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Article

Lessons from Team Entrepreneurship Research for General Entrepreneurship Theory

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Abstract: This paper suggests that the theory of entrepreneurship needs to be amended. This paper first shows how the phenomenon of entrepreneurial teams has become established in practice and in the literature. Then the axioms of entrepreneurship theory are discussed. This paper (with a literature review and GEM data) argues that there is an inconsistency within entrepreneurship theory: in order not to have to change the axioms of entrepreneurship theory, entrepreneurial teams were assumed to consist of individual entrepreneurs. This paper explains how that impedes advances in theory development and suggests a new taxonomy of entrepreneurs: the individual entrepreneur, the individual entrepreneur in a team, and a socially minded true team entrepreneur.

Keywords: entrepreneurial teams; entrepreneurship theory

1. Introduction

After more than 80 years of research on the phenomenon of entrepreneurship, theoretical advances have been slow in the past 20 or so years. Many recent papers still struggle with the definition of entrepreneurship and that of the entrepreneur. That is not necessarily a bad sign as it reflects the openness of the academic debate and the importance and complexity of the topic. In nuclear physics, the debate between those who argue that sub-atomic particles always have a mass and those who argue the opposite is not abating. The International Atomic Energy Agency's (IAEA) logo still shows that electrons are little satellites orbiting the nuclear core, although electrons are more a cloud-like force than individual little spheres. So, in a way, it is good that there is still a lot of discussion that revolves around what an entrepreneur does as entrepreneurs are indeed very multifaceted.

Yet, there is also a problem with this arbitrariness because it prevents academics in the field from forming clusters around important sub-debates and having long, intense and deep discussions about each. In entrepreneurship, there are simply too many contended issues and the debates are too short to gain depth. Over the years, that has led to a fragmentation of theory and subsequently to an attitude of "anything goes", which by now has led to the creation of serious epistemological problems, simply because the *episteme* (the established/agreed knowledge) is too vague (Kobia and Sikalieh 2010). Donald Sexton (1988, p. 6) criticised this epistemological anarchy succinctly by quoting Robert Brockhaus's efforts in bringing the debate into focus and adding rigour to it:

In the late 1970s, Bob Brockhaus suggested that each research paper begin with the author's definition of an entrepreneur and a detailed description of the sample used in the research. He repeated this concern in 1985, and in 1986 he established the "Manhattan Project" to develop criteria for defining the sample used in research studies.

The situation has not gotten better since Brockhaus and Sexton's attempts in putting their considerable weight behind a more concerted research effort. Researchers cannot agree on very basic constructs. To give you a basic example of the size of the problem:



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an entrepreneur is the founder of a venture, but what about another person joining this founder after the venture has been formally established? In other words, while the founding of a venture has for some time now been considered a process (Drucker 1985; Reynolds and White 1997, p. 7; Reynolds 2000, p. 159), the vast majority of researchers consider only those entrepreneurs who are there *at a certain point in time*. To make matters worse: what if two or more people create a venture and one contributes almost only financially, the other through providing expertise and the third through the provision of decisive moral support but is otherwise uninvolved? How many entrepreneurs do we have? Well, the answer in entrepreneurship is, whatever the researchers define (Kalkan and Kaygusuz (1985) argued that the entrepreneur is so many things that description is difficult); often they skirt the issues by not defining the entrepreneur at all as Brockhaus lamented (Forbes et al. 2006; Vanaelst et al. 2006; Blatt 2009). While so much freedom is wonderful (and for many of us was the most important reason to have become academic), it also makes it impossible to compare notes. Studies about seemingly very similar things come to totally different results because they have, in fact, looked at very differently defined entrepreneurs. Normal, you say? Yes, but also less than optimal, we say.

The main hypothesis of this paper is that, to put it in terms of the abovementioned physics metaphor, there are entrepreneurs who are independent satellites and there are entrepreneurs who band together, intentionally or subconsciously, and become more a force than a group of semi-independent individuals. There is a corollary to this hypothesis: there are at least two ideal-type entrepreneurs. Classical literature treats every entrepreneur as an individual; however, we propose that there is another, very different, second entrepreneurial type: the entrepreneur who *prefers* to found the venture in a team and has quite different characteristics than the individual, “hero” entrepreneur. Entrepreneurs, we think, can best be understood when placed along a continuum (ranging from the classical, independent, over-optimistic and individualistic entrepreneur to the team-oriented entrepreneur who only starts a venture if s/he is embedded in a group of other team-oriented entrepreneurs). Maybe there are other ideal types between the extremes of the continuum, but we believe that these two types are a good starting point for further research. West (2007) seems to agree with us when he states that research on entrepreneurial team collective cognition (ETTC) has wrongly focused on individual cognition processes assuming that they can be aggregated. He argues (p. 79) that “the methodologies used to examine individual-level cognition have significant limitations when applied to teams”. We agree and would argue that this exclusive focus on the classical individually minded entrepreneurial type has hampered progress in all areas of entrepreneurship, not only in the cognitive field. The results of West’s study show clearly that “too much integration (highly consistent views) or too much differentiation (constantly identifying different options and alternatives) adversely affects the new venture performance” (2007, p. 95). In other words, in entrepreneurial teams, the classical entrepreneur cannot perform and a more socially minded type of entrepreneur is more effective.

