

Philosophy theory into entrepreneurial education practice: A holistic model.

Abstract

In the entrepreneurial education field, the “perfect” program of teaching entrepreneurship has been largely debated. In this paper, provocatively, we used only different philosophical thoughts in order to reconstruct a holistic pedagogical model suitable for entrepreneurial education. The model is based on two famous philosophical dichotomies, respectively the Kantian opposition of freedom versus determinism and the Aristotelian division into praxis and poiesis. These elements, specifically adapted to an entrepreneurial context, may lead educators and curricula developers in the “tangle forest” of contents and skills that should be transferred to students. In particular the model offers an easy tool that clearly defines areas of intervention to teach entrepreneurship. The final scope is to offer simultaneously appealing to students concerning entrepreneurial activities, as desirability, and tools for such activities as feasibility, articulated in two degrees of outcomes: one internal, as conduct and experience, and one pragmatic, as technical skills.

Key words: Entrepreneurial education, philosophy of entrepreneurship, Aristotle, Kant, desirability/feasibility, conducts and technical skills

1. Introduction

During the last decades the entrepreneurial education has received a strong attention from scholars, educators, practitioners and policy-makers regarded as one of the main channels to sustain entrepreneurship (Kuratko, 2005). Entrepreneurial activities increase formation of new ventures, bring innovations to the market through the “destructive creation process”, and sustain employment and national or global economic systems (Schumpeter, 1934). Thus, entrepreneurial education has not only the task of transferring contents, knowledge, skills and competences to students but rather in turn stimulating acts and behaviors toward entrepreneurship (Liñán, 2004; 2008).

Many studies have been focused on mapping necessary entrepreneurial and business skills and competences (e.g. McMullan, Long 1987; Hood, Young, 1993; Morris *et al.*, 2013). Generally speaking, such contributions tend to highlight two classes of competences: some competences has a softer nature that should stimulate changes in mindsets in order to act entrepreneurially; oppositely other ones should provide potential entrepreneurs with a set of practical skills “ready-to-use” in a business context (Jack, Anderson, 1999; Liñán, 2004; Fretschner, Weber, 2013).

Another and connected issue regarding these programs is how to stimulate entrepreneurship. Despite some controversial results, most part of literature agrees upon positive impacts of entrepreneurial education on intentions (Gorman *et al.*, 1997; Fretschner, Weber, 2013). One often used and powerful model to explain entrepreneurial intention is the Shapero’s (1982) entrepreneurial event model that adjusts the theory of planned behaviors (Ajzen, 1991) and the self-efficacy model (Bandura, 1986) for the special needs of entrepreneurship (Krueger, 1993; Krueger, Brazeal, 1994; Krueger *et al.*, 2000; Guerrero *et al.*, 2008).

However, this increasingly attention and legitimacy of the field of entrepreneurial education is far to be mature (Kuratko, 2005). In particular a holistic model that can blend all these features is missing (Robinson, Hayes, 1991). This work has been created in a provocative way to stimulate a reflection about how much the philosophical though appeals the entrepreneurial studies. To such a scope, we propose that a model based on a reconstruction of two famous different philosophical theories. We reinterpret the dichotomy freedom versus determinism of Kant (Kant, *Critique of Judgment*, 1790/1914, *CoJ*), analyzed on different profiles, as *praxis* and *pragma/poiesis* belonging to Aristotelian tradition (Aristotle, *Nicomachean Ethics*, 1968, *NE*). The first profiles is related to the higher level of acting, more internal that instructs conducts of the subject, considered as *praxis*. The tension at this level is a contraposition of a desiring *autos*, resulting from an inner freedom, to a normative *nomos*, resulting from an

existential and experiential determinism. The other profile is instead the lower level of acting, more external oriented in order to produce “material” modifications of the external world, considered as *pragma/poiesis*. The attention here is focused on a pragmatic/technical level of acting, a concrete “planning” for actions and concrete outputs. The tension arises between an orientation of the action, resulting from desired outcomes, and a necessary order for the action itself.

Thus, we try to address the following research question: *Does a possible general model for entrepreneurial education exist?*

Contributions of our paper to the literature are at least twofold.

First, the model’s utility lies in its simplicity, a “scorecard” to support development of coherent entrepreneurial programs. This model shows in a clear way, “existential and pragmatic” needs of interested people and students to become potential entrepreneurs. This condition may be achieved positively influencing their desiring internal structure, the perception of feasibility, and the propensity toward entrepreneurial activities. This model is a simply tool to orienting teachers and curricula developers, giving suggestions, in relation to general categories, of what a balanced program for their entrepreneurial students could be.

