

## Uncertainty under Entrepreneurship

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Entrepreneurship represents a diverse set of economic activities. In our quest for a theory of entrepreneurship, we strive to identify a common denominator to these activities. There is consensus that this denominator is the bearing of uncertainty (Venkataraman, 1997), as originally discussed by Frank Knight (1921). Indeed, Knightian uncertainty is considered a defining feature of the context of entrepreneurial action (Foss and Klein, 2012; Sarasvathy, 2001).

But what does bearing uncertainty mean? The dictionary definition of ‘bear’ is to endure; endurance pertains to a situation or experience and it refers to how a person relates to it. It is therefore a subjective experience. In order to get a closer sense of endurance, let’s consider the following hypothetical situation. We have an uncertain payoff and anyone willing to receive it should make an upfront sacrifice, at the very least in the form of an effort to attain the payoff. The laws that determine whether and how much payoff is received are not known to anyone, even to me as the author of this hypothetical scenario. Nevertheless, people can make their own inferences on the basis of their observation and interpretation of what is going on in deciding whether to give the challenge a try.

Clearly, we have a situation of fundamental or Knightian uncertainty. Therefore, anyone who takes the challenge and makes the sacrifice in anticipation of the payoff would, in essence, be acting entrepreneurially. But upon closer look, we can distinguish three types of people among this group of challenge-takers in respect to how they perceive the situation. First, there are those who study the payoff in great depth and conclude that it is indeed subject to fundamental uncertainty; i.e. they will never have the necessary knowledge. Second, there are those who see patterns and control levers in the payoff and thus act in full confidence (or elevated hope) that they can attain the payoff if they put sufficient effort. In reality, unbeknownst to them, they are operating under a false framework. Third, there are those who are completely ignorant of the laws behind the payoffs and simply go for the challenge. This can be action on impulse (e.g. Wiklund, Patzelt, and Dimov, 2016) or perhaps wilful or non-wilful ignorance, lack of curiosity.

It is interesting to consider that, while all three types appear to act entrepreneurially, given an external, objective assessment of the situation in which they have been placed, not all of them actually *bear* uncertainty. Indeed, only the first type can be deemed to be doing so as they have full appreciation of that uncertainty. In the other two types, there is no subjective experience of the uncertainty, either because it is not considered at all or because it has been replaced by a false sense of certainty.

The three types of action represent two extremes of a continuum and an intermediary position. At one end of the continuum is complete ignorance of the effort-outcome relationship; all that matters is that the potential payoff is valuable. At the other end of the continuum is the full consideration of the effort-outcome relationship, which rightly concludes that it is fundamentally uncertain. In between lies a consideration of the effort-

outcome relationship that balances the frivolity of ignorance and the dejection of rationality. Curiously, there is another intermediary position, namely of a certain situation which one perceived wrongly to be uncertain. In that case, one would in fact be bearing uncertainty, even if that uncertainty is not really there.

The question then arises about the interplay between the objective and subjective assessment of a situation. On what basis can we conclude that a situation is indeed one of fundamental uncertainty? For the ease of example above, this was considered a given, based on the simplistic way of defining it, but in reality such exogenous definition is not available to an actor. We have to reach this conclusion ourselves. But how do we actually do that?

Objective assessment calls for rigour and evidence. In the logic of scientific inquiry, in the search for patterns, there is a null hypothesis that presumes lack of any patterns or relationships. This hypothesis then needs to be rejected on the basis of evidence. It represents the default position of the scientist, scepticism. This evidence is always tentative, subject to norms of statistical inference and aggregation across studies. It is notable, however, that lack of evidence for a relationship does not mean evidence for a lack of relationship. In this sense, the null hypothesis can never be proven (e.g. Cook and Campbell, 1979); it is an assumption by default that serves a logical purpose, just like the method of assuming the opposite of what has to be proven. It is a residual category, after all attempts to find a relationship have been exhausted. There is no theoretical end to how much this is tried, but in practice it ends when scientists stop trying.

