

Questions from the Effectuation Conference

June 6 & 7, Bodo Norway

At the 2016 effectuation conference, participants submitted 14 open questions. These questions derived from conversations at the conference and span research and practice topics. In the effectual spirit, we shared the questions around with the effectuation community and have consolidated responses to these questions in this document, as well as “Two cents from Saras” on every one. We are quick to note that these responses are not definitive answers, but a part of a conversation and an invitation to continue it. We hope you find them useful.

1) Community Building and Collective Effectuation

Can we consider collective effectuation, and in particular in relation to community building and place-based entrepreneurship (ie entrepreneurship of place, local sustainability, sustenance)? Consider rural entrepreneurship where individual entrepreneurs and policy-makers interact to create thriving, sustainable places. The bird-in-hand becomes:

- Who are we/where are we?
- What do we know?
- Who can do what?
- Who knows what?

So the means are collective, which raises issues of collaboration, control and ownership. The ‘new venture’ becomes a matter of defining the potential of place and people in place. Consider two contexts:

- Policy-less environment where way of life is threatened and community must act together to sustain.
- Supported by policy environment – government must have programs or services. Policy can be used as an enabler (or not) to local, entrepreneurial initiative

Understanding that effectuation necessarily involves co-creation at what point might an idea of “collective effectuation” be differentiated from effectuation as usual?

It is going from a western, individualistic idea of entrepreneurship to a more collective/holistic view of mutual or community benefits?

Response (*with appreciation to Jeff York*)

Effectual processes absolutely can be linked to broader value creation, such as social and environmental entrepreneurship. For a more in depth treatment on these processes, see both Wry & York, 2015 and York, O’Neil, and Sarasvathy, 2016. In sum, because effectuation processes begin with means (Who am I? What do I know? Who do I know?), they are intrinsically linked to what the entrepreneur really does care about. For most entrepreneurs (and healthy people) this will include more than economic value. Of course, affordable loss

might be much higher when an entrepreneur affirms an aspirational identity through the venturing process. For example, an individual who views themselves as an environmentalist may be willing to lose much more to explore an opportunity that creates both environmental and economic value than a venture that only has the potential to make money. Further, the co-creation of ventures may be easier for social and environmental entrepreneurs, as the venture is by definition, more appealing to a wider variety of stakeholders. Finally, because many social and environmental ventures happen under conditions of market failure, prediction is somewhat useless; the opportunity must be created through new policy, business models, or technological innovations. Dacin, Dacin, & Tracey (2011) have specifically called for an effectual lens on social entrepreneurship, yet little has been done in this realm. This is another great area for applying effectuation to better understand specific processes of entrepreneurship.

Dacin, M. T., Dacin, P. A., & Tracey, P. (2011). Social entrepreneurship: A critique and future directions. *Organization science*, 22(5), 1203-1213.

Wry, T., & York, J. (2015). An identity based approach to social enterprise. *Academy of Management Review*, amr-2013.

York, J. G., O'Neil, I., & Sarasvathy, S. D. (2016). Exploring environmental entrepreneurship: identity coupling, venture goals, and stakeholder incentives. *Journal of Management Studies*, 53(5), 695-737.

Two cents from Saras

The issue of “collective” is one of who “we” or who the “entrepreneur” is rather than whether the entrepreneurship can be effectual or not. To qualify as “effectual” the primary consideration is whether the future is taken to be predictable (hence causal approaches become feasible) or fundamentally unpredictable (hence effectual approaches become necessary). So long as the emphasis is on the unpredictability of the future, it does not matter whether an individual, a group of individuals, an organization or a collective is the entity acting to co-create that future.

2) About Experience

Can expertise come from other experiences beyond start-up? Events to have an impact on behavior (effectual/causal)?

Response (*with appreciation to Nick Dew*)

It depends what kind of expertise one is talking about. The general approach of the expertise literature in psych is that expertise is extremely specific, and therefore entrepreneurial expertise will be built on specific experiences in entrepreneurship. Indeed, research on deliberate practice goes further, arguing that the development of expertise requires deep immersion in a specific kind of work or discipline (rather than just being present or “hanging around”), including deliberate and effortful practice at the specific skills that one needs perform at a superior level in that particular area (Baron & Henry, 2010; Dew et al., 2017).

Now, is there room in this view for the notion that other outside experiences might contribute to expertise in entrepreneurship? It is certainly tempting to think so. For instance, Lazaer's (2004) "Jack-of-all-trades" idea makes the point that individuals do better by investing in balanced skills. One can imagine there are some skills that may be associated with the skills required to be an expert entrepreneur, and one could map these skills based on (i) how close they are to the skills of expert entrepreneurs, (ii) to consistencies and inconsistencies in these overlaps, as well as to (iii) how often these associated experiences are relevant. For example, one could argue that there may be some general management skills and knowledge that may overlap with the entrepreneurial domain, or maybe some life skills (growing up in the "school of hard knocks", etc.). However, the wrinkle here is whether these overlapping skills are then the ones that general high performance entrepreneurship. The best test we know of (Astebro & Thompson, 2011) suggests the opposite: that varied work experience is associated with lower (not higher) household income.