To be sure, we do not have the hubris to think that we can define what the entrepreneur is. What we will try, however, is to point out and collate existing assumptions about what that strange beast is by collecting descriptions to which the vast majority of researchers agree. These descriptions, we argue, seem to point towards the existence of at least two very different types of entrepreneurs, one of them is the white elephant in the room. While we will mostly argue from the trait school point of view (McClelland 1961), we do not feel bound to stay within their logic. The data we use draw from the following sources: a literature review, from a very rough-and-dirty analysis of the Fortune list of the 500 biggest corporations of the United States, and from the yearly studies, the General Entrepreneurship Monitor (GEM), in six big industrialised countries. We have chosen the GEM Consortium’s data because it is widely regarded as being the most inclusive (they collect data about entrepreneurial activity in over 40 countries, from over 100,000 interviewees, and started in 1997), and most scientifically rigorous (Autio 2005, pp. 11–12). I consider the fact that we

did not have to do a deep statistical analysis as an advantage rather than a problem: the data are raw and the information gained from it is the best there is: it is almost self-evident.

2. The Basic Assumptions in Entrepreneurship Theory

Like the whole paper, we will keep the description of the (classical) entrepreneur very simple and high-level as we are trying to make a very basic point. Based on my literature review, there seems to be, by and large, a consensus that entrepreneurs are considered to have the following attributes:

- They are very special people (assumed, but rarely explicitly mentioned) (Bygrave 1997);
- They found a venture;
- They are strong individuals who can handle a considerable personal risk (financial and emotional) (Cantillon [1755] 2010; Schumpeter 1934, pp. 54–56; Knight 1967; Drucker 1970; Chell et al. 1991, pp. 18–19);
- They are creative (they have ideas, visions) (Schumpeter 1934; Shackle 1979; Chell et al. 1991, pp. 23–27);
- They are action-oriented and pragmatic (to me the most important trait because they actually make the first step) (Stevenson and Gumpert 1985, p. 88; Busenitz and Barney 1997; Drucker 1970, p. 10);
- They are independent (Kets de Vries 1977, p. 34; Collins and Moore 1970, p. 45);
- They are interested in details; they are tinkerers (Mintzberg et al. 1998, p. 130; Ebner 2005, p. 259);
- They are opportunity-seekers in the sense that they scan the environment (sometimes they even create opportunities) (Kirzner 1973; Shane 2001; Gruber et al. 2008);
- They are tough and single-minded (Say 1803; Koolman 1971, p. 271);
- They are successful (we only study those anyway) (Mintzberg et al. 1998, p. 131).

So far, so good? We think this list is one that most of us have little difficulty agreeing to. We could have added other features, which are often mentioned, but which are, by some at least, strongly contested. Charismatic was an attribute that was mentioned in the early literature but academics have become a little bit more careful with that term and so we have not included it.

3. A Discussion of Theory and Reality

Teaching entrepreneurship is not easy for many reasons. One reason is that students often come into their first entrepreneurship lecture with two things in their minds: the list above and the wish to be an entrepreneur corresponding to that list. Paedagogically, our first job is to somehow explain to them that entrepreneurs are not a different species (Wagner 2004, p. 3, also denies this and points out that statistically there are millions of them worldwide), and that the students do not have to do violence to their characters in order to be in line with that list. If we would not try to achieve that, even fewer students would take that fundamental first step towards creating a venture. While this list is a fairly good description of the ideal type of an entrepreneur, it is also very unrealistic. This is a widely accepted but not acted upon assumption. One of us works a lot with entrepreneurs, big and small. None of them display characteristics which conform to the abovementioned list and Peter Drucker (1998, p. 149) opens his article on the entrepreneur with the following sentence:

DESPITE much discussion these days of the “entrepreneurial personality”, few of the entrepreneurs with whom I have worked during the past 30 years had such personalities.

In fact, the vast majority of them actually clash with the majority of attributes *because they are team entrepreneurs*. What is more, many of the unsuccessful ones (unsuccessful until now, that is) perhaps are unsuccessful *because* they attempted to conform to the list and thereby lost those traits that would have made them successful. These problems point to a flaw either in how entrepreneurship is taught or the theory of entrepreneurship itself.