In regard to subjective assessment, entrepreneurs do not operate in the realm of scientific inquiry. There is no reason that they would adopt a sceptical position by default as their interest

lies in finding practical value rather than some absolute understanding for its own sake. Such pragmatic inquiry looks to transform an indeterminate situation into a determinate one (Dewey, 1938/1991). Therefore, they also operate with working hypotheses but these are assessed by whether they work, i.e. bring something beneficial rather than by whether they constitute a true representation of the situation (Romme, 2003). In this sense, to accept the situation as fundamentally uncertain is tantamount to having given up, because every try brings with it a working hypothesis, of making the situation determinate.

This line of thought leads to two conclusions. First, objective assessment of a situation as fundamentally uncertain is a matter of scientific interest. Thus, only a scientist would be interested in using and applying this label, based on his or her position as a detached external observer. Second, in terms of subjective assessment, fundamental uncertainty does not really exist since in any action it is supplanted by the working hypothesis that is being tried out.

These conclusions suggest, further, that the first type of people, i.e. those who truly bear the uncertainty, do not really exist. This is because, to retain their perception of fundamental uncertainty, they would not be acting at all; they remain detached observers. Every action either brings with itself a working hypothesis that provides a shrine of certainty while the action lasts, or is undertaken, under complete ignorance, for the sake of finding out what happens, in which case uncertainty is irrelevant.

It would seem, therefore, that our current conception of entrepreneurship as the bearing of uncertainty serves just an academic purpose as a topic for conversations that are detached from the reality of the acting entrepreneur. In other words, it belongs to the Ivory Tower. In the rest of this essay, I explore the implications of a conception of entrepreneurship that

leaves the Ivory Tower behind and attempts to step into the ring of action, while also maintaining a certain level of abstraction.

### **The Subjective Assessment of a Situation**

Let's consider for a moment the subjective assessment of a situation from the point of view of the entrepreneur's knowledge of it as well as the potential knowledge he or she could gain from others. This captures both the incomplete and asymmetric nature of knowledge. I use a simplistic, self-explanatory framework, popularised by Donald Rumsfeld in 2002, but with recorded prior use in the engineering industry and related entry in the Oxford English Dictionary (unk-unks). We can divide the knowledge into (1) known knowns, (2) unknown knowns, (3) known unknowns, and (4) unknown unknowns<sup>1</sup>. (1) informs what the entrepreneur does, but the rest are things that he or she has to live with. In this sense, they could contribute to the bearing uncertainty, but do so in different ways.

Unknown knowns (2) are perhaps completely irrelevant from the point of view of the actor. They pertain to the knowledge of others that could be potentially useful to the entrepreneur. But accessing that knowledge depends on the entrepreneur making contact with these people; when this happens the particular knowledge exchanged converts into (1) or (3). Since there are always people who know something relevant, but perhaps whom the entrepreneur would never meet (indeed, they cannot meet everyone), it would be reasonable to assume that we have reached a situation where (2) cannot be reduced any further. In that situation, (2) becomes irrelevant.

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<sup>1</sup> There is also parallel here with Pascal's distinction of four kinds of persons: zeal without knowledge; knowledge without zeal; neither knowledge nor zeal; both zeal and knowledge (Pascal, Pensees: 867).

Unknown unknowns (4) represents an external category. By definition, they cannot be known by anyone – this is the essence of incomplete knowledge and the basis of fundamental uncertainty. To appreciate these, one has to look at the situation from outside of it, as well as outside of time, in order to note the gaps. To those inside the situation unknown unknowns are outside its realm. As such, they are irrelevant for entrepreneurial action, because there is nothing that can be done about them; reasoning about them is both arbitrary and speculative.

But to the extent that we know that some hitherto unknown things will happen and that they can affect us, bearing uncertainty in this case is about being at the mercy of time. But is there any activity that is not at the mercy of time? For instance, a marriage is at the mercy of time in the sense that people inevitably change and so does their relationship, sometimes for the better, sometimes for the worse. What matters is the expectation, indeed the reliance, that what we have in the present needs to be retained in the future. There is thus a sense in which the future can take away from what we have. This reflects the second law of thermodynamics, the entropy principle, which states that everything tends towards disorder in the absence of a force that aims to preserve the order. This same principle is reflected in finance in the notions of ‘time value of money’ and in the pricing of options (longer term makes them more valuable because a wider range of things can happen).