In short, other skills certainly may be in play in the everyday accomplishments of entrepreneurs, but then we are observing general management skills rather than skills specific to expert entrepreneurship. To the extent those general management skills are relatively easy to acquire, we should not expect they will lead to high performance. So, back to square one. It's more likely that it's the hard to acquire, distinctively entrepreneurial skills that make expert entrepreneurs high performers. So we have to study how entrepreneurs acquire those specific skills.

Åstebro, T., & Thompson, P. (2011). Entrepreneurs, Jacks of all trades or Hobos? *Research Policy*, 40(5), 637-649.

Baron, R. A., & Henry, R. A. (2010). How entrepreneurs acquire the capacity to excel: Insights from research on expert performance. *Strategic Entrepreneurship Journal*, 4(1), 49-65.

Dew, N., Ramesh, A, Read, S. & Sarasvathy S.D., 2017 "Toward Deliberate Practice in the Development of Entrepreneurial Expertise: The Anatomy of the Effectual Ask." Forthcoming in Ericsson, K. A., Charness, N., Feltovich, P. J., & Hoffman, R. R. (Eds.) *The Cambridge Handbook of Expertise and Expert Performance*, 2nd Edition. Cambridge University Press.

Lazeur, E. P. (2004). Balanced skills and entrepreneurship. *The American Economic Review*, 94(2), 208-211.

Two cents from Saras

Expertise in any domain comes from the specific domain. So *entrepreneurial* expertise can only come from entrepreneurial experience. But other forms of expertise such as *industry* expertise (ex: expertise in consumer goods) or *functional area* expertise (ex: expertise in marketing) can come from experiences in these various specific domains.

3) Evolution of the Entrepreneurial Identity

As the firm (venture) evolves – from inventor to entrepreneur to manager – (how) do effectual process affect this evolution of identity? Can the application of effectual principles affect the formation of an entrepreneur’s identity?

Response (*with appreciation to Jeff York*)

Effectual processes are both impacted by, and may have impacts on identity. First, if we think about the idea of means (Who am I? What do I know? Who do I know?) this is very tightly linked to identity. After all, the way most of us answer “Who am I?” is by evaluating our identity. Identity theory posits that we create a “self” that is comprised of the multiple roles we hold (entrepreneur, mother, business person, activist, volunteer, etc.) Hence, we can begin to understand identity and effectuation by first utilizing identity theory as a lens to understand how the idea of beginning from means evolves into a venture. Second, social identity theory holds that our identity is comprised largely of membership in various groups (member of a startup, member of a family, member of an NGO, etc.) and the relationships we value within those groups. Hence, the idea of self-selected stakeholders might influence our identity. As various stakeholders seek to join the venture, the entrepreneurs’ relationships evolve, along with the cycle of expanding means and converging goals. From a social identity perspective, each new relationship we enter changes our identity, as we now have new ties to different people and groups. So, while we know almost nothing about the processes based on empirical evidence, it seems theoretically intuitive that effectual processes are both affected by, and have an effect on, identity. For a more in depth treatment on these processes, see both Wry & York, 2016 and York, O’Neil, and Sarasvathy, 2016.

Wry, T., & York, J. (2015). An identity based approach to social enterprise. *Academy of Management Review*, amr-2013.

York, J. G., O’Neil, I., & Sarasvathy, S. D. (2016). Exploring environmental entrepreneurship: identity coupling, venture goals, and stakeholder incentives. *Journal of Management Studies*, 53(5), 695-737.

Two cents from Saras

The entrepreneur’s identity can be as much an artifact co-created by the effectual process as the venture or product or new market. Note that as each stakeholder commitment in the effectual process transforms the goals and means of the venture, it can impact the identity of the entrepreneurs since that identity is part of their bird-in-hand means at any given point in time.

4) Pre-commitment as a Self-Imposed Constraint

What is the difference between pre-commitment and commitment? How does pre-commitment change the relationships with stakeholders?

Response (with appreciation to Nick Dew)

To answer this question one has to take a trip down memory lane, and look at the distinction between pre-commitments and commitments in Sarasvathy & Dew (2005) and Dew & Sarasvathy (2007). In that work the idea was that pre-commitments are commitments to principles the entrepreneur makes up-front before starting a venture (hence “pre”). These commitments shape how they will deal with various decision problems, such as partnering with stakeholders. So, one could say that the entrepreneur might pre-commit to the “bird-in-the-hand” principle in effectuation, which means that before (“pre”) they start proceeding with a new venture they already know they are going to let the actual deals made with stakeholders shape the venture, rather than going after theoretical birds (stakeholders) in the bush. This is how pre-commitment changes the relationships with stakeholders: it stacks the deck in favor of making certain kinds of deals (ones where imperfect stakeholders put skin in the game) and therefore against strategic partnering (where the entrepreneur runs around trying to hook the theoretically perfect stakeholder). In other words, the entrepreneur prefers to do what’s doable based on deals that stakeholders are actually willing to make.