As very few entrepreneurs actually have been formally trained in entrepreneurship, one can surmise that the problem lies most probably within the theory of entrepreneurship, especially in its portrayal of the entrepreneur. In other fields, academics have developed a range of ideal types; not so in entrepreneurship—here only one phenotype is allowed.

This paper is concerned with team entrepreneurship, which many studies see as a very common, if not a more common, phenomenon than individual entrepreneurship (Kamm et al. 1990; Gartner et al. 1994; Ruef et al. 2003; Chowdhury 2005). Many studies have argued for quite some time that team entrepreneurship is a trend on the rise, especially in the high-tech industries (Cooper 1973; Cooper and Bruno 1977; Obermayer 1980; Teach et al. 1986). Figure 1 below shows the average number of owners of ventures in the planning stage (“Nascent Team Size”) and for New Entrepreneurial Ventures (from 3 up to 42 months in business) in six large economies. The GEM data, the biggest longitudinal study on entrepreneurship, corroborates the studies mentioned above: the average team size is almost always above 1.6. That dovetails with my own rough analysis of the 50 largest US businesses in 2011 (taken from the Fortune 500 list). When we could not obtain information on the founding team size for a company (we only counted the founders at the time of the incorporation of the first company), we replaced the ones we were unable to obtain information on (or which were governmental companies) with the next largest company on the list so that our sample ended with Safeway, which is actually no. 60 in the Fortune 500 for 2011. In this sample, 21 (42%) companies were formally incorporated by individuals and 29 (58%) by teams.

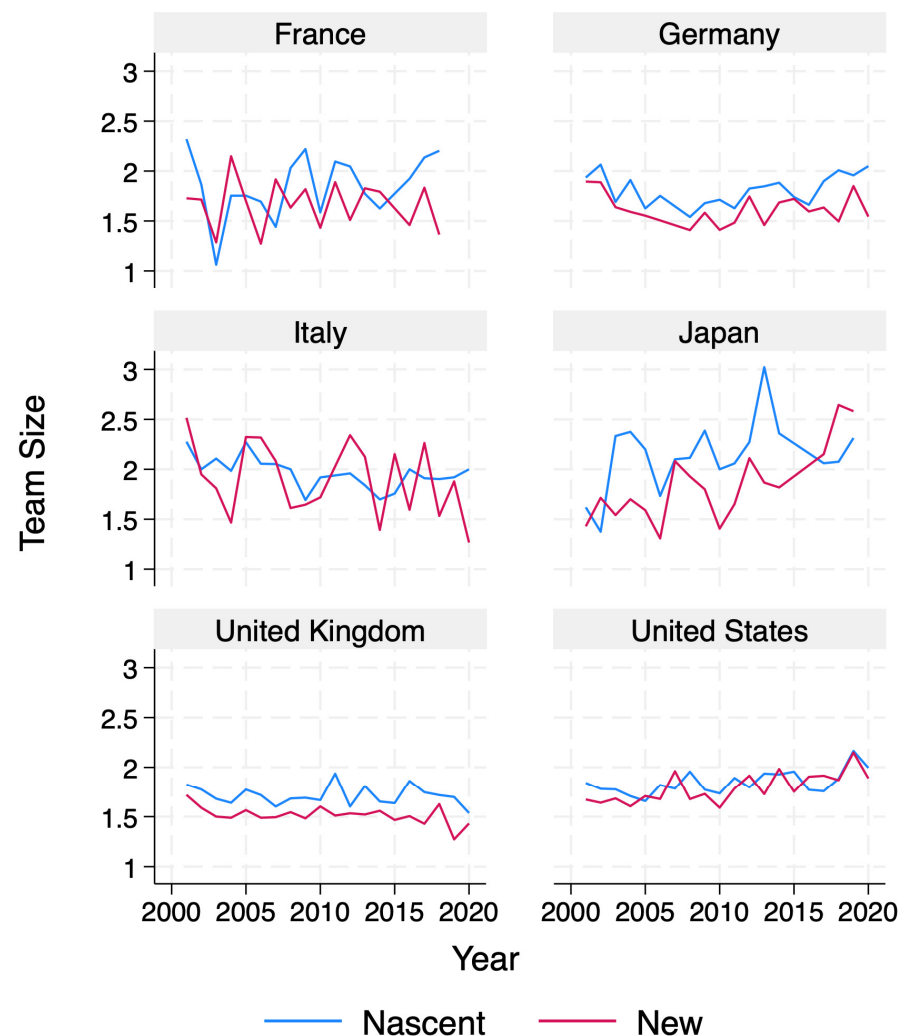


Figure 1. Team sizes in six countries from 2001 to 2020.