Second, this model being deductively developed on philosophical bases may open new streams of research in the entrepreneurial education. Usually, models that deal with skills and contents of entrepreneurial programs use inductive methods of enquiries such as interviews with executives (e.g. Hood, Young, 1993) or drawn from previous literature (e.g. Morris *et al.*, 2013). Despite the fact that these studies are essential to discover specific and particular skills fondant entrepreneurial acting, they lack a general theory and a holistic approach for entrepreneurial education (Robinson, Hayes, 1991).

The paper is structured as follows: in section two we analyze the entrepreneurial literature in relation to contents and skills important for potential entrepreneurs and the presentation of

entrepreneurial intention based models for action. In section three, we present philosophical frameworks that we will use to create the model. Section four, instead, explains the model, translating the philosophical insights in a holistic approach. Finally, the last section is dedicated to conclusions and limitations.

2. Entrepreneurial education and entrepreneurship

Entrepreneurial education principal aim is transferring competences to students that in turn may stimulate intentions toward entrepreneurship (Liñán, 2004; Gorman *et al.*, 1997).

Thus, the central node is individuating prevailing orientations in terms of entrepreneurial education skills, competences and contents that may reveal themselves useful to increase intentions.

2.1 Entrepreneurial education as “Hard” and “Soft” cores

The literature tends to agree on the fact that entrepreneurship, some elements better than others, can be taught, considering co-present both “born-entrepreneurs” and “made-entrepreneurs” (Kuratko, 2005). However, the problem in this branch of education is that an entrepreneur or an entrepreneurial person to be as such cannot just “perform” particular techniques, acts and actions. Rather, successful entrepreneurs are subjects good at interpreting weak signals, “sensing” opportunity, acquiring the ability defined as alertness (Kirzner, 1979), and then capable of seizing such opportunities. This highlights a need of different curricula between those who want to follow a traditional managerial path and those interested in entrepreneurial activities.

Probably, there is common background shared by the two disciplines, entrepreneurship and management, that consists in a “hard” core of practical or “practical-oriented” skills and knowledge necessary to manage a business. These skills have several qualities: with a more

technical foundation, regarded as easier to transfer to students and more often offered in business school courses (Rideout, Gray, 2013). This “hard” core of entrepreneurship, called also the “science” of entrepreneurial teaching (Jack, Anderson, 1999, Rae, 2005), should not be taken for granted in entrepreneurial education nor assumed as completely secondary. For example, Nonaka and Johansson (1985) criticized Japanese business schools due to their low focus on this area of contents, compared to the “American model”, though such model is far to be free of opposite criticisms. American schools are often represented as too focused on hard and technical skills (e.g. Robinson, Hayes, 1991; Katz, 2003; Kuratko, 2005). In particular, this “hard” core contents should encompass potentially useful skills in a start-up, such as business plan creation, cash management, marketing plan etc. (Liñán, 2004).

As stated above, however entrepreneurship is also about a psychological attitude and a state of mind difficult to be taught, as the “art” of being entrepreneurs (Jack, Anderson, 1999; Rae, 2005). Especially, traditional methods and approaches seem to fail in successfully stimulate such mindset in students (Krueger, Carsrud, 1993; Fretschner, Weber, 2013). For this reason, an integrative formation beyond traditional business contents is required, developing too intangible qualities such as negotiation, leadership, motivation, lateral and creative thinking (McClelland, 1973; McMullan, Long, 1987; Vesper, McMullan, 1988; Plaschka, Welsch, 1990). Thus, for entrepreneurship skill- and trait-building courses are as much as important as knowledge-based courses. Another important element of this “soft” core of entrepreneurship is the experience that student can made of entrepreneurship and entrepreneurial activities (Krueger, 1993; Krueger, Brazeal, 1994; Rae, 2005). With the evolution of the discipline, especially this class has received a greater attention of researchers for its more “challenging” nature: it is harder to teach and to be learnt with blander visible impacts but it represents the starting point for igniting entrepreneurial spirit.

