%	17	19%	22	19%
Total	65	100%	145	100%	210	100%
– Thereof in broader, mainstream/disciplinary journals	22	34%	62	43%	84	40%
– Thereof with definition of “[entrepreneurial] opportunity”	20	31%	30	21%	50	24%
Conceptual						
– a) Explicit reference to “nexus” idea	9	21%	10	20%	19	20%
– b) Formal propositions about direct actor effects	14	33%	13	25%	27	29%
– c) Formal propositions about direct “opportunity” effects	6	14%	5	10%	11	12%
– d) Both *b* and *c*	3	7%	2	4%	5	5%
– e) Both *b* and *c* and actor ∗ “opportunity” interaction	3	7%	2	4%	5	5%
– f) Formal propositions about any “nexus effects”[b]	6	14%	8	16%	14	15%
– g) Explicit “nexus” contribution I: both *a* and *e*	0	0%	0	0%	0	0%
– h) Explicit “nexus” contribution II: both *a* and *f*	2	5%	0	0%	2	2%
Empirical						
– i) Explicit reference to “nexus” idea	1	4%	14	15%	15	13%
– j) Formal hypotheses about direct actor effects	15	65%	47	50%	62	53%
– k) Formal hypotheses about direct “opportunity” effects	2	9%	17	18%	19	16%
– l) Both *j* and *k*	1	4%	7	7%	8	7%
– m) Both *j* and *k* and actor ∗ “opportunity” interaction	1	4%	6	6%	7	6%
– n) Formal hypotheses about any “nexus effects”[b]	5	22%	15	16%	20	17%
– o) Explicit “nexus” contribution I: both *i* and *m*	0	0%	2	2%	2	2%
– p) Explicit “nexus” contribution II: both *i* and *n*	1	4%	7	7%	8	7%
– Survey (primary)	15	65%	27	28%	42	36%
– Archival	2	9%	40	43%	42	36%
– Experiment (incl. conjoint)	5	22%	13	14%	18	15%
– Qualitative case study	1	4%	11	12%	12	10%
– Other	0	0%	3	3%	3	3%

[a] Includes Short et al. (2010) 68 articles plus another 5 eligible articles from the same era, less 8 published prior to year 2000.
[b] “Nexus effects” include actor ∗ “opportunity” moderation or mediation (regardless of analysis approach) as well as actor effects on “opportunity characteristics”, but not actor effects on the identification, recognition or evaluation of “opportunities”.

Others have independently added understanding of the evolving nature of “entrepreneurial opportunities” (e.g., Ardichvili et al., 2003; Cornelissen and Clarke, 2010; Dimov, 2007a; 2011; Wood and McKinley, 2010).

All of this has contributed to the understanding of the journey from non-existence to existence of new economic activities. However, Table 1 (*c* to *h*) highlights just how limited the contribution to nexus theorizing is. Formal propositions about direct “opportunity” effects are offered by a total of 11 studies, and the proportion doing so is not increasing. A similar minority—14 studies—formally propose actor–“opportunity” interaction of any kind (see Table 1, row *f* and note 2). Only two of these papers attempt explicit contributions to nexus theory as indicated by citing the nexus idea. Both represent views of “opportunities” and actor–“opportunity” interaction that are quite far removed from the original framework (Sarason et al., 2006; Schindehutte and Morris, 2009).

The empirical stream identifies some characteristics of “opportunities”—e.g., novelty, uniqueness, scope, and change—which together with entrepreneur characteristics may give shape to entrepreneurial action and outcomes (e.g., Dahlqvist & Wiklund, 2011; Hmieleski and Baron, 2008; Parker, 2011; Shane, 2001). However, there are hardly any signs of sub-streams evolving around particular “opportunity” characteristics with agreed-upon meaning and operationalizations. The stream also provides examples of nexus contributions, although this is the authors' explicit intention only in a minority of such cases (*m*–*n* vs. *o*–*p*). Employing the most generous criteria, we identify 22 papers that can be said to further insights into nexus issues, i.e., actor–“opportunity” interplay in entrepreneurial processes. However, while many of those converge on examining “prior knowledge” on the actor side, there is little commonality across studies regarding the “opportunity” characteristics they investigate. Two of the 22 studies are qualitative and exploratory (Corner and Ho, 2010; Shane, 2000) and therefore not included in row (*n*) in Table 1. Another two are archival (Barreto, 2012a; Renko, 2013), the former providing a rare example of a well-defined “opportunity space” in the context of observational data. Five are survey-based, four of which use dependent variables that gauge the performance of established firms rather than new venture creation (Bradley et al., 2012; Dencker et al., 2009; Gruber et al., 2013; Hmieleski and Baron, 2008). The exception is Dimov (2010).

Remarkably, 13 of the 22 “nexus” studies (57%) use experimental approaches (Choi and Shepherd, 2004; Dimov, 2007a; Drover et al., 2014; Grégoire, and Shepherd, 2012; Haynie et al., 2009; Holland and Shepherd, 2013; McKelvie et al., 2011; Mitchell and Shepherd, 2010; Mullins and Forlani, 2005; Shepherd et al., 2013; Welpe et al., 2011; Wood and Williams, 2014; Wood et al., 2014). This is 14 and 4 times higher, respectively, than the prevalence of experimentation in entrepreneurship or “entrepreneurial opportunity” research overall (see Table 1 and Crook et al., 2010). This reflects the method's strength for research on what makes

Table 2
Examples of definitions of "entrepreneurial opportunities".

Definition	Comment
1. None	Close to 80% of reviewed articles do not offer a definition.
2. [S]ituations in which new goods, services, raw materials, and organizing processes can be introduced and sold at greater than their cost of production (…) Entrepreneurial opportunities (…) require the discovery of new means–ends relationships (Shane and Venkataraman, 2000: 220; cf. Shane, 2012:15)	Opportunity is external, objective and pre-exists discovery (but is unequally accessible to different actors). The definition implies inherent favorability; for-profit; innovation, and a "user pays" revenue model.
3. [A] set of environmental conditions that lead to the introduction of one or more new products or services in the marketplace by an entrepreneur or by an entrepreneurial team through either an existing venture or a newly created one (Dutta and Crossan, 2005, p. 426)	Similar to (2). Explicitly broadens actor and organizational context. Note the deterministic "lead".
4. Opportunity exists when competitive imperfections exist in product or factor markets (Alvarez et al., 2013:302; cf. Alvarez and Barney, 2010: 559)	Seemingly similar to (2), but a "creation opportunity" is the end product, not the starting point, of the entrepreneur's actions. Markets and opportunities are social constructions.
5. [T]he chance for an individual (or a team) to offer some new value to society, often by introducing innovative and novel products or services by creating a nascent firm. These opportunities contain the possibility for economic gain as well as the possibility for financial loss for the entrepreneur(s) pursuing the idea (Lee and Venkataraman, 2006: 110)	The definition illustrates ambiguity/indecision as regards external/objective ("chance…to offer" vs. "idea"); innovativeness and organizational context ("often" x and y), and inherent favorability ("chance…value" vs. "gain…loss").
6. [A]n idea or dream that is discovered or created by an entrepreneurial entity and that is revealed through analysis over time to be potentially lucrative (Short et al., 2010: 55)	Illustrates ambiguity/indecision as regards what an opportunity is (create/discover a dream?), especially across time. Increasing objectivity and (known) favorability over time is implied.
7. [T]he chance to introduce innovative (rather than imitative) goods, services, or processes to an industry or economic marketplace (Gaglio, 2004: 534)	Appears to refer to external conditions; explicitly limited to innovative endeavors.
8. [A]n idea for an innovation that may have value after further investment (Kornish and Ulrich, 2011: 107)	Also restricted to innovative endeavors, but clearly referring to subjective ideas.
9. [P]rojected courses of action to introduce (and profit from) new and/or improved supply–demand combinations that seek to address market failure problems (Grégoire et al., 2010b:117)	Action path focus; requires a degree of innovation; introduces intentionality as regards profit and addressing market failure.
10. [A] future situation that is both desirable and feasible, regardless of the resources currently under the control of the entrepreneur (Wood and McKinley, 2010: 68)	Taken literally, opportunity is neither a current situation nor an idea, but a future situation. Note that favorability ("feasible") is known.
11. The progress (idea + action) along a continuum ranging from an initial insight to a fully shaped idea about starting and operating a business. (Dimov, 2007a: 720)	Focus on subjective ideas (like 8) but also includes action. The evolving, process nature is emphasized even more than in (6, 9).
12. [P]erceived as positive situations that are controllable (…) must represent a desirable future state, involving growth or at least change; and the individual must believe it is possible to reach that state (Gartner et al., 2008: 304)	Similar to (10) but emphasizes controllability. Illustrates ambiguity or indecision as regards objective/subjective and current/future.

actors perceive something to be an opportunity. The experimental set of studies can also be lauded for predominantly using business practitioners as participants. This said, there are limitations to the approach and to how it has been applied so far. The dependent variable is typically an expression of attitude or preference, and with one exception (Holland and Shepherd, 2013) it refers to early, pre-action aspects of the entrepreneurial process.