The studies mentioned above show a more pronounced trend towards team entrepreneurship than the GEM data support. However, all data show that team entrepreneurship is a phenomenon, which is too important to overlook. Mosakowski (1998, p. 630) quotes Schumpeter (1942, p. 132), "...technological progress is increasingly becoming the business of teams trained specialists", and thereby supports the view that, especially in high-tech industries, teams of entrepreneurs have always existed. Whether one-third or half of the new ventures have more than one founder does not really matter for the hypothesis of this study. The GEM data are also less enthusiastic about a trend towards more team entrepreneurship. This is also not decisive because the conservative GEM data show that founder teams were quite common in 2001 as well as in 2020. Team entrepreneurship, whether it really is on the rise (we think there might actually be a slight trend towards team entrepreneurship) or just a stable phenomenon, is something that theory has to deal with. As has been briefly outlined before, we think that theory has not kept pace with this development, and what is more, classical great man (that is, individual entrepreneurship) theory is very often irrelevant/wrong for true team entrepreneurs.

Thus, in addition to the problem that there is little agreement in entrepreneurship theory about the central construct, the entrepreneur, the change in a major aspect of the topic under study (individuals/teams) has added another layer of confusion to the debate. What we think has happened is that entrepreneurial teams are assumed to be made up of persons conforming to the (hazy) idea of the individual entrepreneur as outlined in the list above. There are very obvious problems with such thinking that we will discuss in the following paragraphs.

3.1. Special Independent People

The first classical assumption about the entrepreneur that clashes with the reality of team entrepreneurship is that entrepreneurs are special people who have a strong desire for independence. Maybe the most influential work on this was the empirical study by Collins and Moore (1970) in which they concluded that the need for independence is the single most important trait and motivation for people to become entrepreneurs. Just how important this factor is can also be seen from the fact that the mainstream literature (and GEM) differentiates between entrepreneurs who voluntarily found a business and those who are driven into it by sheer necessity (Bosma and Harding 2007). This distinction between necessity and opportunity entrepreneurs is made because one wants to filter out and subsequently drop necessity entrepreneurs as it is often implied that these people are lower-quality entrepreneurs (Block and Wagner 2007), or at least so different from "real" entrepreneurs that they should be treated as a different ideal type (Serviere 2010). The assumed demarcation criterion thus is the individual entrepreneur's need for independence and free choice. How can those super individualistic people choose, at the same time, to work in a team? Either the assumption of the independent individual has to be dropped or else amended in classical entrepreneurship theory to accommodate the large number of entrepreneurial ventures founded in teams, or the theory of team entrepreneurship has to be changed with regard to the need for independence for *all* entrepreneurs. Necessity entrepreneurs and our team-oriented entrepreneurs are not pushed into entrepreneurship because they need/seek independence. Harper (2008), arguing from a game theoretic perspective, starts down this road but stops mid-way in his paper, *Towards a theory of team entrepreneurship*, and concludes that team entrepreneurship only happens because "perceived strong interdependence arising from common interests" (p. 613) comes together and makes more or less unwilling individuals work together. His entrepreneurial team member is the rational, self-centered *homo economicus* of rational expectation theory economics. Its opposite, the team-oriented entrepreneur, would have completely changed the research agenda.

3.2. Risk-Takers/Risk-Seekers

Another attribute of the classical entrepreneur, which is often also used as the demarcation criterion to non-entrepreneurs, is the ability of the true entrepreneur to cope with much higher levels of risk/uncertainty or, indeed, to *seek* areas of great uncertainty and move where other, more timid actors fear to move (McClelland 1961; McGrath et al. 1992; Carland et al. 1995). This theme of the heroic risk-taker is so central that Busenitz (1999) explained that entrepreneurs are simply overly optimistic and do not perceive the risk as being very high, although it objectively is. When one of us started out in entrepreneurship, he assumed that entrepreneurs are, above all, uncertainty-reducers because their threshold when uncertainty turns into detrimental anxiety is higher. McGrath et al. (1992) say that there is a clear connection between tolerance for uncertainty and how entrepreneurial a culture is. In short, the ability to handle higher levels of uncertainty is often portrayed as the one factor which is able to explain entrepreneurs in one neat dimension, also because many other factors can be directly linked to it (action-orientation, optimism, independence). Entrepreneurs are, according to Joseph Schumpeter (1934, p. 74; 1942, p. 83), people who combine existing means of production to create something new: they continuously creatively destroy. With the modern founder of entrepreneurship (we think that Schumpeter's theory was so appealing because he combined two schools, the trait school or "who is the entrepreneur?", with the economic school, "what do entrepreneurs do?") defining entrepreneurs as those who do not fear to creatively destroy, i.e., do not fear newness, it is a small wonder that this factor is considered as being extremely important. When one of us came to work with more and more entrepreneurs, his confidence in the risk-seeking trait of entrepreneurs became smaller with each entrepreneur he met. Even serial entrepreneurs did not conform to this ideal—only one study (Kerneltor 1985) corroborated the view that entrepreneurs become more risk-averse as they gain more experience. What is more, those who professionally finance entrepreneurs (venture capitalists) also seem to be very wary of the risk-taker. Building on Baumol's (1968) suggestion, we have replaced this image of the risk-taker with the image of someone who takes that crucial first step towards founding a venture and who then is drawn further into the venture and becomes more calculating, rather than being a risk-taker. That is not to say that the risk-taking entrepreneur does not exist—we just think s/he is less frequent than the type who basically stumbles into founding a venture.