Known unknowns (3) represent perhaps the most interesting category. Similar to (2), some of this category can be converted into known knowns (1) as part of the actions that an entrepreneur undertakes. But there will always be elements of (3) that are not in play, i.e. they are not subject to immediate conversion. These are the ones that the entrepreneur has to live with in the sense that he or she is aware of them as currently indeterminate; they may

turn out to hold positive or negative consequences. Here, again, the entrepreneur is at the mercy of time.

In order to distinguish further between (3) and (4), let's consider the following example. We are moving along a path through a forest and reach a steep corner around a big rock. We do not know what lies around the corner. In one scenario, we know that there are tigers in this forest. In this sense, the question arises whether there is a tiger around this particular corner. It becomes a known unknown.

In another scenario, we have no idea (and nor does anyone else) what creatures, if any, there are in the forest. In this sense, the question of what lies around the corner is an unknown unknown. We can of course imagine that there might be a tiger behind the corner. The only difference in the first situation is that our thinking has been channelled towards a tiger on the basis of prior knowledge and the idea of a tiger is less arbitrary or speculative. With an unknown unknown, our thinking about the tiger is of our making; we inflict this upon ourselves. We could easily be thinking about something more pleasant such as a rabbit or a tortoise.

Regardless of what prompts us to think about a possible creature behind the corner – whether our prior knowledge or our imagination – the corner matters only in terms of the consequences it can inflict upon us. These can be bad or non-bad (which can comprise both neutral and good). Any hesitation to turn the corner is related to the possibility of bad consequences. If we are assured that nothing bad will happen, we will not be conscious of turning the corner. The notion of bad relates to the possibility of loss as the essence of risk (March and Shapira, 1987).

Viewed from this perspective of approaching the corner, (3) and (4) effectively merge into one single notion of not knowing what is behind the corner. This is a one-time event, to which probabilities do not really apply. This is because they apply to ensembles of events – either turning the corner many times in identical situations or many people turning the identical corners at the same time.

We can therefore reduce the notion of being at the mercy of time to the notion of turning a corner (or opening a door) in the sense that our journey over time can be seen as a series of corners to be turned. We can now zoom onto the subjective experience of turning the corner with the sense that this can be bad or non-bad.

### **The One-Time Experience of Turning a Corner**

In the classic Schrodinger's Cat thought experiment – devised to probe the interpretation of the superposition of quantum states –there is a cat in a box with a radioactive material, a Geiger counter on which a hammer is suspended, and a glass container with cyanide positioned under the suspended hammer. It is known that at some point the radioactive material will decay, which will be detected by the Geiger counter, which will lower the hammer, which will break the container and release the cyanide, which will kill the cat. But, without opening the box, we cannot know whether this has happened. Until then, the cat is deemed both alive and dead.

Our turning the corner is tantamount to opening the box. Until we do, both the bad and non-bad scenarios are real and we have to entertain both of them. This is consistent with the

notion that there are no future facts, i.e. every proposition about the future has fractional truth about it (Brumbaugh, 1966). Thus both the bad and non-bad scenarios are possibly true. The only way to remove this duality is ... to turn the corner.

The more we think about what lies behind the corner, the more agonizing the experience becomes and the more the uncertainty bears down on us; we have to endure it. But at the same time this may slow us down. And as we slow down and approach the corner, our heartbeat speeds up (but perhaps this is just me). And the faster our heart beats, the more we want to think about the corner. Until we are poised at the edge of a precipice. There is nowhere further to go without appearing behind the corner and becoming at the mercy of whatever lies there in waiting. The feeling is not dissimilar to standing at the end of a high board, about to jump into a pool of cold water, many meters below. We have to push off, let go ... and there is no coming back to the moment before. We cross a point of discontinuity.

It appears that the generator of the feeling of uncertainty in crossing this point is our thinking fuelled by emotion, our desire to conjure up the definite image of what is behind the corner. Looking at the situation with a cool-headed rationality, we know that we cannot know. But this is overpowered by wanting to know before we can know.

In the next section, I will attempt to get closer to this feeling in order to understand what generates it. Because the point of discontinuity is bridged by time, however brief that moment might be, there is a sense then that it is the passing of time that brings a resolution of the uncertainty. We can therefore consider our being in that time, our endurance of it. To understand endurance, I will use Henry Bergson's masterful examination of time as pure

duration in his doctoral thesis, *Time and Free Will: An Essay on the Immediate Data of Consciousness*.