In all, our review clearly suggests that from a nexus perspective, the voluminous research on "entrepreneurial opportunities" has made limited progress. This does not imply that the individual studies failed to reach their intended goals, but collectively they have only achieved limited contributions to conceptualizing and operationalizing characteristics of "opportunities", theorizing their direct and actor–contingent effects on action and outcomes in the venture creation process, or rigorously testing such effects.

4. Assumed requisites of a prospective, micro-level theory of an entrepreneurship nexus

A theory is a system of constructs in which the constructs are related to each other by propositions (Bacharach, 1989). If the meaning of constructs is not clear, then relationships among constructs cannot be clear, either. Construct clarity is essential to the development of sound theory, effective communication, and the building of cumulative knowledge (Bacharach, 1989; McKinley, 2007; Miller, et al., 2013; Suddaby, 2010). Therefore, each *explanans* and *explanandum*, or antecedent and outcome, should have clearly defined and consistent meaning, which is distinct from other constructs in the theory.

Assuming the entrepreneurial process is the journey from non-existence to existence of new economic activities, a prospective, micro-level theory of entrepreneurial processes can address a number of questions pertaining to *identification*, *evaluation*, *initiation*, *progress*, *persistence*, and *success*. These are strong candidates for the role of explananda, or dependent variables. By success we mean the establishment of a new, viable economic activity. Relative performance of established firms lies outside the immediate realm of the theory (cf. Shane, 2012; Shane and Venkataraman, 2000; Venkataraman, 1997).

The nexus framework focuses on two micro-level explanantia. We generalize Shane and Venkataraman's (2000) "individuals" to "Actor", thus allowing this role to be held also by teams, a relay of champions, or organizations (cf. Table 2; definitions 3, 5, 6). As the second nexus element they choose "opportunities". For now, we will use the label "Non-Actor" for this component of the theory.

Table 3
Examples of within-work inconsistencies in the meaning of "opportunity".

1. Opportunities are defined as objective, external situations and yet entrepreneurs can choose to sell their opportunity to another actor (Shane and Venkataraman, 2000: 220 vs. 221, 224).
2. Opportunities are situations that "allow outputs to be sold at more than their cost of production" yet four of eight cases so labeled did not generate profit and one was not technologically feasible (Shane, 2000: 451 vs. 455).
3. Opportunities are defined as objective, external situations although later they are described as subjective ideas [that may evolve or be abandoned] (Dutta and Crossan, 2005: 426 vs. 436–8; Hmieleski and Baron, 2008: 285 vs. 286, 291, regarding "discovery opportunities").
4. New technologies are described as opportunities in themselves whereas in other instances that label is used for specific applications of said technologies (Eckhardt and Shane, 2010: 49 vs. 61; Shane, 2003: 34 vs. 24; levels inconsistency).
5. An opportunity is a chance "to introduce" something but also remains an opportunity after it has been introduced, as long as it generates profit (Eckhardt and Shane, 2010: 49 vs. 54; Shane and Venkataraman, 2000: 220 vs. 221; time [and/or level] inconsistency).
6. Opportunity is defined to mean the chance to introduce innovative (rather than imitative) goods, services, or processes and yet there are also "imitative opportunities" (Gaglio, 2004: 434 vs. 435; Shane and Venkataraman, 2000: 220 ["new means–ends frameworks"] vs. 221; however, also see Shane, 2012, on this issue).
7. Opportunity is a market imperfection and the authors assert it is not contingent on actual realization of economic wealth (Alvarez et al., 2013: 302) yet "creation opportunities" only exist after they are enacted in an iterative process of action and reaction (p. 308). This begs the question what criterion other than the realization of economic wealth marks the existence of such opportunities/market imperfections.
8. A "creation opportunity" is defined as "a competitive imperfection in product or factor markets" created by the actor, yet the "opportunity" label is also applied to an early stage, unproven idea (Alvarez et al., 2013, pp. 302, 308, 310; cf. Alvarez and Barney, 2007, different parts of p. 15; Alvarez and Barney, 2013: 155; time/essential properties inconsistency). Cf. also the expression "Enacted opportunities formed endogenously by entrepreneurs seeking to exploit them" as source of "competitive imperfections" (= opportunities) (Alvarez et al., 2013: 305*t*1). What is it entrepreneurs are trying to exploit, when they start forming an "opportunity"?
9. In The Creation View "opportunities" is not pre-existing but created by the Actor, yet Actors are within this view portrayed as if they embraced the Discovery View, because early in the process they ponder what "opportunities" they might "face" and whether they have the resources to "exploit" them (Alvarez et al., 2013: 308).
10. More than one (own or adopted) definition is provided where the definitions do not agree on essential properties of an "opportunity" (Smith et al., 2009: 41 vs. 42; situation vs. information; Casson and Wadeson, 2007: 298 vs. 285–6; favorability perceived vs. objective; opportunities existing independent of perception or not).
11. Opportunity is defined as "desirable" and "feasible" yet some are eventually abandoned because the entrepreneur no longer believes in them (Wood and McKinley, 2010: 68 vs. 71, 75; cf. DeTienne and Chandler, 2007, feasible by definition pp. 366 vs. not required in operationalization, p. 371)
12. Opportunity is defined as an idea for an innovation that may have value; however, there appears to have been no attempt to exclude from the empirical study those ideas that fall at the low end of the distribution according to quasi-objective measures of value or originality (Kornish and Ulrich, 2011: 107 vs. 111–112).

On the Actor side, the theory needs to assume that Actors exist and that they vary across time and cases on distinct characteristics which can help explain, e.g., their action or inaction, and their success or lack thereof. Similarly, to perform its role as explanans, the Non-Actor needs to exist early, otherwise it cannot contribute to a decision to initiate (or not) the process. The Non-Actor also needs to have characteristics that are distinct from the Actor and from the explananda. Further, the theory needs to assume variance in these characteristics and that this variance can help explain variance in identification, evaluation, initiation, persistence, progress and/or success. A core, nexus assumption is that the effects of the characteristics of the Non-Actor component are potentially contingent on characteristics of the Actor, and vice versa.

Finally, we hold that testability is a preferable characteristic. A conceptualization making instances of Non-Actor identifiable and their characteristics possible to operationalize is preferable to a conceptualization that makes testability problematic in these regards.

5. Limitations of extant conceptualizations for our current purposes

5.1. Three views of "opportunities" and the entrepreneurial process

Our literature review demonstrated that prior work has expressed varying ideas regarding the nature and role of the Non-Actor in entrepreneurial processes. Noting that a coarse classification can never do justice to each individual work, we can with some expansion of earlier expositions (e.g., Alvarez et al., 2013) broadly classify three different perspectives: the *Discovery View*, the *Creation View*, and the *Evolving Idiosyncrasy View*. As demonstrated below, none of these currently fulfills the criteria outlined above for a prospective, micro level theory of the "entrepreneurship nexus". This is because essential constructs are either missing, unclear, or problematically overlapping. This leads to further problems of specifying relationships and putting them to an empirical test.