The inspiration for pre-commitments came from Elster (2000), who uses the term to highlight how individuals sometimes might want to restrict their own freedom of choice because it works better in the long run, i.e. how they might decide up-front to eliminate some options or ways of making decisions because they already suspect that they may later get drawn into making some bad decisions if they try to optimize in the moment. The counter argument to this way of thinking is simply that commitments always close off some options while opening others, rendering the “pre” in pre-commitment irrelevant. In which case the point perhaps is just that some notion of meta-commitments may be useful, i.e. commitments to high-level principles that guide an entrepreneur’s decision-making. So, doctors pre-commit to doing no harm no matter how ill the patient is at the time; judges pre-commit to the presumption of innocence no matter what the balance of evidence is at the time, and entrepreneurs pre-commit to making every decision with affordable loss in mind, no matter how tempting it might be to chance ruin in the moment. And so on.

Sarasvathy, S. D. and N. Dew: 2005. New Market Creation Through Transformation. *Journal of Evolutionary Economics* 15 , 533–565.

Dew, N., & Sarasvathy, S. D. (2007). Innovations, stakeholders & entrepreneurship. *Journal of Business Ethics*, 74(3), 267-283.

Elster, J. (2000). Ulysses and the sirens: Studies in rationality and irrationality.

Two cents from Saras

A commitment is specific, current and entirely chooseable at the moment of choice. A pre-commitment is a commitment to a process or criteria of how to make choices under uncertainty. It is made prior to (often way in advance of) the choice. Its purpose is to make the choice itself predictable even when the consequences of the choice are unpredictable.

5) Time Constraints

Why is it that many constraints (such as resources) encourage the process to become more effectual, while time constraints encourage the process to become more causal?

Response (*with appreciation to Stuart Read*)

Nice question! Before I actually respond to this question, I want to add the connection between constraints and innovation (Keupp & Gassmann 2013). Scholars of effectuation appreciate that, within bounds, constraints on resources actually improve outcomes relating to innovation and creativity – but we are not the only ones to make this observation.

At any rate, my best hypothesis for the ‘constraint contradiction’ posed in this question identifies two dimensions on which the categories of constraints in the question might differ. These dimensions I refer to as source and order.

Source

Constraints that might include expertise, money, knowledge or resources (the first category in the question) are generally considered exogenous. Features of the environment which may be closer (I don’t know anything about making ice cream) or further (nobody is willing to give me ten million dollars to get into the ice cream business) from the individual. Regardless, these are constraints which are accepted as givens until the stakeholder acquisition process ensues. Constraints relating to time (the second category in the question), however, are endogenous. An entrepreneur may self-impose a constraint of time (perhaps based on affordable loss – I’m only willing to commit 6 months to exploring this path), or more likely jointly agrees to constraints of time through commitments with partners (if you let me use your processing plant, I will create 50 gallons of premium ice cream next week).

Order

Relatedly, these different categories of constraints emerge at different steps in the process (Sarasvathy & Dew 2005). Means, and their attendant constraints, initiate the process. Time constraints come with affordable loss (in the middle of the process) or with commitments (well into the process).

Taken together these differences between the two categories of constraints (means v time) may at least partially explain their seemingly contradictory effects. Means based constraints are something entrepreneurs apply creativity to in order to work with. Time based constraints are something entrepreneurs accept in exchange for partners. But with those partners come

commitments, commitments which leave less room for effectual creativity and call more on causal execution.

Keupp, M. M., & Gassmann, O. (2013). Resource constraints as triggers of radical innovation: Longitudinal evidence from the manufacturing sector. *Research Policy*, 42(8), 1457-1468.

Sarasvathy, S. D., & Dew, N. (2005). New market creation through transformation. *Journal of Evolutionary Economics*, 15(5), 533-565.

Two cents from Saras

I'm not sure that time constraints encourage the process to become more causal. If I have very little time, would it not make more sense for me to bring on others so the venture gets more time?

6) The Social Ask

How can we link effectuation to outcomes, not (just) business outcomes but also value creation in social and environmental areas?

Response (with appreciation to Stuart Read)

The easy answer to this question is that the distinction between business and social organizations is an arbitrary one. That every business is a social business and that many social problems can be addressed by entrepreneurial activity. This is the main thesis in the "Markets in Human Hope" Chapter in "the pink book (Sarasvathy 2008) and Chapter 23 of the "Effectual Entrepreneurship" (Read et al 2017) textbook (Entrepreneurship as a technology for social change).