### **Henry Bergson's *Time and Free Will***

What is time as defined within our own experience? Henry Bergson's work focuses on immediate experience, of being in the flux of things. We can think of the passing of time – for example of one minute – as a series of sixty seconds (or even smaller units), and we can relate to each of these seconds our own state of consciousness, i.e. sixty moments. Seen in this way, time is a multiplicity of moments and we understand its duration by counting the moments.

For Bergson, counting entails dividing something into identical parts and then extending these parts in space, whereby we can lay them side by side. The units are considered identical, homogeneous and can thus be represented collectively by their quantity. This is essentially the meaning of 60 seconds, a collection of 60 identical moments and we can see these extended on a line. In the counting of moments, there is no succession; all the states are held simultaneously and are extended or charted in space in order to differentiate them, and thereby count them. To do this, we effectively stand outside of the experience itself. Bergson calls this 'externality without succession'.

The concept of space is essential for carrying out the extension and counting: "Space is what enables us to distinguish a number of identical and simultaneous sensations from one another; it is thus a principle of differentiation other than that of qualitative differentiation, and

consequently it is reality with no quality” (The Multiplicity of Conscious States. The Idea of Duration, paragraph 13).

Therefore, when we consider time in terms of counting the multiplicity of moments, there is an implicit conception of time that we apply: “When we speak of time, we generally think of a homogeneous medium in which our conscious states are ranged alongside one another as in space, so as to form a discrete multiplicity” (The Multiplicity of Conscious States. The Idea of Duration, paragraph 10). This, in turn, leads to the conclusion that, so conceived time is essentially space: “It is to be presumed that time, understood in the sense of a medium in which we make distinctions and count, is nothing but space” (The Multiplicity of Conscious States. The Idea of Duration, paragraph 10). When time is projected into space, duration becomes expressed as extensity. The attempt to measure replaces duration with space.

But, Bergson argues, the moments whose multiplicity constitutes time are immediate conscious experiences of a qualitative nature. These are psychic states whose causes are within us. Pure quality cannot be counted or even compared. At the most, we can talk about the intensity of psychic states – such as the intensity of feeling or of effort – but by admitting some degree of quantification, intensity implicitly presupposes some form of extension in space: “Representative sensation, looked at in itself, is pure quality; but, seen through the medium of extensity, this quality becomes in a certain sense quantity, and is called intensity” (The Multiplicity of Conscious States. The Idea of Duration, paragraph 10).

There are thus two kinds of multiplicity: (1) of material objects that can be counted and thus represented by a number; and (2) of states of consciousness, which cannot be counted without symbolical representation that requires the medium of space. These reflect two different

kinds of reality: one heterogeneous, of sensible qualities, and the other homogeneous – space. Space enables us to count and abstract.

The immediate experience of time is one that preserves the pure quality of psychic states. Bergson refers to this as “pure duration”: “Pure duration is the form which the succession of our conscious states assumes when our ego lets itself live, when it refrains from separating its present state from its former states” (The Multiplicity of Conscious States. The Idea of Duration, paragraph 14). “Pure duration might well be nothing but a succession of qualitative changes, which melt into and permeate one another, without precise outlines, without any tendency to externalize themselves in relation to one another, without any affiliation with number: it would be pure heterogeneity” (The Multiplicity of Conscious States. The Idea of Duration, paragraph 15).

In pure duration, past and present are part of an organic whole, like the notes of a tune. Each represents the whole and cannot be isolated and differentiated from the rest. The multiplicity of states is holistic, the states form a succession, inter-penetrating each other, whereby no single state is singled out. Bergson calls this ‘succession without externality’. We stay in the moment because to single out and differentiate successive states requires stepping out of it.

To appreciate the difference between ‘externality without succession’ and ‘succession without externality’, Bergson offers the example of listening to the chimes of a church bell. In the former, in attempting to count the chimes, we step out of the immediate experience of listening (i.e. externality) and make a mental note, say a dot. But to count the dots, we cannot pile them one on top of the other – we start extending them in space. But in marking a new dot, we also retain all the previous dots because in the end we need to count them all. It is in

this sense that there is no succession to the chimes: we retain them all, by means of representing them and extending them into space. In ‘succession without externality’, we stay within the immediate experience of listening to the chimes. They inter-penetrate and succeed one another.