Indeed, entrepreneurial learning tends to favor active experimentation and balance between concrete experience and abstract conceptualization (Ulrich, Cole, 1987; Gorman *et al.*, 1997). Eriksson (2003) divides the process of experiential learning in mastery, vicarious and social kinds of experience. Mastery experience comes from personal and direct experimentation and achievements. The knowledge of being able to achieve certain objectives reinforces self-motivation and lead to higher and positive expectations about the future (Wood, Bandura, 1989). Vicarious experience derives from the possibility of using role models to inspire students and triggering a comparison/emulation process. Positive role models develop a tension to be better and more motivated (Boyd, Vozikis, 1994). For this reason, the entrepreneurial story-telling is a powerful tool for this kind of education (Rae, 2005). The last element is social experience that comes out thanks to public recognition received by potential/actual entrepreneurs and any other kind of incitement coming from the social environment. Be paired with a person who lives or have lived an entrepreneurial experience allows to transfer tacit knowledge hardly to be taught in a classroom. Most part of business schools does not provide this type of training evidencing a flaw in the designing of curricula (Ball, Gilligan, 1985).

Finally, especially after the present financial crisis, more and more scholars have started to point their attention to the necessity of courses in business ethics and philosophy for potential entrepreneurs (Small, 2003; Grassl, 2010). This knowledge may be seen as the final piece of a completed and sounded judgment, capturing veiled and weak signal of an unavoidable uncertainty connatural to the entrepreneurial acting (Harmeling *et al.*, 2009; Pellegrini, Ciappei, 2013).

The “soft” core influences propensity of the character to act entrepreneurially and thus to increases the awareness of existing business opportunities or of possibilities to create new ones (Jack, Anderson, 1999; Liñán, 2004; Fretschner, Weber, 2013).

Thus, for what we have mentioned education program to be effective is impossible to be focused only either on the hard or on soft cores of entrepreneurship. For example in Hood and Young's (1993) works, they tried to bring together these two facets in a "perfect" mix for entrepreneurial education. The study analyzes a hundred of successful top executives and entrepreneurs to infer what qualities are needed for act entrepreneurially, and four critical areas arise: content, skill and behaviors, mentality, and personality. The first three areas are related to *creative knowledge*, which is divided in formal and informal knowledge. In particular, content can be acquired in traditional classrooms while skills and behaviors and mentality need to be supported by an experiential learning and the formation of experience. Finally, the *personality characteristics* are related to a deeper motivation and traits, for instance high need for achievement (McClelland, 1961), locus of control (Pandey, 1979) or tolerance for ambiguity (Scheré, 1982). To each area, also some proper teaching courses which should be able to increase student knowledge/traits are also associated:

- *Content*: Finance and cash management, Engineering, Accounting, Marketing.
- *Skill*: Leadership, Communication, Human Relation, Management.
- *Mentality*: Creativity, Opportunistic think, Vision, Positive think.
- *Personality*: Self-motivation, Risk-taking, Common sense, Values.

2.2 Entrepreneurial Intention models

Once briefly presented the entrepreneurial competences, their different natures and implications, we need to further develop our theoretical review in order to touch upon another connected issue in entrepreneurial education. Such competences need to stimulate or induce students' entrepreneurial intentions. Intentions, despite not being actual behaviors are one of the best predictors of the entrepreneurial activities since this event is rare and difficult to measure (Krueger, Carsrud, 1993; Sánchez, 2011). Considering this topic, there are several

models that try to explain intentions, but in particular three models have been often used in relation to an entrepreneurial career or to a new venture: The Theory of Planned behaviors (TPB) (Ajzen, 1991) and the Shapero's entrepreneurial event (EE) (1982). Both have been tested empirically and have shown explanatory power in relation to the formation of intentions. Entrepreneurial intentions are considered of a rare and of a long-term nature and probably for these reasons, EE model have been found slightly better than TPB for such circumstances (Krueger *et al.*, 2000; Guerrero *et al.*, 2008). However, both EE and TPB model combine exogenous and endogenous variables to explain the intentionality of entrepreneurial behaviors, thus presenting high level of compatibility (Krueger *et al.*, 2000; Liñán, 2004; 2008). Indeed, Krueger and Brazeal (1994), building on these two previous models, create a unique theory, often refereed as Entrepreneurial Potential model (as reported in figure 1)