The Discovery View is most clearly expressed in works by Shane and co-workers (e.g., Eckhardt and Shane, 2003; 2010; 2013; Shane, 2000; 2003; 2012; Shane and Venkataraman, 2000) and is at least partly and implicitly embraced also in laboratory research that presents presumed "opportunities" to participants. It is the origin of the nexus idea, and it is therefore not surprising that it fulfills many of the criteria outlined above. Actors and "opportunities" are assumed to pre-date the entrepreneurial journey, have varying characteristics, and jointly shape the process and its outcomes. An "opportunity" is something objectively existing and favorable (Table 2: 2). However, neither the Actor nor the analyst can know ex ante whether what the Actor is (considering) Acting upon truly is an "opportunity" or not (Eckhardt and Shane, 2003: 339; Eckhardt and Shane, 2010: 54; cf. Dimov, 2007a: 724). This has dire consequences. First, the Non-Actor component conceptually overlaps the explanandum "success". This is because "opportunity" is defined in such a way that competently exploited by a suitable Actor the outcome must be successful (Eckhardt and Shane, 2010:

Table 4
Examples of "within-author" drift in meaning of "opportunity" across works/time.

Work	Definition
Shane (2000: 451)	1. Entrepreneurial opportunities are opportunities to bring into existence new goods, services, raw materials, and organizing methods that allow outputs to be sold at more than their cost of production.
Shane and Venkataraman (2000: 220)	2. [S]ituations in which new goods, services, raw materials, and organizing processes can be introduced and sold at greater than their cost of production.
Eckhardt and Shane (2003:336 [a + b + c]): Shane and Eckhardt (2003: 165 [a + b]); Eckhardt and Shane (2013: 161 [a only])	3. a: [S]ituations in which new goods, services, raw materials, and organizing processes can be introduced through the formation of new means, ends, or means–ends relationships. (cont. b) These situations do not need to change the terms of economic exchange to be entrepreneurial opportunities, but only need to have the potential to alter the terms of economic exchange. (cont. c) In addition, unlike optimizing or satisficing decisions, in which the ends that the decision maker is trying to achieve and the means that the decision maker will employ are given, entrepreneurial decisions are creative decisions. That is, the entrepreneur constructs the means, the ends, or both.
Shane (2003: 18)	4. [A] situation in which a person can create a new means–ends framework for recombining resources that the entrepreneur believes will yield a profit.
Nicolaou, Shane, et al. (2009: 109)	5. [Opportunity recognition is the identification of] a chance to combine resources in a way that might generate a profit.
Eckhardt and Shane (2010: 49)	6. [S]ituations in which new goods, services, raw materials, markets and organizing processes can be introduced for profit. [The work also states that "Opportunities are economic circumstances where if the correct goods or service were to be properly organized and offered for sale that the result would be profitable" (p. 48)].
Shane (2012: 15)	7. [S]ituations in which it is possible to recombine resources in a way that generates a profit. (The work also repeats the Shane and Venkataraman, 2000, definition).
Eckhardt and Shane (2013: 161)	8. Unexploited profitable combinations of what is technologically feasible and market feasible. Exist independent of human perception. [the work also repeats the first part of the definition given by Eckhardt and Shane (2003a)].
Grégoire & Shepherd (2012: 756)	9. [S]ituations that are relevant for introducing new or improved products, services, or ways of doing business to better serve the needs of consumers in one or more market(s) (cf. *same authors* Table 1, *def. (9)*; *however, these authors re-use the above definition also in* Grégoire and Shepherd, in press).
Wood et al. (2014: 254)	10. Opportunities concern the introduction of new and/or improved means of supply (e.g., new products, services, or ways of doing business) to better serve the needs of consumers in one or more markets.
Wood and Williams (2014: 575; 578)	11. [S]ubjective interpretations about a set of circumstances and what could be done in these situations (…) [which] involve the introduction of new means–ends relationships (cf. *same author above and* Table 1, *def. 10*).
Drover, Wood & Payne (2014: 839)	12. [S]ituations in which "new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production" (Casson, 2000, p. 220). By definition then, opportunities must hold profit potential (cf. *same author above and* Table 1, *def. 10*).
Dimov (2003: 412)	13. [A] perceived possibility of economic gain (cf. *same author* Table 1, *def. 7*).
Sarasvathy, Dew, Velamuri, & Venkataraman (2003: 143)	14. New idea/s or invention/s that may or may not lead to the achievement of one or more economic ends that become possible through those ideas or inventions (and) beliefs about things favorable to the achievement of possible valuable ends; and actions that generate and implement those ends through specific (imagined) new economic artifacts. (cf. *same author* Table 1, *def. 2 and 5*).

48). Therefore, the theoretically defined Non-Actor cannot explain negative outcomes. If an Actor fails to act on what is objectively an "opportunity" (for them), this cannot be explained by the characteristics of that "opportunity". The same goes for failure to bring the start-up process to completion. These negative outcomes must be due to faults on the Actor side, or to other factors not included in the model. This is at odds with the very heart of the nexus idea, which highlights the interplay of two, micro-level explanantia as well as uncertainty and the importance of allowing for failure (Eckhardt and Shane, 2010; Shane, 2012).

Second, the Discovery View currently lacks a construct to denote the contents of what the Actor is (considering) acting upon (Shane, 2012: 15–16). Alternatively, the "opportunity" label is used—confusingly—both for the early, inherently uncertain Non-Actor entities and the more restrictive set of such entities that are theoretically assumed or empirically proven to be favorable (Table 3: 1–3). Despite claims to the contrary (Eckhardt and Shane, 2013), the contents of the early stage, subjective entity acted upon are not captured by the notion of "conjecture", which focuses on (positive) evaluation rather than substance (Eckhardt and Shane, 2003: 339). Further confusion surrounds the level at which objective, pre-existing "opportunity" is defined (Table 3: 4).

Third, to reconcile the ideas of objective, Actor-independent existence on the one hand and the uncertainty and fallibility of the Non-Actors that Actors actually pursue on the other, proponents of the Discovery View sometimes explicitly treat "opportunities" as unknown (Eckhardt and Shane, 2010: 50–54). However, this does not seem well aligned with insistence on the importance of measuring "opportunities" and their effects (Shane, 2012; Shane and Venkataraman, 2000). Adding to their unknown status the criterion that they be Actor-independent makes operationalization and probability sampling of "opportunities" as defined in this view seem impossible. This has raised concerns that propositions within this view may be inoperable and/or non-testable (Alvarez and Barney, 2013; Dimov, 2011).[5]

The Creation View is mainly associated with Alvarez and co-workers (e.g., Alvarez and Barney, 2007; Alvarez et al., 2013), although others have put forward related arguments more or less independently (e.g., Ardichvili et al., 2003; Cornelissen and Clarke, 2010; Wood and McKinley, 2010). This perspective is cast as an alternative or complement to the Discovery View. However, although Actors and "opportunities" remain on center stage, it was not developed with an explicit aim to theorize how variance in Actors and Non-Actor components jointly shape entrepreneurial processes. It is therefore not surprising that it lacks elements needed for our current purposes.

Like the Discovery View, the Creation view defines "opportunity" in a rather external-objectivistic manner as a market imperfection, although it is emphasized that "opportunities" can be socially constructed and emerge only thanks to Actor's actions (Table 2: 4). The created "opportunity" is the successful end point of the entrepreneurial journey; hence existence or characteristics of "opportunities" under this view cannot explain why the Actor took action in the first place, and giving them a role in explaining success would be tautological. Similar to the Discovery View, the Creation View lacks a well-developed concept for the uncertain and sometimes rightfully abandoned Non-Actor worked on at early stages of the process (cf. Klein, 2008: 181). There is cursory reference to "initial beliefs about opportunities" (e.g., Alvarez and Barney, 2007: 15; Alvarez et al., 2013: 308) mixed with recurring instances of also applying the "opportunity" label to such early, subjective, and uncertain beliefs (Table 3: 8). Moreover, there may be a more fundamental lack of clarity of what the discovery-creation distinction is under the Creation View, as it is alternately cast as a matter of theoretical assumptions (Alvarez and Barney, 2007: 17); objectively different states of the "real world" (Alvarez and Barney, 2007: 14*n*3), and different sets of action patterns in venture creation processes (Alvarez et al., 2013).

What we label the Evolving Idiosyncrasy View, most clearly expressed by Dimov (2011: 64–66) and Sarason et al. (2006; 2010), has a similar but slightly different take on the evolving, Actor–contingent nature of the entrepreneurial process. "Opportunity" is predominantly used to denote a subjective and unproven idea. This idea exists early in the process, but can change considerably during its course, and take on increasing "objectification" over time (Wood and McKinley, 2010). This makes the perspective reminiscent of Sarasvathy's (2001) description of effectual processes, although her theorizing does not emphasize the "opportunity" construct.