In management theory, the team is regarded as a very important way not only to mitigate the factual risk, but, more importantly, in our view, the team is assumed to buffer the team members (entrepreneurs) from the *felt* risk. Simply by there being a team, the threshold level where dysfunctional anxiety starts to kick in is raised. Armies discovered that two soldiers are vastly more effective in stress situations than individual soldiers; special forces units around the world use the four-man team as the basic unit because it maximises redundant abilities as well as creates a feeling of safety. Humans are social animals and simply feel safer in groups and, because they feel safer, they are more effective. Founding an organisation is an extremely uncertain process and what is more natural than to seek emotional support from a team in such a situation? If many entrepreneurs consciously or subconsciously aim to reduce the felt risk and create ventures in a team, then the classical risk-taking entrepreneur is not identical with the team entrepreneur: there are at least two ideal-type entrepreneurs. Thus, also in this respect, classical entrepreneurship theory would need to be changed or amended.

We also believe that many individual entrepreneurs only become increasingly individual (less willing to listen to those around them) *after* they have successfully founded and established a venture. This means that the strong individuality assigned to the typical entrepreneur is not present in the beginning—and is thus not an important attribute of the successful entrepreneur—but develops afterwards. One of us once came into contact with one of the most successful modern German entrepreneurs, Dirk Roßmann, the founder of Rossmann, the largest German drugstore chain with an annual turnover of over EUR 14 billion. Pretty much from the beginning, Roßmann had a trusted advisor, yet as Ross-

mann grew, advice from anyone, including the almost-cofounder, was only reluctantly accepted, if at all. The impression was that Dirk Roßmann did not understand why his drugstore chain was so successful and attributed it to something in his personality. Every time Roßmann was advised to start using a management tool (one of us witnessed the attempt to utilise category management), he refused. We believe it was the influence of the idealised entrepreneur image and the fear that systematic management practices would drive his “personality” out of Rossmann, and thereby destroying the basis for the venture’s success, that was behind this utter refusal to employing such tools.

3.3. Individual Creativity

Peter Drucker, who propagated a very systematic approach to entrepreneurship and stressed the need for an entrepreneurial team to be put in place as early as possible, said that the great idea is still the most important spark which starts ventures (Drucker 1985). Naturally, the idea comes from an individual and not a team. If team entrepreneurship is the rule rather than the exception, why do we still prop up the idea that *individual* creativity is an all-important attribute of the entrepreneur? This concept is so deeply ingrained that many papers on team entrepreneurship actually try to prove that an entrepreneurial team should always have a “lead entrepreneur” (Ensley et al. 2000; Chen 2007; Chung 2009). To us, it is obvious that we need to change the theory so that we can make room for team creativity/entrepreneurship beside the creative individual. First, the idea that entrepreneurship is about a specific point in time needs to change: founding a venture, being an entrepreneur is a process—whether it is an individual or a group of people. Secondly, when it comes to general management theory, we mostly agree that groups are more creative. When it comes to entrepreneurship theory, however, the assumption seems to be that one person is more likely to have that one great idea. Despite facing an empirical and a theoretical inconsistency—we are blind on *both* eyes—we refuse to adapt theory.

If the founding of a venture would be understood more as a process and we were to drop the assumption that it *always* has to be one person who has the great idea, we might have a better basis to understand entrepreneurial reality—at least for those instances where a venture is founded by a group of people.