That said, there are two interesting avenues that go beyond this. The first is with respect to dependent variables. Outcome measures which go beyond profitability, growth, ROI etc. There has already started to be some work in this direction. For example, Chu & Luke (2012) investigate microenterprise programs in Vietnam. They find "A deliberate strategy of involving both poor and non-poor households in MEPs emerges through effectuation, learning from past challenges. This approach represents a shift in focus away from the extremely poor but presents a potential pathway for effective and sustainable poverty alleviation." And in Brazil, the authors Sarathy, Andreassi, Tonelli & Eddleston (2015) consider the outcome variable of socio-emotional wealth in their investigation of family firms. So there is work which is starting, and certainly the potential for a far wider slate of social dependent variables.

The second is more general. Effectuation is a naturalistic set of decision-making heuristics which, though derived from expert entrepreneurs, suggests applications to other areas in and beyond business. The connection of effectuation, or effectuation-compatible heuristics to problems outside of venture creation is a fascinating one which has already seen early investigative effort. A recent working paper, for example examined the use of effectual heuristics in a community response to a deadly mudslide which swept away a large portion of a neighborhood. It is hard

for us to imagine the possibilities for where this direction could take us, and we are looking forward to creativity from the community.

Chu, V., & Luke, B. (2012). Mission drift or strategic shift? Group formation strategies within MEPS. *Journal of International Development*, 24(8), 1042-1045.

Read, S., Sarasvathy, S., Dew, N., & Wiltbank, R. (2017). *Effectual entrepreneurship*. Taylor & Francis.

Sarathy, R., Andreassi, T., Tonelli, M. J., & Eddleston, K. A. (2015). 5. Strategies and motives of family and non-family firms in Brazil: socio-emotional wealth and firm performance in an emerging market. *Firms within Families: Enterprising in Diverse Country Contexts*, 73.

Sarasvathy, S. D. (2009). *Effectuation: Elements of entrepreneurial expertise*. Edward Elgar Publishing.

Two cents from Saras

There are two clear implications for outcomes from effectuation. Effectual approaches are more likely to increase the probability of novelty and decrease the costs of failure. This can be argued to be as much true for non-financial as well as financial outcomes. Novel solutions to big social problems, for example, or lower environmental costs in case of building sustainable ventures. Interesting research issues here could consist in differences in the priorities of different stakeholders self-selecting into the effectual process. Not only reconciling those differences, but leveraging these differences to co-create new possibilities for both types of outcomes.

7) Effectual Leadership

How does leadership connect with effectuation? What about group dynamics and decisions where different people use different heuristics?

Response (with appreciation to Stuart Read)

Yes! Thank you for raising these topics. There is a whole stream of research waiting to happen here.

Generally speaking, the starting points for the first question have already been established. There are leaders who operate effectually (something Maine, Soh & Dos Santos (2015) indicate in their research regarding biotech CEOs and founders). And there are leaders who structure the organization to enable their employees to operate effectually (one example of this might include the Guidewire case). And there is a natural set of questions which derive from those two starting points. Antecedents, mechanisms and outcomes are all interesting in these situations.

The complicated question, and perhaps the more interesting question, will be the second. Intuitively, we all have personally witnessed situations where we have been part of a team where causal and effectual logics work simultaneously, but in different people. The interactions

and outcomes in those situations can be unpredictable because while teams work together, there is an argument that ultimately, individuals decide alone (Sugden 2005). Fortunately, there is a rich body of work on entrepreneurial teams to start with. This research might encourage us to start from a team diversity perspective, because though demographics have been shown to be not terribly important (Chowdhury 2005), diversity of cognitive approach may be. Furthermore, such research may help explain some of the conflict in teams. Specifically in the new venture context, venture capitalists (who might embody causality) have been observed to have conflict with their entrepreneurial (who might embody effectuation) peers (Higashide & Birley 2002). We can only speculate, but it seems likely this will be an interesting area.

Chowdhury, S. (2005). Demographic diversity for building an effective entrepreneurial team: is it important?. *Journal of Business Venturing*, 20(6), 727-746.

Higashide, H., & Birley, S. (2002). The consequences of conflict between the venture capitalist and the entrepreneurial team in the United Kingdom from the perspective of the venture capitalist. *Journal of Business Venturing*, 17(1), 59-81.

Maine, E., Soh, P. H., & Dos Santos, N. (2015). The role of entrepreneurial decision-making in opportunity creation and recognition. *Technovation*, 39, 53-72.

Sugden, R. (2005). The logic of team reasoning. In *Teamwork* (pp. 181-199). Palgrave Macmillan UK.

Two cents from Saras

I think there is a LOT of potential to connect effectuation (i.e. non-predictive control) with several varieties of leadership such as transformational leadership, servant leadership, leadership that is shared, collective, distributed etc. See citation below for a recent review of leadership theories. I think we can write a paper connecting effectuation to all the theories mentioned in this citation.