Under the Evolving Idiosyncrasy View the uniqueness of each "opportunity" is emphasized, and the argument insists on the inseparability of the "opportunity" from the entrepreneur. Although this highlights the interplay between Actor and Non-Actor, in line with the nexus idea, the perspective explicitly denies that characteristics of the "opportunity" can be meaningfully discussed without reference to a particular actor. This is in direct opposition to viewing Actor and Non-Actor as separate entities whose characteristics may have both direct and interactive effects. Thus, the Evolving Idiosyncrasy View does not invite theorizing about—or empirical assessment of—abstracted characteristics of the Non-Actor component nor their influence on action and outcomes across Actor + Non-Actor dyads.

5.2. Favorability as an obstacle to construct clarity

Our review and analysis above show that the meaning of "entrepreneurial opportunities" is unclear (cf. Foss and Klein, 2012: 74; Hansen et al., 2011; McMullen et al., 2007: 273). Further, this holds not only across but also within works and "views". A major reason why authors have not attained clarity is that "opportunity" necessarily carries a connotation of favorability. It thus comprises both *contents* and an *evaluation* of the contents. Authoritative lexical definitions suggest "A time, juncture, condition of things favorable to an end or purpose, or admitting of something being done or effected" or "A set of circumstances that makes it possible to do something" (cited from Grégoire and Shepherd, in press; Sarasvathy et al., 2003). The assumed favorability shows also in the definitions in Table 2. When the "opportunity" is occasionally described as "false", "illusory", "unfruitful" or as bringing losses to the entrepreneur, it is only because someone has changed their mind or failed to take the right action in relation to the "opportunity". If a formal definition were worded so that no favorability of any kind is implied, there can be no reason to keep the label "opportunity".

The locus of the favorability may vary. It may be (1) stipulated or assumed by the theorist, (2) proven through the eventual outcome, or (3) perceived by (potential) entrepreneurs or their stakeholders. The Discovery View builds on (1) but due to the elusive nature of empirical "opportunities" its proponents also lean on (2) (Eckhardt and Shane, 2003: 339) and occasionally drift into (3) (Table 4: 4). The Creation View combines (1) and (2) by theoretically defining "opportunities" as market imperfections created by the Actor, but its proponents also slide into (3) (Table 3: 8). The Evolving Idiosyncrasy View applies (3) as the main view, and may or may not consistently stick to it. Either way, it is doubtful whether the theorist ever has reason to accept this criterion for using the "opportunity" label for subjective ideas, including those that are all but delusional, rejected by other stakeholders, and lead to non-action, eventual abandonment, or failure (cf. Dimov, 2007a: 720).

A greater problem is that even when there is agreement across views, or consistency within a particular view, the favorability connotation creates conceptual problems in relation to the scope conditions that Suddaby (2010) argues need to be specified in order to reach construct clarity: *space*; *time*; *level*, and *values*.[6] When a new technology (or regulatory, demographic or social change)

[5] Interpreting "objective" as pertaining only to physical existence and applying a very low threshold for objective favorability (e.g., above-zero probability of success; Shane, 2012), there are a few empirical contexts where "objective, pre-existing opportunity" may be a reasonable approximation. This is when the "opportunity" essentially consists of a site and its characteristics, such as well-defined geographical markets (Barreto, 2012a), real estate development sites (Fiet, 2007), or potential mining sites (Bakker et al., 2014).

[6] Suddaby (2010) regards level as an aspect of space.

is introduced, this may be good or bad for the economy as a whole, and of varying benefit across regions, industries, firms, individuals, and particular new venture attempts involving different applications of the focal technology. Where does the "opportunity" label apply? An idea for a new type of business venture may be favorable or not depending on who pursues it as well as when and where it is converted into a new market entry attempt. Even those who accept the existence of "objective opportunity" concede that the opportunity may no longer exist by the time the Actor is ready to launch (Eckhardt and Shane, 2010: 50). Does an Actor's choice to give up a start-up attempt mean that the "opportunity" no longer exists; that it never did, or that the "opportunity" is now available for someone else? Combining level, time and space, assume a number of entrepreneurs respond to the same regulatory change by trying to start the same type of businesses in the same and different locations at different points in time, and that some of them succeed and others fail. Which of these cases represented "opportunities", and which did not (cf. Barreto, 2012a)?

It is questions like these that authors wrestle with and stumble on when theorizing about "opportunities" (see Tables 3 and 4). As a result, nowhere in the reviewed literature have we found use of the "opportunity" construct that approaches satisfaction of Suddaby's (2010) criteria for construct clarity. But the problem here lies more with the notion of "opportunity" itself than any shortcomings of its users. Our conclusion is that "opportunity" is not a suitable construct for prospective, micro-level theories of entrepreneurial processes. A second conclusion is that micro-level favorability should not be built into either the Actor or Non-Actor constructs of such a theory. Thirdly, to capture and extend the ideas that have previously been discussed under the "opportunity" label, more than one construct will be needed.

6. An alternative conceptualization

Using Suddaby's (2010) criteria for construct clarity as inspiration we outline in Table 5 the three constructs we suggest be used instead of "entrepreneurial opportunity", with further elaboration below. The purpose of this exercise is to fulfill the previously outlined criteria of construct clarity, early existence, explanatory variance in characteristics, and testability, while retaining widely accepted notions that external conditions are important, and that Actors act on the basis of subjective cognitions.

Table 5
Summary of constructs to represent "Entrepreneurial Opportunity".

	External Enabler	New Venture Idea	Opportunity Confidence
Definition	A single, distinct, external circumstance, which has the potential of playing an essential role in eliciting and/or enabling a variety of entrepreneurial endeavors by several (potential) actors	An "imagined future venture"; i.e., an imaginary combination of product/service offering, markets, and means of bringing the offering into existence	The result of an actor's evaluation of a stimulus (External Enabler or New Venture Idea) as a basis for the creation of new economic activity
Examples of what it is	Changes to technology, demography, culture, human needs and wants; institutional framework conditions, macro-economic conditions, and the natural environment	The *contents* of "imagined future ventures" Any of the eight conceived applications of 3DP™ technology described by Shane (2000)	An assessment that: "Because of EE x, this is a good/bad time for people to introduce new ventures" "I/someone could (not) make good money from using technology X in manner Z to serve market Y"
Examples of what it is not	The complete set of external circumstances that influence the fate of a particular venture Necessarily perceived or acted upon Generally favorable for the economy at large, or for all types of ventures and actors	A manifest venture or business model An idea for increased efficiency of existing operations Necessarily innovative, complete or well-articulated; acted upon; successful, or perceived to represent "an opportunity" by anyone or for anyone	Identification of New Venture Ideas The contents of External Enablers or New Venture Ideas Entrepreneurial self-efficacy Necessarily even remotely correct Necessarily referring to self
Favorability	Assumed on aggregate level for some activities (unknown which) but not necessarily overall. Micro-level favorability is selective, interdependent, subjective, uncertain, and only revealed through empirical analysis	Not built into construct—revealed through empirical analysis Variable across ideas, actors and contexts	Degree of favorability—from low to high—is the essence of the construct Subjective Ipsative Of varying magnitude and uncertainty
Level	Aggregate; pertaining to multiple potential activities and actors	Venture (through one or more cognizing agents)	The evaluator: individual The evaluated: micro to macro
Time	Particular EEs are temporary; some EEs are always present in a disequilibrium economy	Existing when cognized; in operation for the duration of the venture creation process; changeable	Momentary Periodically reassessed
Lineage	Economics Sociology Social psychology Organization/Management Prior "Entrepreneurial Opportunities" research	Prior "Entrepreneurial Opportunities" research Cognitive and Social psychology	Psychology Prior "Entrepreneurial Opportunities" research
Values/assumptions	External Enablers are good if conducive to new economic activities that improve the economy at large	New Venture Ideas are good if conducive to venture level success and/or improvement of the economy at large	Confidence may or may not be well founded, leading to positive or negative effects for focal Actor and others

6.1. External Enablers

The idea of objectively favorable, pre-existing and actor-independent "opportunities" on the micro-level has triggered philosophical and logical opposition, which has arguably led researchers to either reject the nexus idea or dissuaded them from applying it in empirical research. At the same time there is widespread agreement across proponents of different views that changes in, e.g., technology, demographics, regulatory frameworks and the natural environment trigger new venturing attempts, some of which will prove successful (Alvarez and Barney, 2013; Davidsson, 2003; Dimov, 2011; Shane, 2012). Prior research has also demonstrated that focusing on particular aspects of environmental change can illuminate our understanding of how new economic activities emerge (e.g., Barreto, 2012a; Grégoire, and Shepherd, 2012; Hiatt et al., 2009; Shane, 2000; 2004; Sine and Lee, 2009).