3.4. Action Orientation

The action orientation is an attribute of entrepreneurs that we personally also find very useful for understanding entrepreneurial behaviour. The typical entrepreneurial organisation (Mintzberg 1979, 1983, 1989) is highly centralised and this creates a very important advantage: entrepreneurial ventures are fast-moving, internally and externally adaptable organisations if the founder is flexible. It is a well-documented observation that in ventures which are founded by groups of people, decision making is hampered by protracted conflicts amongst the founding team members (Ensley and Pearson 2005; Foo 2011). Obviously, we are not suggesting that we drop the action orientation attribute because we find it an important aspect of individual and team entrepreneurs. However, the growing preference for founding a venture in a team, despite the negative consequences, also points to the need to have different analytic tools for different situations. Entrepreneurs who trade off being able to act fast for the advantages of a team have to have reasons for doing so, and the fact that many make this trade-off makes it necessary to amend classical theory. One possible explanation is that the emotional threshold to make difficult decisions from within the security of a team is lower. In other words, the true team entrepreneurs trade off speed for quality in decision making. That, of course, clashes with the independent trait that is so important in classic entrepreneurship theory.

4. Three Different Entrepreneurial Ventures—Three Different Theories

We think we have made it reasonably plausible that there is something wrong with the theoretical framework of entrepreneurship; the most important arguments of classical entrepreneurship theory are at odds with each other when common team entrepreneurship

is taken into consideration. That prevents entrepreneurship from moving forward and forces it to repeatedly fight old battles.

What we propose is a soft and simple solution: instead of forcing a big debate about the general theory of entrepreneurship, we suggest that there are three different situations in which ventures are typically founded and that we need three (or maybe only two) different theories to look at these three situations. Adding one or two ideal types to our phenomenological understanding of the entrepreneur avoids having to dilute the (very useful) traditional description. We can, thus, keep the classical ideal and simply add other ideal types.

4.1. *The Classical Situation: One Individual Entrepreneur*

First, we have the situation where one person founds a venture. As mentioned above, of the top 50 of the Fortune list of the biggest US companies, 42% were incorporated by individuals (point-in-time view) and 58% had more than one founder. If one takes the median year (1944) and looks at the figures before and after this median year, the numbers remain remarkably stable: 40% of the companies founded after 1944 were incorporated by individuals and the number for the companies founded before that date is 42.5%. These figures are somewhat astounding in the light of mainstream theory stressing the heroic individual entrepreneur. At no point in modern time were individual founders the majority. Nevertheless, generations of founders have been raised in the belief that only a strongly individualistic personality is likely to be a successful entrepreneur. Again, in this paper we are not arguing in favour of getting rid of the classical stereotype, which is in all likelihood a very important and common phenomenon. However, we are arguing that this classical stereotype does not (statistically) represent the typical entrepreneur (even if we assume that there are individually minded entrepreneurs among the team entrepreneurs). This means that the view of the entrepreneur has to be altered.

4.2. *Two or More Classical Entrepreneurs*

The second founding situation is that of two or more individual founders who come together out of necessity. The founders more or less conform to the classical paradigm, i.e., they are individuals. The current research on team entrepreneurship assumes that all teams fall into this category because they are entrepreneurs and entrepreneurs conform to the criteria prescribed in the classical school (see list above). If not, all research which has taken place in this field has to be re-evaluated as many of the studies would have started from wrong assumptions about founders and have drawn faulty conclusions.

4.3. *Two or More Team-Oriented Entrepreneurs Found a Venture*

The last founding situation is the one that we believe is as common as that of the individually minded entrepreneur, with the potential of soon becoming the most common. Here we have founders who team up because they *prefer founding a venture in a group*. This may happen as conscious act, driven by the subconscious need to be part of a group, or may just happen because they are long-term friends, meet by chance and have an idea collectively, or else for other reasons which are difficult to categorise. This is the group for which we suggest that the pretense of assuming that they are just individual entrepreneurs who happen to form the venture in a team is wrong. These people are very different from the classical entrepreneur as we have discussed above: they are not extreme individualists seeking uncertainty who are creative destructors without fearing the consequences of their bold action, and think they alone have what it takes to be successful. Rather, they are much softer, maybe even completely different, versions of that ideal of the classical entrepreneur. They also go against the publicly held image of the superhuman entrepreneur, an image that is strengthened by the classical school.

Possible examples for entrepreneurs of the second type (Gates/Allen, Jobs/Wozniak, Hewlett/Packard) abound in practice but have not found their way into theory simply because entrepreneurship researchers fear to completely lose the already spurious agreement

on what an entrepreneur is. Having three different research strands within two different schools of entrepreneurship (individualist vs. true team entrepreneurs) could solve that problem because two would be based on the classical paradigm, while one would stand in contrast to the classic paradigm and, therefore, indirectly would give the classical school more legitimacy.