Avolio, Bruce J., Fred O. Walumbwa, and Todd J. Weber. "Leadership: Current theories, research, and future directions." *Annual review of psychology* 60 (2009): 421-449.

8) Theoretical Links

Publish more work where effectuation is connected with the more traditional areas such as psychology and the philosophy of science.

Response (with appreciation to Saras Sarasvathy)

For, this, please refer to Chapters 9 and 13 in "the pink book" (Sarasvathy 2009). Soft copy of these chapters is attached to the email distributing these responses.

Sarasvathy, S. D. (2009). *Effectuation: Elements of entrepreneurial expertise*. Edward Elgar Publishing.

9) Institutional Links

What is the link between effectual processes and the:

- Regulatory,
- Normative,
- Cognitive

...institutional environment in which the venture situates itself?

Response (with appreciation to Nick Dew)

Answering this question involves taking a drive in the sociology literature on structure and agency, which is huge and encompasses a range of studies specific to entrepreneurship, in particular the notions of institutional entrepreneurship (Garud, Jain & Kumaraswamy, 2002) and social embeddedness (e.g. Uzzi, 1997). One useful guide into these debates is a meta analytic review paper by Heugens & Lander (2009 in AMJ). That paper is about organizations in general but the theories highlighted in principle apply to organizations big and small, including nascent entrepreneurial ones, which scholars frequently argue are more open to institutional pressures than established orgs (for example, being desperately in need of legitimacy is one of the classic arguments). As Heugens & Lander (2009) summarize, a basic question debated in this literature is the extent to which typical accounts of action (one of which might be effectuation) place less emphasis than they ought to on the social forces that shape action (regulatory, normative and cognitive institutions) and therefore these accounts present an “undersocialized” picture of entrepreneurship.

In other words, the links between effectuation and structure might be being underplayed. Part of this argument is about effectual processes being constrained by institutional structures (i.e. there’s a lot you can’t do; the scope for choosing effects is constrained by social structure). But another part of it speaks to the ways in which social structures are enablers of action, and therefore suggests opportunities for effectuation scholars to better understand how social structure provides a platform for effectual action (i.e. how the choice of effects shaped by social structure in the first place) (Washington & Ventresca, 2004). In general, the literature has seen much more emphasis on the constraining aspects of structure than on the enabling aspects (Heugens & Lander, 2009).

The upshot of the Heugens & Lander (2009) study is that - however you might argue the relationship between effectuation and social structures (constraining and enabling) - the effect sizes of the social forces on action appear to be pretty small. Correlations are in the 0.07-0.09 range (see p.72), which leads Heugens & Lander (2009) to summarize that “the influence of social structure on organizational conduct is weak at best.” What’s more, it’s only the mimetic effects that for sure cut across all the study results. Furthermore, there is a bias in the literature in that the top-tier outlets (ASQ, SMJ, AMJ) report studies with stronger effect sizes than the overall pool of studies (with the exception of AJS). Assuming articles in the top journals are more read than the overall pool of articles (certainly they get cited more), this creates the impression

that institutional forces have a somewhat stronger role in shaping action (some aspect of which involves effectuating) than is the reality. In short, caution required!

Heugens, P. P., & Lander, M. W. (2009). Structure! Agency! (and other quarrels): A meta-analysis of institutional theories of organization. *Academy of Management Journal*, 52(1), 61-85.

Garud, R., Jain, S., & Kumaraswamy, A. (2002). Institutional entrepreneurship in the sponsorship of common technological standards: The case of Sun Microsystems and Java. *Academy of management journal*, 45(1), 196-214.

Washington, M., & Ventresca, M. J. (2004). How organizations change: The role of institutional support mechanisms in the incorporation of higher education visibility strategies, 1874–1995. *Organization science*, 15(1), 82-97.

Uzzi, B. (1997). Social structure and competition in interfirm networks: The paradox of embeddedness. *Administrative science quarterly*, 35-67.

Two cents from Saras

Effectuators can take institutional structures as given and outside their control or as transformable through effectual action. In other words, effectuation prompts you to more consciously choose which institutions you will take as mutable and which not. Simply by challenging the immutability of institutions, effectuation already cues in institutional entrepreneurship.

10) Power

How does power influence the effectual process (from the practice group at the conference, by way of Michael and Rene)

Response (with appreciation to Rene Mauer)

The effectual process starts with means-based action under the rule of affordable loss, leverages contingencies and seeks self-selected partner commitments. These commitments increase the available means and allow partners to bring in their ideas for further development. The process starts over with action based on the now growing set of means. While the entrepreneur clearly is in power with regard to means-based action and affordable loss considerations, contingencies and, moreover, partner commitment may substantially shift the perceived and actual distribution of power in a relationship between different actors. The initial decision to take on the partner is taken by the entrepreneur from quite a power position. However, we can imagine cases, in which entrepreneurs may quickly be dominated by committed partners – for example because they have substantial resources. On Shark Tank we can see how established sharks invest in unexperienced but well-deserved entrepreneurs, take the lead, and make the business grow successfully. The entrepreneur may not be in charge to the same extent as before, but this may be to her advantage. Of course, we can also imagine a more unpleasant case, in which a

partner “overpowers” the entrepreneur. At this point, we also need to acknowledge the alternative of not collecting stakeholder commitments at all. For an uncertain venture project, this could easily mean that the project does not go anywhere. In essence, these reflections put a lot of emphasis on the stakeholder negotiation process. While the context is still one of uncertainty, it seems key to really establish mutual commitments for co-creation. But of course: there is no guarantee for anything in entrepreneurship.