External Enabler is our label for such single, distinct, external circumstances, which—by affecting supply, demand, costs, prices or payoff structures—can play an essential role in eliciting and/or enabling a variety of venture development attempts by several Actors. It is thus an aggregate level construct. The existence and enabling capacity of External Enablers is theoretically assumed, in alignment with an underlying assumption of a disequilibrium economy (Arend, 2014; Shane and Venkataraman, 2000). This also accords with historical experience; in each long enough time period environmental changes occur. Some Actors try to exploit these changes, and a number of them attain success in doing so.

Importantly, however, External Enablers (EE) are not favorable for all purposes and the economic effect of any given EE is not necessarily positive overall. On the micro-level, what is an enabler of one venture may be the undoing of another. Consequently, natural disasters or terrorist attacks can be External Enablers for ventures initiated in response to these events. In other words, the favorability of any EE is selective, subjective, interdependent, and uncertain. By *selective* we mean that their favorability is contingent on space, time, and application area (e.g., industry; product; geographical area; time of the event of the EE and of the attempt to exploit it). The favorability is *subjective* in the sense that it is contingent on the characteristics of the Actor.

Further, the favorability of an EE may be *interdependent* with other external conditions, as when the unleashing of the potential in new technology is contingent on regulatory change (see, e.g., Navis and Glynn, 2010). Finally, due to competitive action and other unknown future changes, the favorability of an EE for any particular purpose is fundamentally *uncertain* ex ante.

External Enablers are temporary. Over time, the actions of other entrepreneurs and additional changes within the economic system will erode the existence of an EE or its enabling capacity for particular types of new economic activity.

Being abstract- and environment-related, the construct has its relevant lineage from economics, sociology and social psychology. Therefore, these disciplines would be the most likely sources of extant theories, auxiliary constructs, and validated measures. The construct also shares some characteristics with Strategic Issues in management research (Barreto, 2012b; Gartner et al., 2008), although we do not assume the existence of an organization or established economic activity (cf. Shane, 2012:11). Further, not all Strategic Issues require *entrepreneurial* responses.

By including External Enablers we wish to acknowledge environmental circumstances, whose importance is insisted on in the Discovery View, and which may be regarded as under emphasized by others (see. e.g., Eckhardt and Shane, 2013; Shane, 2012). However, in line with arguments from the Creation View (e.g., Alvarez and Barney, 2007) we also acknowledge that Actors themselves can have some influence on some External Enablers and occasionally have a major role in them, as when entrepreneurial Actors are also the inventors behind new technology or successfully lobby for the regulatory change they subsequently try to exploit.

6.2. New Venture Ideas

Our second construct, *New Venture Ideas*, stands for "imagined future ventures" (cf. Cornelissen and Clarke, 2010; Klein, 2008), where "new venture" denotes a distinct economic (i.e., resource-transforming) activity offering goods and/or services to customers or other beneficiaries. Thus, New Venture Ideas (NVI) are imaginary combinations of product/service offerings; potential markets or users, and means of bringing these offerings into existence. They are the contents (but not the favorability) of what others may have called "opportunity recognition", "opportunity identification" or "(entrepreneurial) discovery". We use the label "New Venture Idea" to indicate inclusion of ideas that guide the creation of new corporate and social ventures. The intended new activity needs not be innovative (see Amason et al., 2006, on newness vs. novelty) but it must aim at introducing to potential users something not previously offered by the same actor, rather than optimizing an on-going activity (cf. Shane and Venkataraman, 2000: 220).

New Venture Ideas are cognitive and non-material. They may to a varying extent reflect the Actors' interpretation of identifiable External Enablers. Further, they represent what an Actor might be aiming to create, rather than denoting the gradually materializing venture itself. However, the cognitive nature of ideas does not make them completely inseparable from a particular individual. A well-articulated NVI can be shared within a team or transferred between successive champions. It can be codified and communicated to other individuals, such as potential investors and customers. Different individuals can independently conceive of NVIs with essentially the same characteristics. An experimenter can present NVIs with varying characteristics to participants to test their reactions. An individual entrepreneur can conceive of and act upon a variety of NVIs with varying success. All this suggests that characteristics of NVIs can be meaningfully conceptualized separately from a particular Actor (cf. Katz and Gartner, 1988; Shane, 2012). It also suggests that despite its cognitive nature the New Venture Idea construct is best attributed to the level of the (emerging) venture (Davidsson and Wiklund, 2001).

Importantly, NVIs are not inherently favorable or perceived to be so. They can be good or bad; their subjective or objective favorability is what the effects of their characteristics on explananda are supposed to show. Individuals can conceive of an NVI and then decide not to act because they (correctly or incorrectly) conclude it is not worth their while, and different individuals contemplating the same NVI may assess them differently. This shows that *identification* or *recognition* of New Venture Ideas does not require positive *evaluation*. It also underlines that separating the two is essential (see *Opportunity Confidence* below). In terms of time, an NVI exists—albeit initially often in rudimentary and malleable form (cf. Sarasvathy, 2001)—as soon as someone cognizes it. It is in operation from the moment the entrepreneur starts to act on it until the attempt is either given up, or the new economic activity has been established in the market. Conversely, there can be no new venture creation process before there is an NVI. The cognitions that give direction to hobbyists' actions to solve their own problems are not NVIs before they see their solution as the potential basis for a business.

Aspects of our notion of New Venture Idea appear under the "entrepreneurial opportunity" label in prior literature, although this is not always in line with the authors' stated definition (cf. Table 3). Similar ideas also appear under other labels (e.g., [new] [venture] idea; opportunity idea; business idea/concept; entrepreneurial idea/concept). This use typically occurs without conceptual elaboration and often interchangeably with "opportunity". In some earlier works, [New] [Venture] Idea is the main construct (e.g., Brush et al., 2001; Foo et al., 2005; Klofsten, 2005), yet again with little conceptual elaboration (Hill and Birkinshaw's, 2010, discussion of sets of ideas being an exception; cf. Gruber et al., 2013). We have not found under any label a well-developed construct which corresponds to our notion of New Venture Idea, and which clearly distinguishes between the contents and the evaluation of what is being cognized.

6.3. Opportunity Confidence

Our third construct has an important supplementary role. Opportunity Confidence (OC) refers exclusively to an Actor's *evaluation*—from negative to positive—of a stimulus that may be relevant to the creation of new economic activity. It denotes not what the Actor sees but their evaluation of it. It represents the only phenomenon where the notion of "opportunity" is justified in a prospective theory: Actors take action or not depending on whether *they* are confident that what they "see" is an opportunity.

The term was introduced by Dimov (2010), although our definition (see Table 5) deviates slightly from his, or at least from his operationalization. Prior literature has also used "[opportunity] evaluation/belief/conjecture" (Autio et al., 2013; Eckhardt and Shane, 2003; Grégoire et al., 2010b; Shepherd et al., 2007) in a similar manner. Consequently, our intention is not to introduce an entirely new idea. Instead, we aim for clarification by sharpening and elaborating on the construct, and by eliminating this dimension from our main constructs: External Enablers and New Venture Ideas.

Degree of favorability is what the OC construct is all about. The favorability is *subjective* as in subject-specific; because of knowledge–, resource– and opportunity–cost differences across Actors, they may correctly assign varying attractiveness to identical stimuli (McMullen and Shepherd, 2006; Shane, 2000). Opportunity Confidence is also subjective in a second sense, due to Actors' tendency to under- or over-estimate what is possible for them. This is what Frey and Heggli (1989) call *ipsative*. This also implies that OC may be mistaken and have little to do with the true state of External Enablers or the success chances of New Venture Ideas.