Figure 1 ABOUT HERE

The model indicates that inertia guides human behaviors, but “something” such as a relevant event and particular contingency may interrupt or displace that inertia. In particular, Shapero (1982) identifies three macro-classes of events: negative displacements (e.g. boredom and no-satisfaction, turning into middle age, divorce, job loss), middle things (e.g. end of secondary school or university, changing job), and positive pushes (e.g. support from a partner; life achievements etc.). Displacement precipitates a change in behavior, leading the decision-maker to seek for best opportunities available from a set of alternatives (Katz 1992). In this set, an entrepreneurial career will be pursued only if the subject has perception of a relative credibility toward such alternative in addition to some degrees of propensity to act (Shapero,

1982; Krueger, 1993; Liñán, 2004). Indeed, a well-formed intention cannot be considered as such without a propensity to act. However, credibility is the result of two interacting variables:

- The perception of desirability toward the behavior. The subject in order to choose a (entrepreneurial) behavior needs to feel some degree of attraction toward it, either basing such judgment on cultural personal or experiential factors. Prestige, recognition, sense of being useful can be elements associated to this variable; however, with an opposite logic also refraining facets should be inquired such as shame, possibility to be depicted as a greedy person etc. (Krueger, Brazeal, 1994)
- The perception of feasibility of such behavior that is the perceived ability to carry out that task. Regarding such variables the literature talks also about self-efficacy. The social-cognitive theory of Bandura (1986) defines as self-efficacy a person's perceived ability to execute some target behavior. Personal attitudes, abilities, and cognitive skills comprise the so-called self-system. This system plays a major role in how subjects perceive a situation and in the consequentially behavioral response to that stimulation. Bandura (1986) identifies self-efficacy as most important "meta-skill" in approaching goals, tasks, and challenges, at the center too of the self-system. Indeed, personal perceptions of self-efficacy work in several ways: influencing perseverance and resilience in negative situations that may occur during the performance of the activities, and impacting the overall quality in relation to the conviction of being successful. Thus, through the stimulation of self-efficacy is possible to influence the whole process behavioral process (Boyd, Vozikis, 1994).

Thus, credibility is seen as a higher level of potential intention that sets borders and delineations of acting. Instead propensity to act is definitely more outward-oriented in order to

setting and planning favorable conditions in which the actual behaviors may take place (Krueger, Brazeal, 1994).

Thus, entrepreneurial education is charge with the duty of offering to students the “potential equipment” to be entrepreneurs. On the one hand, it needs to increase perceptions of credibility of an entrepreneurial career, both in terms of a desirable and feasible option; and on the other hand, it also needs to stimulate propensity to act to reach such goals. Empirical studies have already shown that entrepreneurial programs seem to be able to influence positively the process (e.g. Liñán, 2004; 2008; Guerrero *et al.*, 2008)

2.3. Entrepreneurial education and the “unsolved” problem

Many studies have stressed skills and contents necessary for a serious entrepreneurial program but most of this literature either focuses attention only on partial aspects of the whole, such as the role of the stand-alone experience or the self-efficacy or derives from practice such a series of skills (Nonaka, Johansson 1985; McMullan, Long. 1987; Hood, Young 1993; Gorman *et al.*, 1997; Eriksson, 2003; Morris *et al.*,. 2013; Rideout, Gray, 2013). All these contributions were fundamental in order to confer legitimization to the field; however, to move into a more mature phase the field still needs to find an internal coherence in terms of programs, impacts and approaches (Robinson, Hayes, 1991). This work expressly tries to develop a deductive theory for entrepreneurial education that may “speak” in terms of general, and non-punctual, categories of contents through a model that can capture all above mentioned problems into a holistic approach. Thus, our “guiding” question is: *Does a possible general model for entrepreneurial education exist?* In the next paragraph, analyzing philosophical thoughts, we will try to give a positive reply to such a question.

3. Philosophical bases for an entrepreneurial education model

We start our theoretical speculation recalling two classical dichotomies of classic philosophical studies: contraposition of freedom and determinism based on the concept of determinant/reflective judgment (Kant, *CoJ*) and the Aristotelian division of the profiles of action *praxis/poesies* (Aristotle *NE* book VI). This two dualisms offer a complete spectrum to frame entrepreneurial education problems. We want to premise that a long debate about philosophical debate about correctness of such foundations is far beyond the scope of this article. We will present dichotomy in order to use it in a descriptive way that will help us to neatly convey a model of general sense.