Two cents from Saras

Power can also be cocreated, just as it can also be challenged through a growing network of self-selected stakeholders. In this connection, I hark back to Gandhi in South Africa when he was thrown out of a first class compartment in the train even though he had a valid first class ticket. Hundreds of other people had experienced the same “boot” of power on their backs. Yet Gandhi decided to do something that was within his control to challenge the existing power structure. He decided to burn his ID card in a public space. He invited others to join him and also invited a couple of newspaper reporters. Effectuation continuously highlights what is actually within one’s control and what can be *done* with that, *even if* it is not clear up front whether doing that will make any substantial difference to existing power structures. By on the one hand, disconnecting action from predicted or predictable consequences, and on the other hand by urging action based on what is within one’s control (however small and insignificant that action might appear to be), effectuation makes reshaping power balances possible.

11) Relational Capital

How does relational capital work as a catalyzer of the effectual process? (from the practice group at the conference, by way of Michael and Rene)

Response (with appreciation to Anusha Ramesh)

Under uncertainty, when goals are unspecified, preferences are unknown, and the future is unpredictable, entrepreneurs have to constantly work with other stakeholders such as customers, suppliers, investors, etc in order to build ventures. And since the effectual cycle unfolds based on actions and interactions with other stakeholders, the network of stakeholders is built on existing and new relationships. At any point in time, therefore, relational capital is a part of the means of the individual(s). Having a strong set of existing relationships (or relational capital), then, gives the entrepreneur more choices in terms of who to ask, and how, when starting the process of venture creation. Hence, relational capital allows the individual more choices in terms of who to approach, and potentially work with while starting out.

However, the effectual process unfolds through relationships and commitments with other people. This allows the entrepreneur to tap into the existing relationships of other individuals who become part of the self-selected stakeholder network and the opportunities to build relational capital multiplies very quickly when the entrepreneur uses effectual approaches to venture creation. Therefore, effectuation can also serve as a catalyst that develops relationship capital.

Finally, the relationships built under these conditions of uncertainty, goal ambiguity, and unordered preferences have an interesting property: they allow individuals to shape the environment, preferences, and goals rather than work towards fixed ends. Hence, relationships can be built by transforming goals, rather than working towards a pre-specified goal and stakeholders can self-select into the network in ways that they find meaningful rather than having to “buy into” a vision of an opportunity.

Two cents from Saras

Relational capital is all important and pervasive in the effectual process. But the most important thing to consider here is not simply relational capital *as is*, but the fact that relational capital itself can be co-created, nurtured, shaped and increased. Relational capital is part of the bird-in-hand, can play the role of catalyzer in the crazy quilt principle, but can also be the outcome or product of the iterative effectual process as a whole.

12) Asking Entrepreneurs

How to ask for effectuation principles in interviews with entrepreneurs? (from the practice group at the conference, by way of Michael and Rene)

Response (*with appreciation to Stuart Read*)

So...you want to be able to hire/identify effectuators. Three ideas come to mind. The first is Guidewire. Founded in 2000, the company employs well over 1,000 people now. Account for attrition and early retirement, and they have hired a lot of people over the past 17 years. It is their objective to find people who will operate well in the agile/SCRUM environment of the company. And there are two unique aspects to how they interview. The first is that they don't interview. If you apply for a job at Guidewire, you may be invited to come work on a team for a day. You work alongside existing employees, solve real problems and do real work. And the second is what they look for. Beyond the normal things you would expect (competence, smarts), they look for people they describe as cheerful and unflappable.

If you find that approach too indirect, the next two suggestions draw more directly from the effectuation research. Because effectuation is dependent on (an uncertain) context, it may make sense to build an interview around a situation. The situation may involve a new product and questions from the Brettel et al (2012) scale. Or...even more ambitious...present a candidate with the venturing experiment (full text of the experiment is available both in Sarasvathy (2009) and on the www.effectuation.org website). Having coded responses to that experiment, I can say it is relatively straightforward to pick out effectual and causal logics as people work their way through the problems.