Overall, entrepreneurship would be able to explain and maybe even predict (in the social sciences, prediction is the more sought-after quality of a theory) many more phenomena than the old paradigm can alone. In epistemology, maybe the most important quality criterion of a research programme is often how much of reality it covers (Blaug 1992). At the moment, the situation in entrepreneurship is a bit like it is in physics: although Newton's theory only works for "normal" sized objects and not for sub-nuclear and stellar objects, it is the one used by engineers and not Einstein's superior theory, which covers all three levels. However, in a way, the situation in entrepreneurship is worse because the classical theory—the only one currently in use—is mainly applicable to only *one* situation (individuals founding a venture alone). It is not applicable to the perhaps equally common occurrence of team-oriented entrepreneurs coming together and it is also not relevant to individually minded entrepreneurs founding a company in a team.

Last but not least, there should logically be a fourth group: team entrepreneurs who are (or feel) forced to found ventures alone. We are not at all sure that this category is so small. Maybe among the failed ventures, one would find a surprisingly large number of ventures that fall into this category. Because entrepreneurship research tends to be interested only in successful ventures, this fourth category is an undiscovered species so far. From this dysfunctional category, many lessons could be learnt.

Our theoretical assumption is also supported through a statistical analysis of the GEM data by regressing the team sizes of actual entrepreneurs on the team sizes of nascent entrepreneurs. While the regression results merely allow us to test whether the sign and magnitude of the marginal effect of nascent entrepreneurs are different than the null hypothesis, the possible interpretations are open to debate. Each observation in the GEM data has a pair of observations which are dependent. The GEM survey respondent tells us the number of entrepreneurs in the nascent stage on the enterprise (less than 3 months) and the number of entrepreneurs in the new entry stage (3 to 42 months). Each pair is supposed to be dependent because the second phase of entrepreneurship, which is the actual market entry, is a follow-up of the nascent phase. We estimate the equation

$$New_i = \beta_0 + \beta_1 Nascent_i + \vec{\gamma}_t + \vec{\gamma}_c + \gamma_g + \vec{\gamma}_a + \varepsilon_i \quad (1)$$

where New_i is the number of entrepreneurs in the 3 to 42 months phase, $Nascent_i$ is the number of entrepreneurs in the less than 3 months phase, $\vec{\gamma}_t$ is a vector of time indicator coefficients which controls for nonlinear time trends, $\vec{\gamma}_c$ is a vector of country indicator coefficients, γ_g is a coefficient indicating whether the respondent is female, $\vec{\gamma}_a$ is a vector of age indicator coefficients which controls for potential nonlinearities of the effect that age has on the number of entrepreneurs, β_0 is a constant, and ε_i is the random error. The marginal effect of the team size of nascent entrepreneurs on the team size of actual (new) entrepreneurs, β_1 , is our coefficient of interest. The null hypothesis—team sizes at market entry are the same as team sizes in the previous (nascent) phase (equivalent to $\beta_1 = 1$)—is tested against the alternative hypothesis that team sizes at market entry are smaller (equivalent to $\beta_1 < 1$). A rejection of the null hypothesis could be used to support one of the theoretical arguments of this paper, namely, that there is a type of entrepreneur (the socially minded entrepreneur) who prefers to found a venture with others and thus needs the social support to start the journey of setting up their own ventures. In other words, if the null hypothesis could be rejected, teams' sizes statistically decline between the planning and the actual founding phase, supporting in turn the existence of the socially minded entrepreneur. There is another interpretation of a rejection of the null hypothesis and that is that entrepreneurs feel uncomfortable actually setting up the venture in a group

and only formally set up a venture when the team size has shrunk. In line with what we said earlier, i.e., that we personally consider the very first step to founding a venture more important than any of the following steps (among them the formal incorporation), we would interpret the rejection of the null hypothesis (because of sinking number of founders) to be in favour of the existence of the socially minded entrepreneur.

We estimate eight different specifications of equation 1 using the standard ordinary least squares estimator. To account for potential dependence of responses within countries in the error term, we cluster the errors by country. Table 1 shows the empirical results. Columns 1 through 4 include all countries in the GEM while columns 5 through 8 include only the United States, France, Italy, the United Kingdom, Germany, Japan, and Canada. We estimate the coefficient β_1 as approximately 0.33 in all specifications in the first row with the standard errors in parentheses below each estimate. The estimates are also robust to controlling for the year, country, gender, and age of the respondent. Each control variable is added as a set of indicator variables successively in columns 1 through 4 and again in columns 5 through 8. An x in the year, country, gender, or age row indicates which controls are included in that column. Since the standard error is substantially smaller than the coefficient in each specification, the coefficients in all specifications are statistically larger than zero. The coefficients are also all statistically smaller than one since the t-statistic for the test of the null hypothesis $\beta_1 = 1$ in the bottom row of Table 1 are all larger than test statistic 3.922 for 18 degrees of freedom. The degrees of freedom are determined by the smallest cluster size which, in our sample, is 18 observations in the cluster of observations from Japan. We reject the null hypotheses that $\beta_1 = 0$ and that $\beta_1 = 1$ at the 0.05 percent confidence level in all eight specifications. According to our estimates, the average team size decreases by about a third from the nascent phase to the entry phase.