Opportunity Confidence is an individual level, perceptual construct, although it can emerge from social interaction (Dimov, 2007a; Gemmel et al., 2011) and be shared within a team (cf. Foss and Klein, 2012: 79). Separating this individual level perception from the venture- and aggregate level stimuli to be evaluated makes it easier to account for different stakeholders holding varying levels of OC with regards to the same External Enabler or New Venture Idea. The level of the evaluated entity may vary from micro (one's own New Venture Idea) to macro (e.g., the favorability of an External Enabler for business start-ups in general). Importantly, the evaluated entity is *not* the self, which is instead captured by the notion of entrepreneurial self-efficacy (Chen et al., 1998). If an Actor loses heart and gives up somewhere in the process, this may be because they no longer believe in the viability of their New Venture Idea. Alternatively, they no longer believe they are the right person to exploit what they still see as a viable idea. This is an important and neglected conceptual distinction, which can arguably be managed by assessing self-efficacy separately, and considering McMullen and Shepherd's (2006) first- vs. third-person contrast when assessing OC.

Subjective, perceptual, and individual-level, the construct has its most relevant lineage from psychology and its application in prior research on opportunity perception and evaluation. Along the time dimension, OC is *momentary* in the sense that the evaluation is made at and is valid for a particular point in time. Over an entrepreneurial process the OC may vary, even if its object remains unchanged. Allowing this independent evolution of contents and evaluation over the process is an additional advantage of conceptually separating the two.

In summary, Opportunity Confidence—ranging from low to high—refers to individuals' evaluation of External Enablers and/or New Venture Ideas. It is essential to conceptualize this evaluation separately in order to eliminate innate favorability from the other constructs; let different stakeholders' evaluations vary for the same stimulus, and to allow contents and evaluation of the stimulus to vary independently of each other over time.

Fig. 1 Illustrates how the three constructs are related. The five individuals may be potential entrepreneurs (Actors) or other stakeholders. Two of them, A and B, contemplate the same External Enabler, e.g., a new technology or a socio-demographic shift, but arrive at very different levels of Opportunity Confidence in relation to it. This could be due to differences in prior knowledge or dispositional optimism. Individuals C and D both evaluate the same New Venture Idea and do so at the same point in time. C discards the idea while D thinks it is excellent, again due to some kind of personal differences. Inspired by the idea, D acts on it or at least finds reason to assess it again at a later point in time. The second evaluation is more lukewarm, presumably because of learning more about the qualities of the idea. The arrow from External Enabler to New Venture Idea is dashed because the idea may or may not have a clear basis in an External Enabler. Shane (2000) eight applications of 3DP technology are examples of the former, while the ideas behind many imitative start-ups in stable industries exemplify the latter. Individual E evaluates two different New Venture Ideas (at the same point in time) and arrives at different levels of confidence that they represent opportunities, presumably due to differences in the characteristics of the ideas themselves. Hence, E would be more likely to act, or recommend action, on NVI#2 than on NVI#1.

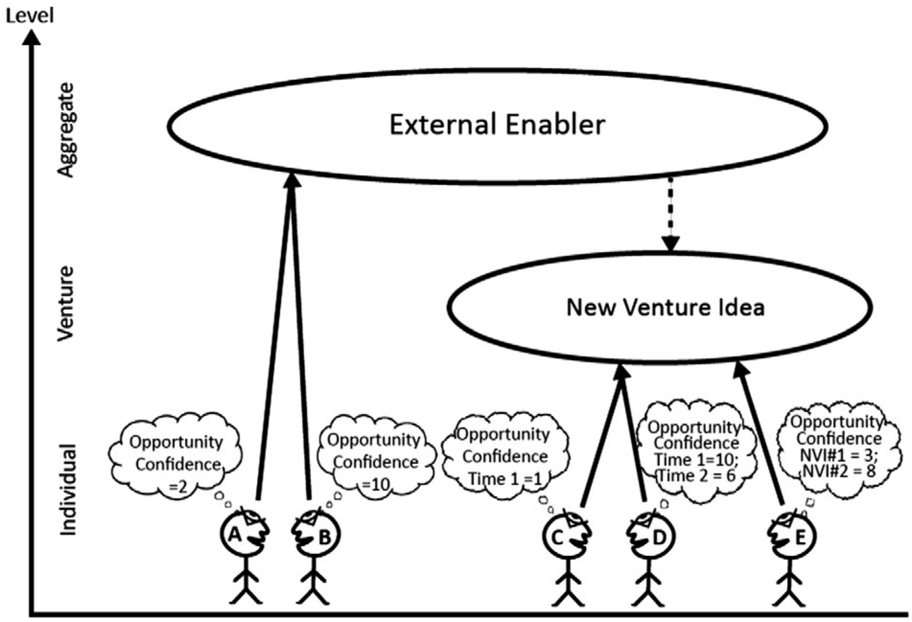

Fig. 1. External Enablers, New Venture Ideas, and Opportunity Confidence.

7. A revised framework for developing and testing entrepreneurship nexus theory

Our goal in this article is to provide a more workable framework, promoting testable theory for the micro-level study of how new economic activities and organizations emerge. In so doing, we put particular emphasis on the nexus idea and the role of the Non-Actor, i.e., the contents of "that, on which Actors [might] act". For this purpose we represent the various ideas previously labeled "entrepreneurial opportunity" by three constructs: External Enablers, New Venture Ideas, and Opportunity Confidence. We also suggest expanding Shane and Venkataraman (2000) emphasis on "individuals" to "Actors". Further, we heed calls to highlight entrepreneurial Action (Dimov, 2011; Klein, 2008; McMullen and Dimov, 2013; McMullen and Shepherd, 2006; Venkataraman et al., 2012) and Outcomes (Davidsson, 2003; Zahra and Dess, 2001), which can also be seen as one of several ways in which we try to increase explicit attention to process issues within the framework. The delineation between Action and Outcomes is not crucial for our current purposes. We have previously suggested *initiation*, *progress*, *persistence*, and *success* as explananda. In addition, Action can be alternatively construed as *action path* such as mode-of-exploitation (Shane and Venkataraman, 2000) or *activity pattern*, referring to such things as the intensity and sequence of different (types of) actions over time (Lichtenstein et al., 2007; Shane and Delmar, 2004).

To maintain focus we will not elaborate on the precise meaning of, or inter-relationships among, these latter constructs. The same goes for Actor characteristics and their direct effects, as well as environmental contingencies other than as represented by the External Enablers. These delimitations do not mean we necessarily consider these de-emphasized factors to be less interesting or important. Further, we wish to emphasize that what we are offering is not a fully developed theory but a framework within which such theory can be developed and tested. In Sections 3 to 6 we have dealt with construct clarity for a particularly problematic part of the framework. Below we add some further ideas on research questions, the structure of relationships, and suitable empirical approaches.

7.1. The Actor ∗ New Venture Idea nexus

A significant share of the extant literature on "entrepreneurial opportunities" associates that construct—conceptually and/or empirically—with subjective ideas about potential, future ventures (cf. Table 2, definitions 5, 6, 8, 11). Frequently, this does not appear to be a deliberate, consistently upheld or preferred choice but rather a practical, second-best solution. In contrast, we argue that New Venture Ideas should be embraced as the main alternative. New Venture Ideas appear *early* and pertain to *all* new venture creation processes. Their label is not contingent on Actor, time, or outcome, and the variances of their characteristics are not subject to any theoretical range restrictions. New Venture Ideas can be of any quality and they come with no assumptions regarding Actor evaluations or eventual outcomes. Further, it is a notion that should be compatible with a multitude of philosophical positions, and with "process theory" as well as "variance theory" (van de Ven, 2007).

This said, at least three arguments against using subjective ideas in a nexus approach can be found in the literature. First, arguing for the Discovery View, Shane (2012: 16) emphatically argues that short of objective, actor-independent "entrepreneurial opportunities" there is no meaningful nexus because both parts of it are functions of the Actor. Second, the Evolving Idiosyncrasy

View suggests that the entrepreneur and the "opportunity" (usually referring to a subjective idea) are so intertwined that they cannot be meaningfully separated (Dimov, 2011; Sarason et al., 2006, 2010). Third, there is the suggestion that the solution to the elusiveness of "opportunities" is not to put subjective ideas in their place but to increase the focus on actions in the entrepreneurial process (Dimov, 2011; Klein, 2008).