Having said all that – there is a little story I would like to share. Years ago, while I was gathering data from corporate experts (individuals with expertise in large organizations) using the venturing experiment, I encountered a participant who consistently selected effectual logic in his responses. His answers looked just like the answers from the expert entrepreneurs (and

completely different from virtually all his expert corporate peers). This participant worked at a large, old and conservative bank. After the experiment was done, he and I debriefed and talked for a while. He told me that though he had worked for the bank for more than 20 years, he had never felt at home there. He always had the idea to become an entrepreneur, but hadn't acted on it. He asked me whether it was something he should do. Should I tell him he is in the wrong place and has been for 20 years? Be careful – you may be faced with “inside” information about someone's personal situation and future.

Brettel, M., Mauer, R., Engelen, A., & Küpper, D. (2012). Corporate effectuation: Entrepreneurial action and its impact on R&D project performance. *Journal of Business Venturing*, 27(2), 167-184.

Sarasvathy, S. D. (2009). *Effectuation: Elements of entrepreneurial expertise*. Edward Elgar Publishing.

Two cents from Saras

Definitely NOT by actually asking for them ☺ Let the entrepreneurs and their stakeholders describe their experiences in their own words, tell their stories in their own way. As they do that, ask them questions in a normal, natural, conversational way to get them to go into more detail. For example, if they say, I was looking for a way to organize my closet and realized I could use my camera to keep a record of my clothing labels and so built an app that connected clothing labels with websites for the manufacturers and distributors of those clothes, jump in and ask, “How exactly did you go from taking pictures in your closets to thinking of the app? Why an app? Are you an app developer? How exactly did you build the app? How did you go about finding out ways to connect labels with particular websites? Do you have experience in the clothing industry?” etc. As you can see, you can easily code the “I was looking for a way to organize my closet” as part of the bird-in-hand principle, but without the info on whether the entrepreneur already knew how to code an app or whether he or she was from the clothing industry, you would not be able to classify what was within their bird-in-hand or affordable loss or what was enabled through the crazy quilt process. As they answer your questions, you can ask more questions about people they brought on board. How exactly did they meet these people, what kinds of conversations did they have with them, what were the “deals” through which their relationships with these early stakeholders structured and so on and so forth.

13) Competition

How is competition within teams related to use of effectuation and/or causation? (from the practice group at the conference, by way of Michael and Rene)

Response (with appreciation to Bill Forster)

I'm not sure what exactly is meant by competition in teams, but I'm assuming that the question deals with conflict in teams. If that's the case, the answer may lie in how teams would likely differ in composition and diversity when using effectual vs. causal logics. This is because

teammates are brought on for different reasons depending which logic is used, and effectual teams would likely have lower levels of separation diversity and hence lower levels of conflict.

A causal entrepreneur would likely select team members based on how their skills contribute to achieving the pre-selected goal or end point. When you know exactly where you are heading, the rational thing to do is to bring people on board who would help you get there most effectively, and many times that entails selecting teammates based on instrumental considerations. "What skill sets or resources do we need to achieve our goals?" would be the appropriate question to ask when adding members to the team. For example, an engineer may seek to partner with a business person or an entrepreneur lacking the resources required to scale a venture may want to team with someone who has money and is willing to invest. Although the causal entrepreneurs might consider other criteria such as personality or passions, those considerations would likely be secondary to more instrumental characteristics. In contrast, the effectual entrepreneur, in the process of interacting with people she knows to co-create her venture, would seek to join forces with self-selected stakeholders - some of whom might end up on the new venture team. Although instrumental concerns of how the person could benefit the venture would be important, the effectual entrepreneur would likely create a team of people who also shared many of the same goals, passions, and outlooks on the venture, and this shared foundation would likely minimize types of diversity that create conflict.

When thinking about diversity in a team, it is important to think about the distinction between diversity in type (diversity in variety) and diversity in amount (separation diversity). While diversity in type (the engineer and the business person for example) typically leads to greater creativity, innovation, and better decision-making, diversity in amount (a person highly passionate about the venture vs. one of lower passion) results in increased conflict and distrust (Harrison and Klein AMR 2007). For entrepreneurship specifically, diversity in entrepreneurial passion intensity (not types) in a team is what can drive discord (Forster, Cardon, & Post, AOM 2012). While team diversity in variety may predict team innovation, it is diversity in the amounts of key variables that predict conflict. Because an effectual team would likely have less diversity in the amounts of key personal characteristics (of entrepreneurial passion, commitment, etc.), I would predict effectual teams would also have less conflict between teammates. Lower levels of diversity in the levels of entrepreneurial passion in a team could also be beneficial in developing team level entrepreneurial passion which is helpful for long term team functioning (see Cardon, Post, & Forster, 2016).

Cardon, M., Post, C., & Forster, W. (2016). Team entrepreneurial passion (TEP): Its emergence and influence in new venture teams. *Academy of Management Review*, amr-2014.

Forster, W.R., Post, C.A., & Cardon, M. 2012. Passion Diversity in Entrepreneurial Teams. *Academy of Management Annual Meeting*, Boston, MA.