3.1 *The Dimension of the Agent*

Philosophy studies since Greek time have been strongly focused on a probably unsolvable question on the free will. On the one hand, scholars support the idea that human beings, as such, have freedom over their actions, also in order to imply a responsibility over such actions. On the other hand, the world and consequentially human beings and their acting and actions may result mechanistically subdued to determinism of the nature, in a bundle of chained relations of cause-effect (O' Connor, 2000). Kant, in his whole philosophy production was deeply concerned about this fact, even though his point of view has been seen as controversial (Mele, 1995). In the first Critique (Kant, *Critique of Pure Reason*, 1781/1899), Kant assumes a precise position in favor of a mechanist structure of the world. However, already in relation to the third antinomy¹, it is possible to see kind of fissure in the granitic conviction of a mechanistic world (Vaida, 2009). Indeed the antinomy states that “[Thesis]: *Causality, according to the laws of nature, is not the only causality from which all the phenomena of the world can be deduced. In order to account for these phenomena it is*

¹ Kant is one of the first author that has developed such philosophical concept. An antinomy is condition of incompatibility of laws. This contradiction cannot be either easily solved because one law would exclude the other however neither of them can be displaced (Al-Azm, 1972).

necessary also to admit another causality, that of freedom [...] [Antithesis]: There is no freedom, but everything in the world takes place entirely according to the laws of nature.” (Kant, *Critique of Pure Reason*, 448^A476^Bff.). Oppositely in the second Critique, Kant assumes a completely different position talking about moral and ethical behaviors guided by practical reasons. At the central stage, Kant put exactly the freedom as driving force, and the inquiries of final purposes (Allison, 1990). However, this “fracture” is possibly recomposed with Kant’s final critique that, among other scopes, clearly addresses a unifying vision of freedom and nature thanks to the third faculty of the human spirit that is the judgment (Bruno, 2010). In particular, Kant identifies two types of judgment determinant and reflective (*CoJ*, 5: 386-389). The former is the traditionally way of judging where universal concepts are applied to particularities of reality, following a pure deterministic approach. Instead, a reflective judgment is the opposite process where peculiarities of reality are connected with universals given by the pure reason. Thus, the subjectivity of the “judging” agent in this matter has a predominant role and each individual may find his/her own solution that at the end must match some kind of *a priori* rules (Arendt, 1958). However, a reflective judgment is carried out through confrontation and dialectics and it is not derived from pure *ratiocinium* (ratiocination).

Such judgment is able to understand nature (reality) as finalistic, despite being not as such intrinsically. Indeed, the human intellect cannot work in any other way but this; we need to give a “sense” to everything to understand it, even if probably this final purpose does not necessarily exist. However, this finalistic dimension is also an expression of determinism as it is determined by the structure of the human thought (Al-Azm, 1972; Allison, 1990; Vaida, 2009; Bruno, 2010). As premised, we acknowledge the fact that such brief presentation of the dichotomy of freedom and nature is incomplete and far to account for all theoretical implications it contains. However, in relation to the purpose of the paper, the dichotomy

allows us to introduce and translate a bland form of the “two-aspect” approach to the self of the agent. Despite this approach is potentially disputable in absolute philosophical terms (e.g. Vaida, 2009), we consider it very useful in terms of opposition of different “spheres” of the self. We may think about the self as a tension: on the one hand an *autos*, representation of the desiring side of the self and expression of the intellectual freedom. On the other hand, a *nomos*, representation of the regulating side of the self and expression of a determinism coming from nature. The emancipation (satisfaction) is exactly an increasing in “auto-nomy” as balance between the two, voluntary left with a hyphen to differ it from the traditional concept of self-legislation. Together *autos* and *nomos* carry out essential functions of the self that taken as a whole may be seen as a meta-function related to managing the “desire’s arising”. Typically, pushes coming from *autos* try to overcome a state of need, but at the same time, an *autos* without rest would lose his freedom again becoming “slave of the desire”, pathologies such avarice or nymphomania. Having desires or having direction coming from them, are conditions not sufficient for emancipation that to be achieved requires also correct acting and actions. Thus, if the subject does not want to fall into pathology, s/he needs a kind of *nomos* to properly relate to contingencies of reality. The *nomos* acts as a regulator of behaviors and actions, disciplining the *autos*, and thus discovering enjoyable ways to fulfill the desire (Lottin, 1942). On the contrary, a *nomos* too restrictive in terms of abiding by rules risks disheartening vital “sparks” of *autos*. This condition reduces the auto-nomy and satisfaction too, depressing and annihilating the desire. In this work, we adopt a perspective of the anthropological philosophy rather than a psychological approach to describe the dichotomy². Following such perspective the self can be understood as a system that connects