As regards Actor-dependence, real world entrepreneurs select which "opportunities" (according to the Discovery View) they act on. Hence, Actor-dependence and the endogeneity problems it might bring (Hamilton and Nickerson, 2003) pertain to all nexus research using observational data. Only experimental designs can fully separate the two nexus elements, and this they can do regardless of whether the experimenter-manipulated Non-Actor component is a set of external conditions or New Venture Ideas. Further, research on habitual entrepreneurs (Ucbasaran et al., 2006) demonstrates that the same individuals pursue different New Venture Ideas with varying results. Arguably, this outcome variance is largely due to differences in the quality of the New Venture Ideas and their fit with the Actors. The moderate rate of completion of nascent venture processes (Parker and Belghitar, 2006) also suggests there is considerable variance in New Venture Idea quality in observational data. Hence, even when New Venture Ideas do not have Actor-Independent existence, they can have conceptually meaningful characteristics that can be assessed and compared across ventures. These characteristics seem to have considerable variance and may prove to have probabilistic effects that can be meaningfully construed as, at least in part, Actor-independent.

Regarding the third objection, Actors act *on* something, and the efficacy of particular actions is likely to be contingent on the nature of the imagined new venture the Actor is trying to establish (Alvarez et al., 2013; Eckhardt and Shane, 2010). An increased emphasis on action does therefore not eliminate the need for investigation of New Venture Ideas. For these reasons, we maintain that nexus theorizing based on New Venture Ideas has considerable potential.

7.1.1. Theoretical development

A major mission for future research is to identify, conceptualize and operationalize the salient characteristics of New Venture Ideas. This is a very considerable task, yet an important and potentially fruitful one. For example, psychology has the "Big Five" personality characteristics (John and Srivastava, 1999) and innovation research has distilled five generic innovation attributes which affect their diffusion speed (Rogers, 1995). By the same token, it might serve entrepreneurship research well to develop a manageable set of well-defined and -operationalized New Venture Idea characteristics.

This work does not start completely from scratch. Our review hinted at some potentially salient characteristics (see also Baron and Ensley, 2006). However, only novelty (innovation) comes with a rich conceptual background (e.g., Gatignon et al., 2002; Rogers, 1995; Schumpeter, 1934; Utterback and Abernathy, 1975) and even there, work on operationalizations appropriate for the emergent stage has only recently begun (Dahlqvist & Wiklund, 2011; Hill and Birkinshaw, 2010). Further exploration into *risk*, *uncertainty* and *ambiguity* and similar distinctions (Alvarez and Barney, 2007; Sarasvathy et al., 2003) might prove useful, although this requires careful consideration of what can justifiably be conceptualized as characteristics of the idea rather than the Actor or the environment. Similarly, aspects of McMullen and Shepherd's (2006) distinction between first- and third-person "opportunities" can be addressed in terms of the New Venture Idea's degree of *relatedness* to its founders' knowledge and resource endowments (Haynie et al., 2009) as long as the theorist observes that this moves the nexus mechanism into the construct rather than being represented as interaction between constructs.

Research needs to allow for New Venture Ideas being only vaguely formulated at early stages, and sometimes subject to substantial change (cf. Sarasvathy, 2001; Smith et al., 2009). This can possibly be achieved by including, e.g., *clarity*, *completeness*, and *change* as New Venture Idea characteristics. *Readiness* (Douglas and Shepherd, 2002) or *preparedness for immediate market implementation* would reflect aspects of discovery vs. creation, and the range from the simplest arbitrage (Kirzner, 1973) to attempted realization of what is thought technically and commercially impossible (e.g., Shane's, 2012, "Leo Air").

In the interest of parsimony several of the above notions may eventually be reduced to sub-dimensions in a sufficiently complete and broadly applicable list of salient super-constructs representing attributes of New Venture Ideas; something like the Big Five. Moreover, as a list is not theory (Sutton and Staw, 1995) the next challenge is to work out the theoretical mechanisms and to subject these ideas to empirical testing. This is depicted in Fig. 2. We should emphasize at this point that the applicability of the three constructs developed in Section 5 is broader than the "boxes and arrows" framing of this figure, and likely to be useful also for "process theory" (McMullen and Dimov, 2013; van de Ven, 2007).

The merging arrows in Fig. 2 (which represent direct as well as interactive effects) reflect the research question "How do characteristics of Actors and New Ventures Ideas independently and interactively influence new venture creation processes?", where the latter stands for Opportunity Confidence, Action, and Outcomes. Theorizing and testing the role of characteristics of New Venture Ideas for different aspects and stages of the venture creation process is a major task for future research. This is particularly true for Action and Outcomes at later stages of the process, which our review demonstrated have received only cursory attention in prior research.

A process perspective on venture creation calls for consideration of feedback loops. In Fig. 2 this is represented, firstly, by the feedback arrow from Action/Outcomes to Opportunity Confidence. Contacts with potential customers and resource providers, as well as intermediate Outcomes, may make Actors adjust their assessment of the favorability of their New Venture Idea (cf. Dimov, 2010; McMullen and Shepherd, 2006, on "doubt"). Theorizing and testing this dynamic from a nexus perspective is another important task for future research. There is reason to suspect that explicit consideration of variation in Opportunity Confidence over time may reconcile limited or mixed support for theorized effects of other factors on Outcomes in prior research (Dimov, 2010). Second, New Venture Ideas being incomplete and malleable at early stages makes it unlikely that their early-stage characteristics can accurately explain venture creation Outcomes at a much later time. This highlights the need for multi-stage theorizing. The research question

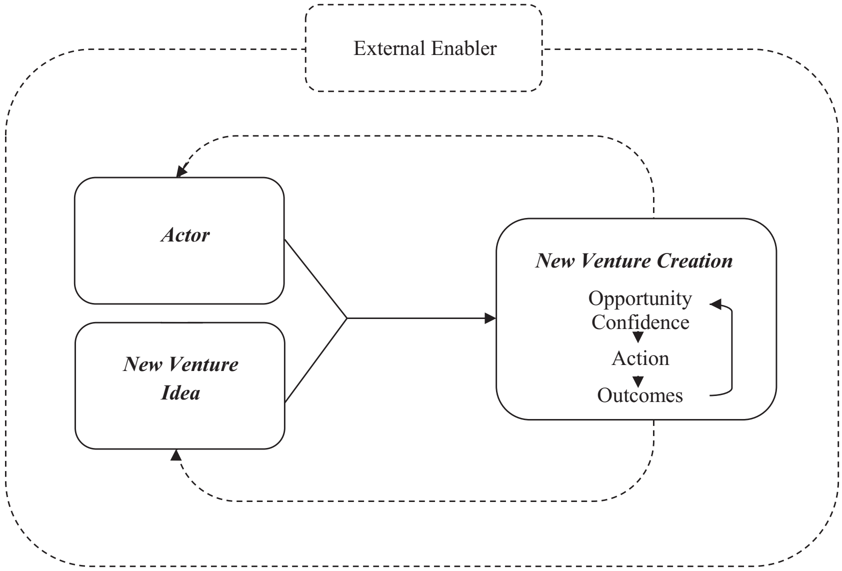

Fig. 2. The Actor—New Venture Idea Nexus.

implied by the dashed feedback arrow at the bottom of Fig. 2 is "How and why do Actions and (intermediate) Outcomes in the new venture creation process lead to changes in the New Venture Idea?" whereas backward- and forward-pointing arrows combined suggest interesting possibilities in terms of learning and excessive tinkering. Although this theme has appeared in prior work there is certainly room for further development of abstracted, testable theory pertaining to these questions.