It is thus the position of externality that turns time from pure duration into space, with the associated line as the medium on which to record its extension. Bergson offers another interesting example of a straight line and a material point A on it. The point would see itself changing, but this change would not necessarily be in the form of a line. To see itself moving along the line, the point needs to rise above (outside of) itself and perceive different points on the line, thereby forming the idea of space. In other words, in order to perceive a line as a line, one needs to step outside of it and take account of the void around it.

Crucially, the line only symbolizes the time that has passed, not the time which is passing ... or the time that will pass.

### **Back to the Precipice**

Turning back to the example of walking along a path and approaching a turn, it is curious that I have resorted to using space – and the line of a path – to represent our movement. In this sense, we think about the corner and the turn around it as also being in space. But the concept of space is misleading here because it invites the metaphor of being able to peek around the corner, which is what we aim to do in trying to think about what lies there.

It should be emphasized that the corner – and the gulf between us and it - lies not in space but in time. If the journey up to the present moment can be represented by a line, the line cannot be extended until the moment passes. Thus, what lies around the corner will become part of the line once the corner is turned. Until then, what lies behind the corner does not really exist in the present moment; it is merely an extension of our imagination. Therefore, the gulf between us and the corner only becomes such when we seek to extend the line of our time and look to identify the other shore.

In order to do this requires that we step out of the immediacy of our experience, that we see our journey stretched out on a timeline and seek to extend the line forward, to form a bridge of sorts that we can then cross. We therefore seek to define our experience before we actually experience it.

In contrast, staying with the immediacy of our experience, there is an inter-penetrating multiplicity of present and past moments ... but no future other than the vision or imagination that represent our purpose, that form a whole with our present and past and that cannot be isolated from them. This is similar to the experience of daydreaming, of present and future being one. Any other future is an abstraction and, as such, it cannot be part of pure duration. Thinking about it shuts down the immediacy of experience and gives the reins to cognition, which – with its focus on abstraction and differentiation – operates in space.

There is no uncertainty in pure duration. It arises only when we start thinking about what lies outside of it. But what prompts such thinking? Why can't we just relax and let our ego live in the present moment, taking the new experiences as part of the holistic succession of time, the ultimate freedom? Where does the worry about what lies behind the corner come from? It is

related to the possibility of own vision, the immediate effortless extension of the present, being exposed as wrong. It is the need to preserve that vision that creates the craving for certainty that this will be the case. This is a force that aims to work against the inevitable entropy. It becomes the source of uncertainty, and this source is internal.

### **A Plane Story in the Meantime**

As I was thinking about this section, I was flying from Catania, Italy to London, with a connection in Milan. My connection time was short, 50 minutes, and I had been thinking about it ever since I left London to Catania a couple of days before. I had become fixated on making it; this became of paramount importance to me. I started thinking about it more and more.

As I was about to leave for the airport, it started pouring with rain (this was in Catania, Sicily, where it had been sunny and over 30 degrees for days, and just until a few hours earlier). My first thought at the rain was that it might cause flight delays – my 50-minute connection was firmly in my thoughts. I got the airport, the rain had stopped and the sun was out. The boards said that the flight was on time, as scheduled at 17:05. A sigh of relief. At 16:15, as I was passing by the announced gate, I could not help noticing that there was no plane yet at the end of the bridge; the plane had not arrived yet. I immediately thought of my connection and started calculating the possibility of the plane arriving soon and still leaving on time. Just then, a plane was landing; I hoped it was mine. After a few minutes, it was parked at the end of my gate. Phew! But despite the gate opening soon, boarding did not start until 16:50. It was completed at 17:20 and as the pilot announced it, he also said the flight would be 1 hour and 40 minutes. I was calculating frantically – if we arrived 15-20 minutes late, I would have

30 minutes to get to the other flight. The plane took off at 17:35 and I was told by the hostess that our expected arrival time was 19:25. 20 minutes in between, with gates normally closing 15 minutes before ... and I had to go through security and passport control.

I asked about my connecting flight and had to sit nervously until I got a response shortly before landing. It seemed that there was a slight delay to the flight – I had a chance after all. But another uncertainty arose: would we park on an air bridge or on the tarmac, to be taken to the terminal by bus. The first option was clearly speedier as I could be one of the first out of the plane, able to proceed. In the second option, I had to wait on the bus for half of the plane to disembark and then for the bus to take me on the terminal. We landed at 19:20 and ... parked on the tarmac five minutes later. The mobile staircase took some time to come to be positioned on the plane. I was counting the minutes.