Harrison, D. A., & Klein, K. J. (2007). What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of management review*, 32(4), 1199-1228.

Two cents from Saras

Particular entrepreneurs and their teams may have particular preferences for and against competition within teams. These preferences can be seen as part of their “bird-in-hand” and can be used to kickstart the effectual process. For example, if a particular entrepreneur believed competition was a good thing, they would build in practices and mechanisms of competition in their teams which would then encourage certain kinds of stakeholders to self-select into their venture and discourage others. In this way, the effectual process may create a path-dependency that shapes the culture of the organization as it comes into being. All the same, it could also happen that a later stakeholder could negotiate an alternative kind of team into the venture. To the extent that such a stakeholder convinces the existing venture to change, the venture could develop along other trajectories as well. This is why, I always say that effectuation offers sufficient even if unnecessary conditions for successful outcomes. You can imagine effectual process leading to highly competitive internal cultures, and also vice versa and an infinite variety of combinations of the two. It all depends on who self-selects into the process and what they end up negotiating in terms of re-shaping/transforming the developing venture.

14) Tool Links

How does effectuation relate to other models or schemas or tools such as ‘agile’, SCRUM, appreciative enquiry, design thinking and lean startup? (from the practice group at the conference, by way of Michael and Rene)

Response (*with appreciation to Stuart Read*)

This question has been on my mind and one output is manifest in the second edition of the Effectual Entrepreneurship textbook. In it, you will find new “research roots” topics, two of which directly address ideas in this question; design thinking and lean startup (I’ve pasted those “research roots” texts in at the end of this response). Agile and SCRUM are something we have talked about for a while in the context of the Guidewire case, as approaches to effectual organizing. And though appreciative enquiry is the one I know least about, one common thread to all these ideas is their deeply practical nature. Each of these ideas has risen to popularity through use, not through academic research. As such, it is not surprising to find links between these ideas and effectuation. Like these ideas, effectuation is also founded on the practices of (expert) entrepreneurs, so connections are natural and expected. One of the difficulties in making those connections is that none of these practical ideas have developed conceptual roots. Without such foundations, it is hard to establish the clear connections between each and effectuation. In practice, people are already figuring out, for example, that lean is related to the effectual idea of “affordable loss”. But that lean, taken too far, starves the process of the slack that enables inputs to the effectual process. These are fascinating topics for practical work. And given someone is willing to make the investment in researching and publishing the conceptual foundations of these ideas in a way academic researchers can appreciate, fascinating topics for future academic research as well.

Design thinking

Perhaps formally originating in the Bauhaus Movement (1919), there is an expectation that design requires a specific way of thinking. That perspective has generated a great deal of related academic work (Simon, 1969), the creation of a global industrial design firm named IDEO, and the establishment of an entire school at Stanford University that teaches “design thinking” (it is called the d.school). There is good overlap with effectuation and design thinking, particularly as it relates to the topic of this chapter (this box is in Chapter 11 of the new textbook: Transforming means into something valuable). Current research is beginning to explore those relationships, looking at very specific theories of design (Agogué et al., 2015), and we expect to see more work in the future that brings these ideas together.

The lean startup

Few popular books on entrepreneurship have proven to be as well liked as Eric Ries’s Lean Startup. Published in the wake of the global financial crisis of 2009, The Lean Startup was very much the right book, with the right message at the right time.

Central to the book’s message is the notion of “lean” which borrows from the lean manufacturing philosophy pioneered by Japanese auto manufacturers such as Toyota. To make a production process “lean” means to eliminate all the waste in it. Leaning a startup means eliminating the need for elaborate business plans, fancy product development and large amounts of outside funding. Instead, Ries urges founders to focus on just the necessary things to get a new venture going. Therefore, in place of developing the perfect instantiation of a product or service, just develop the “minimal viable product” (MVP) version. In place of doing elaborate market research, validate the MVP by getting direct customer feedback on it. In place of investing heavily in a particular direction, stay flexible and “pivot” when necessary.

Lean Startup may not be based on a careful program of published research in the way that effectuation is, but the popularity of the terms “lean,” “pivot,” and “MVP” suggests that Eric Ries has written a book that many entrepreneurs find exceedingly useful (Ries, 2011).

Agogué, Marine, Mats Lundqvist & Karen Williams Middleton (2015) Mindful deviation through combining causation and effectuation: a design theory-based study of technology entrepreneurship. Creativity and Innovation Management, forthcoming.

Droste, M. (2002). Bauhaus, 1919-1933. Taschen.

Ries, Eric (2011) The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses. Crown business books.

Simon, H. (1969). The sciences of the artificial. Cambridge, MA.

Two cents from Saras

There are two extremely important and unique features that effectuation adds to other toolboxes. First, the idea of NOT predicting the future and second, the idea of stakeholders who SELF-SELECT into the process. These can be mixed and matched with other tools, but none of these others explicitly hone in and build on these two unique ideas.