7.1.2. Empirical development

External Enablers may serve as an excellent, heterogeneity-reducing context for studies of the Actor ∗ New Venture Idea nexus, as indicated by the dashed envelope in Fig. 2 (see, e.g., Barreto, 2012a; Shane, 2000). Further, regardless of specific empirical approach, our framework calls for longitudinal designs undertaking repeated assessment of New Venture Idea characteristics and Opportunity Confidence. Limitations of archival data sets (making the trend in Table 2 dubious) include that Opportunity Confidence can usually only be inferred from Action and that they are unlikely to provide satisfactory detail on New Venture Idea characteristics. In one rare case when it does (Shane, 2001) information on the Actor is lacking. This said, longitudinal survey studies like the Panel Study of Entrepreneurial Dynamics have developed a methodology through which the Actor ∗ New Venture Idea nexus can be investigated in large-scale, prospective, and process-oriented studies on the micro level. Future studies of this nature could collect rich, time-varying data on both parts of the nexus (and on Opportunity Confidence), utilizing the versatility of survey-based data collection. Challenges for the future include finding ways to apply the approach to more homogeneous and theoretically suitable samples (Davidsson and Gordon, 2012) and to extend it into the study of new internal ventures (Davidsson, 2003).

Experimental and simulation-based studies can completely eliminate selection bias and range restriction pertaining to New Venture Ideas. They can systematically examine what type of New Venture Ideas appeal to and fit with what type of Actors (e.g., novice vs. expert; solo entrepreneurs vs. teams; founders vs. investors; independent start-ups vs. corporate venturing) using any range of variation in New Venture Idea characteristics that the investigators deem theoretically motivated. Further, our framework provides guidance for the design of future laboratory research where prior work has often failed to make critical distinctions. First, it clarifies that "Which Actors are most likely to identify New Venture Ideas?" and "Which Actors become more confident that a given New Venture Idea represents an opportunity?" are separate questions which are likely to have different answers. Second, it forces experimenters to think twice about portraying, e.g., the probability and magnitude of future financial outcomes as contents of the Non-Actor part of the nexus. In our framework, these would reflect Actor inferences, presumably from more substantive attributes of New Venture Ideas, which would affect the Opportunity Confidence.

7.2. External Enablers as Non-Actor component

Even though New Venture Idea is our main suggestion for the Non-Actor nexus component, there are reasons to sometimes assign a greater role to External Enablers. Changes in external conditions are no doubt a trigger of new economic activities and hence of central interest to an understanding of entrepreneurship and its role in the economy. Further, the nexus framework outlined in Fig. 2 does not address where New Venture Ideas come from in the first place. There is therefore reason to also develop and test theory where External Enablers assume the role of Non-Actor nexus element. However, this comes with some caveats. Early identification of External Enablers can be challenging, and traditional, broadly based data may not be able to capture sufficient variation in External Enablers across cases or within processes over time. This limits the prospects of applying this perspective to concurrent study of

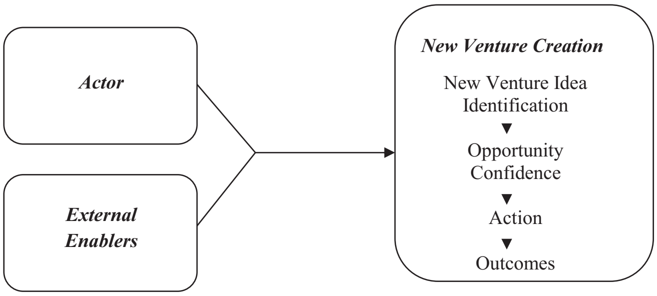

Fig. 3. The Actor—External Enabler Nexus.

venture creation processes. In many cases—notably imitative start-ups and corporate "me-too" entry in mature industries—no clearly identifiable External Enabler has a major role in triggering initiation or determining success. Thus, attention to distinct External Enablers is neither necessary nor sufficient for studying the emergence of all kinds of new economic activities. Further, by taking External Enablers as a starting point and not repeating the feedback loops from the previous figure, Fig. 3 does not capture well what Alvarez and Barney (2007, 2010) call "creation opportunities". For these reasons, we see Fig. 3 as supplementary to our main argument.

7.2.1. Theoretical development

The overarching research question depicted in Fig. 3 is "How do characteristics of Actors and attributes of External Enablers independently and interactively influence new venture creation processes?", where the latter stands for identification of New Venture Ideas; Opportunity Confidence; Action, and Outcomes. Here, there is need for conceptual development that classifies External Enablers theoretically rather than just grouping them as socio-cultural, demographic, climatic, regulatory or technological changes and documenting the effects of individual instances of these. A good example here is Grégoire and Shepherd's (2012) work on the role played by structural alignment of what we would label as External Enablers, i.e., defined technologies and market needs. Another main challenge is to increase specificity of the assumed effects for the different explananda in Fig. 3, i.e., the role(s) of External Enablers across the venture creation process.

7.2.2. Empirical development

A range of empirical approaches can be (and have been) used to study what we call External Enablers. Shane (2000) reveals the potential in carefully designed case study research, although this approach shares the limited generalizability of any "small n" research. If retrospective, case studies usually also suffer from survival bias. Grégoire's work demonstrates the potential in laboratory research (Grégoire and Shepherd, 2012; Grégoire et al., 2010a). A limitation is the restricted ability to address process and dynamism, especially in relation to Action and Outcomes further into the entrepreneurial process. Future research may find ways to overcome this limitation through extension into multi-period designs. This said, inability to study real Action involving high stakes will remain a non-trivial limitation.

Hence, for external validation, observational studies are also needed. High quality information on a meaningful yet manageable range of variation in both Actors and External Enablers is rarely found in archival data. However, longitudinal data collected before and after a "natural experiment" can be used, as in Shane's (2004) work on the effects of the Bayh–Dole Act. Repeated, cross-context surveys like the Global Entrepreneurship Monitor (Amorós et al., 2013) can occasionally allow addressing—on a rather abstract level—the question of which Actors build more Opportunity Confidence and come up with (what kind of) New Venture Ideas in response to particular External Enablers? This is conceivable, e.g., when the population studied is subjected to major tax reform or significant currency devaluation between waves of data collection. Future survey studies may be able to follow cohorts of start-up attempts triggered by different External Enablers. Alternatively, the design can aim at capturing the differential influence of a given External Enabler across contexts, e.g., where a technology or regulation has differential impact across industries or geographical regions.

To sum up, using External Enablers as the Non-Actor component facilitates theorizing and testing of drivers of the identification and contents of New Venture Ideas. In addition, it can provide insights into the influence of external conditions at different stages of entrepreneurial processes.

8. Conclusion

Our aim is not to discredit prior work on "entrepreneurial opportunities" or to dissuade others from pursuing research in this area. On the contrary, we argue that the phenomena commonly discussed under the "entrepreneurial opportunities" label are of central importance, as are many of the ideas previously developed in that literature. We fully acknowledge that it is only thanks to the foundation laid by others that we could identify the inherent problems of the "entrepreneurial opportunity" construct. Building on that foundation we suggest alternatives that we hope can create avenues for entrepreneurship research to unleash previously under-utilized potential to make important and unique contributions to the broader fields of economic and organizational studies.

We cannot expect wholesale adoption of our views on the part the research community. However, it is reasonable to suggest that editors and reviewers insist on widely accepted criteria for good science and therefore consider our critique in evaluating manuscripts where "entrepreneurial opportunity" has a central role. Similarly, authors of review articles and meta-analyses may find our critique enables them to aggregate knowledge across more precise notions of "opportunity" rather than combining findings across phenomena that—despite a shared label—are exceedingly diverse.

As regards new studies we hope scholars from a broad set of backgrounds will find that our delineation of External Enablers, New Venture Ideas, and Opportunity Confidence provides useful tools that help them make leaps forward in developing knowledge about the phenomena commonly discussed under the elusive "opportunity" label. We cannot guarantee success in such endeavors. For example, it may turn out too challenging a task to distil a manageable set of operable New Venture Idea characteristics that can be meaningfully applied across different types of ventures and stages of the venture creation process. Alternatively, it may turn out to be impossible to find sufficiently generalizable effects of such characteristics or to reliably isolate their effects from those attributable to the Actor. Similarly, distinguishing Opportunity Confidence from Actor constructs like "entrepreneurial self-efficacy" is a challenge. However, all research is challenging and risky. We hold that the constructs suggested in this article reduce the risk and challenges involved in clinging to the "entrepreneurial opportunity" construct. Hence, at this juncture our Opportunity Confidence is high that the journey we have outlined is a journey worth taking.

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