I rushed to the front and was second on the bus at 19:30. But I had to wait for the rest of the passengers. I was nervous and realised I was noticing and reacting to things I would normally be oblivious to. Gradually the bus filled with passengers. The very last people coming down from the plane were an old couple, moving down the stairs very slowly, waiting for one another. At the end of the stairs they hesitated and then took their time to choose the door through to get on the bus. At that point, the second bus – for the passengers from the back half of the plane, who started disembarking five minutes after us – drove off. I had never seen the second bus go first. How irritating. The old couple on the bus, our driver was still not to be seen. Turned out, they were waiting for a baby stroller, unfolded it and were trying to get it through the last door of the bus. We finally drove off and reached the terminal at 19:39.

A ground agent was waiting with London Heathrow sign. There were three of us connecting and she led us with a brisk walk through the airport and through the priority security check. The usual procedure ... but now I was asked to open my bag to be checked (they had not done this at Catania airport). I ran on, putting on my belt on the go, through passport control. I was at the gate at 19:45, as the last passenger were boarding and getting on the second bus, waiting outside. As soon as I realised that I made it, the uncertainty disappeared and all my worries over the previous minutes, hours, and days now seemed petty and trivial. I was on the bus at 19:47. The plane was fully boarded at 20:10. By then, a strong wind had come and traffic control had to change the landing and take-off pattern. We did not take off until 21:00, over an hour late. This meant that now I would most likely miss my train to Bath...

There is nothing entrepreneurial in this story, but I was unnerved by the uncertainty of not knowing whether I would make my connection. Normally insignificant events took on significance as bearing on that ultimate outcome. Nine minutes on the airport bus felt like an eternity and it seemed all sorts of small events were lining up for the purpose of slowing me down.

There were two factors that generated this experience. The first was that the outcome was outside my control: I was entirely at the mercy of circumstances. The second was that I had vested my interest in a particular outcome, of making the connection. Missing it would mean spending the night in Milan (normally not a bad thing) and disrupting my planned work the following day. It was also my children's first day and school and the plan was that I would take them to school. Disrupting that pattern felt like a loss because I had attached plans, other events to it. It had assumed a taken for granted status, whereby I would have images of the following day interpenetrating my many presents as the day was drawing near. Yes, these are

trivial but the point is that they generated a very real feeling of bearing uncertainty. That feeling would be by order of magnitude more intensive if something much more serious was on the line. I recall the last time I had missed a connection, I had to spend the night in Amsterdam. A couple were in the same situation, on their way to their son's graduation from university, which was happening the following morning. They did not make it.

### **Loss, Uncertainty, and Vulnerability**

The disruption of the image of the future in which we start living feels like a loss because of the personal value of what is tangibly attached to it. This could be emotional, such as not making it to a wedding or graduation, or material such as missing an important job interview or losing invested money. This can also have emotional or material consequences for others, such as investors, for which we feel a burden of responsibility.

In her principles of effectuation, Sarasvathy (2001) discussed the importance of affordable loss. The insight behind comes from earlier research in which entrepreneurs and bankers differ in their approach to a new venture situation: while bankers focus on a given return and look to minimize risk, entrepreneurs focus on setting an acceptable level of risk and then look to maximize return (Sarasvathy, Lave, and Simon, 1998). In this scenario, it is actually the bankers who bear uncertainty and not the entrepreneurs. All because they have become vested in a particular outcome.

Sarasvathy (2001) discusses the bankers' approach as belonging to the realm of causal reasoning, which focused on predicting the future and setting goals. As such, it becomes the source of anxiety in a situation of uncertainty. But the discussion so far suggests that this

conception may be misleading. While the situation may be objectively uncertain, it is not necessarily subjectively so. What creates the subjective uncertainty is not so much the setting of goals or focusing on a particular prediction of the future, but the pre-organization (and pre-commitment) of our lives around a particular future scenario, to which we aspire. We do not necessarily set it as a goal driven by prediction, it is simply where we want to be; it is purpose. And when our purpose excites others, they may make commitments behind it, such as investments of money or time. This is not driven by a causal reasoning (something that we have to suppress). It is a natural expression of human aspiration, of the future flowing into our immediate experience. Stepping outside of that experience – such as when the future feel threatened or outside of our control – we become aware of the time gap that separates us from the future and of our vulnerability to the commitments made. It is their unaffordability that generates uncertainty.