Table 1. Dependent *t*-test for differences in the team size.

	1	2	3	4	5	6	7	8
Nascent (β_1)	0.332 (0.025)	0.306 (0.025)	0.305 (0.025)	0.309 (0.025)	0.343 (0.068)	0.336 (0.069)	0.338 (0.069)	0.334 (0.075)
Year	x	x	x	x	x	x	x	x
Country		x	x	x		x	x	x
Gender			x	x			x	x
Age				x				x
R^2	0.14	0.18	0.18	0.19	0.17	0.18	0.18	0.25
Observations	8225	8225	8224	8046	1171	1171	1171	1113
T-Stat	27.24	28.05	28.04	27.73	9.67	9.60	9.63	8.89

5. Conclusions and Future Research

As our interest lies primarily with the real team entrepreneurs, i.e., those who only found a venture because they can do so in a team setting, we are naturally inclined to think that this field would yield the most interesting results. In 1990, Judith Kamm and colleagues wrote a paper about *Entrepreneurial Teams in New Venture Creation: A Research Agenda* in which (9–10) they suggested:

The objectives of research on entrepreneurial teams should be twofold: (1) to address the gap in the entrepreneurship research field on venture teams; and (2) to help prospective and practicing entrepreneurs form and maintain effective teams [...]. Several tasks need to be undertaken in order to achieve the research objectives: (1) “mapping the territory” by defining the relevant dimensions of entrepreneurial teams; (2) identifying the problems and costs inherent in the formation and maintenance of effective teams; and (3) identifying the success factors that compensate for, avoid, or overcome these problems.

While we wholeheartedly agree with them, we suggest not to start “by defining the relevant dimensions of entrepreneurial teams”, but going one level higher and defining

two contrasting types of entrepreneurs: the classical individual entrepreneur and the team-oriented entrepreneur. If this is not accomplished, the classical assumptions about entrepreneurs will simply add to the confusion in the team entrepreneurship research programme. What they suggest is to focus on the different types of *ventures*; we suggest focusing on the (two) different types of *entrepreneurs*. We believe researchers have followed Kamm et al. and focused on the venture and not the entrepreneur.

The creation of the team-oriented entrepreneur would completely change the research agenda. A totally new type of entrepreneur could be discovered and with it a new venture-creation process. For the practice and teaching of entrepreneurship, this could have tremendous possible consequences. The hurdles of feeling entrepreneurial and starting a venture would be dramatically lowered as the ideal-type hero-entrepreneur would have a more normal sibling with whom students could much more easily identify. More people would try out founding a company and, what is more, these people would also have the proper role models and processes to help them be successful. They would no longer try to fit into a mould which is just not right for them. Since Schumpeter (1934) pointed out that economic growth is created by the entrepreneur—an assumption which has been empirically corroborated in many studies, as Robichaud et al. (2010, p. 59) point out—positive effects for economic development can be expected.

In this sense, not only would research within the new team entrepreneurship research programme be positively affected, but the debate in the classical school would also be shot in the arm because there would be a contrasting view. After all, competition is good for business. Entrepreneurship researchers in particular should have no problems seeing the truth of this statement.

Moreover, one of the most important tricks in statistics is to partition the basic population properly before analysing it. If a biologist is interested in the human species, the first thing they would surely do is separate male and female members of the population and analyse them separately. Otherwise, the results would be non-sensical in many areas (“on average humans have one mammary gland and half a uterus”). The same is true for the entrepreneurial population. What we are suggesting is to partition the entrepreneurial population into individually minded entrepreneurs and team-oriented entrepreneurs, and then to take a look at the differences between these populations. The newly minted type of entrepreneur, the team entrepreneur, would allow the classical entrepreneurship researchers to develop sharper features for their classical-style entrepreneur, then debate these features and finally arrive at a typology within the classical research programme, which may later result in a typology of entrepreneurs spanning the entire spectrum.

The applications for future research are too many to go into and we will not pretend that we have the fantasy to even scratch the surface. What we have tried to do in this short paper is float an idea, the idea that there is also a true team entrepreneur, not only the loner who is unfortunately increasingly part of an entrepreneurial team. Hopefully, other researchers will find this thought interesting enough to pick up and apply in their respective field of entrepreneurship.

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