In other words, entrepreneurship – rather than acting in the face of uncertainty – entails the enactment of purpose, the attachment to which generates uncertainty. This is because the attachment takes the form of present commitments such as promises, plans or investments and, as such, goes beyond the entrepreneur to involve other people. This creates a new reality in the present that is vested in things turning out in a certain way. The image of the future can no longer remain an immediate psychic state since it needs to be communicated and ‘seen’ by others. By having to use the medium of language to do so, the entrepreneur inevitably becomes external to it and this needs to project it on a spatial timeline. But as the line of time runs only to the present, the future state becomes separated by a gap, by a dotted line representing things not yet passed. It is not a line we can move on since, by attempting to move, we inevitably create another line, the solid line of actual history. The original image inevitably gets lost. And this has implications for the commitments vested in it.

Bergson offers a feel for this experience in his discussion of hope: “What makes hope such an intense pleasure is the fact that the future, which we dispose of to our liking, appears to us at the same time under a multitude of forms. Even if the most coveted of these becomes realized, it will be necessary to give up the others, and we shall have lost a great deal. The idea of the future, pregnant with an infinity of possibilities, is thus more fruitful than the future itself, and this is why we find more charm in hope than in possession, in dreams than in reality” (Bergson, 1913: *The Intensity of Psychic States*, paragraph 8).

If the vesting in a future image through present commitments is inevitable, the question then arises of what makes such commitments affordable, so that they do not generate enervating uncertainty? These commitments can be viewed against cushions of social and financial capital as well as self-esteem, i.e. how much disappointment we can generate in ourselves as well as in others and how much money we can lose. These cushions and their thresholds vary across individuals. What is common among them is that crossing them creates a sense of vulnerability, i.e. a possibility of being harmed, whether emotionally, socially, or materially. Thus, the question of ‘what is affordable?’ can be rephrased as ‘when do I become vulnerable?’. Without awareness of our vulnerability, we cannot determine what is affordable. Indeed, Brene Brown, who has studied vulnerability in great depth, describes it both as the birthplace of creativity and the source of uncertainty (Brown, 2013).

Therefore, entrepreneurial action operates at the interplay of purpose and vulnerability. They can reinforce or undermine one another, as in when strong purpose can elevate one’s threshold of vulnerability, or when strong sense of vulnerability can dampen one’s purpose. Both of these emanate from the individual, while reflecting a number of social constraints.

Because individuals vary both in their purpose and thresholds of vulnerability, entrepreneurship cannot be viewed and explained in absolute terms. What may be a bold, meaningful purpose for one, may be trivial for another. What seems a scary prospect or one, may be just an energizing challenge for another. Understanding entrepreneurial action is ultimately a quest to understand one's purpose and vulnerability.

## **Conclusion**

Uncertainty is typically seen as the defining feature of the context for entrepreneurial action. It is undoubtedly an important concept, arising in economics in the context of a decision calculus for the future, in a quest to offer a normative basis for decisions. It puts emphasis on entrepreneurship as judgmental decision making about resource deployment (Knight, 1921; Foss and Klein, 2012) that makes consideration and conclusion as the filter for action. In particular, Foss and Klein define judgment as “residual, controlling decision-making about resources deployed to achieve some objectives; it is manifest in the actions of individual entrepreneurs; and it cannot be bought and sold on the market, such that its exercise requires the entrepreneur to own and control a firm” (2012: 78).

This view leaves unanswered the question of how entrepreneurs exercise such judgment. The judgment itself is a latent construct, inferred from observations of objectives and the resources deployed. It is considered to be made under uncertainty, because there is no rational way of connecting the objectives and the deployed resources. And it is considered to be a judgment because ... how else would people act but through deliberation. There is thus a residual mystery about the experience of the entrepreneur. It feels like a dive.

This essay offers a conception of entrepreneurship resting on the experience and interplay of purpose and vulnerability. Through the former the entrepreneur acts upon the world. Through the latter the world acts upon the entrepreneur.

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