² Despite the preference of this work for a position associated to the anthropological philosophy, a parallelism, probably quite rough, can also be made considering concepts of the psychoanalysis. Freud (1910) considers the structure of the self as formed by three parts: *Id* that contains basic instincts of conservation and strong emotion; *Super-ego* that represents the social and psychological infrastructure that allows to the self to be related to the rest of the world; *Ego* that is the internal personality that functions as balance among the two. To make a parallelism maybe some facets of the *Id* belong to the *autos*, but this is a quite reduction view of the *autos* we are

it to the world and other agents. This system is open as much as *autos* seeks for satisfaction of the desire outside the self. The external orientation of *autos* is normal because pushes of desire arise from a state of need/necessity, thus the self cannot compensate this lack autonomously. Nevertheless, the system (or the self) needs also at a certain point to be closed, in order to avoid a situation in which the self gets lost in the *mare magnum* (vast sea) of possibilities. *Nomos*, indeed, confers such a closure when it finds rules, laws, instruction that can translate an ideal possibility into feasible directions. The auto-nomy is achieved when this system of openings/closures finds an idiosyncratic equilibrium suiting for contingencies of reality. This equilibrium directs the desire to potentially achievable goals, suggesting also steps to be taken to reach them.

3.2 The Profiles of Acting

The second dichotomy regards the dimensions of acting. In particular, we refer to profiles of action following Aristotelian division into *praxis* and *poiesis*.

Unfortunately, modern world is completely different from the classical one for several reasons and this discrepancy may heavily impede a simple application of such categories today. First, the contempt shown from ancient philosophers toward the “work” would be inadmissible; today the situation is rather the contrary posing as a central stage of the society exactly such scope. Secondly, the scientific method based on theory and empirical proofs has an epistemological dimension of driving results completely different from the traditional contemplative method. For Aristotle exists different types of reasoning (*NE*, VI, 1139a–1141a). A theoretical reasoning (*theoria*) connected to the intellectual virtue of *episteme* and *nous* that together represent *sophia* (or theoretical wisdom/reason), and two non-theoretical

talking about, because desire is not only guided by instincts. Super-ego may be seen as *nomos* but even here super-ego in the more traditionalist Freudian literature seems to be hetero-directed (by society, experience etc.) while in our case *nomos* has a definitely more internal aspect. Finally, auto-nomy or satisfaction is a balance of the two aspects inasmuch an equilibrated ego is a result of a congruity of *Id* and *super ego*.

reasoning: one practical reasoning or *phronesis* applied to *praxis* to determine how to act morally; one technical reasoning (*techne*) directed toward an external entity or production-oriented, as what happens in *poiesis*. Despite lexical similarities of these archaic terms with those of modern languages their meanings are actually very distant. *Theoria*, often translated with theory, concerns discovery of truths that are unchangeable and things that ought to be in a particular way, i.e. universals or ultimate truths. These inquiries have definitely nothing to deal with “theory”, nor its “application, confirmation, or falsification” as modern world has learnt to understand it (Carr, 2004). Third, with the arrival of the tertiary and quaternary, production industries have reached a high degree of immateriality, rendering difficult a univocal assignation of the verb doing, usually applied contexts of *praxis*, and making, usually referred to *poiesis* (Ciappei, 2003). Also, some authors have questioned the appropriateness of the translation “doing” and “making” for concepts of *praxis* and *poiesis* (Squires, 2001; 2003; Sennett, 2008).

In order to explicate this dichotomy, we will later use interpretations and in particular evolutions taken by studies of philosophy of education. The action model of Leontjev (1978), contrary to Aristotle’s thought, sees each action or act as an interplay of subjects, activities and objects, the latter considered as general outputs. With a little conceptual leap, Volanen (2012) interprets *theoria* as first thinking related to a state of being of the subject, *poiesis* as performance, and *praxis* as conducts and related reflections. Especially the latter point of view is largely shared among scholars (e.g. Broadie, 1991; Squires, 2003). However, considering the education field as central topic of the paper, we prefer to stick to the traditional dichotomy *praxis/poiesis* for several reasons. On the one hand, usually education is more likely to directly affect conducts, so *praxis*, rather than being, considered as *theoria* (Kristjánsson, 2005). However, reiteration of conduct for a sufficient period of time may influence the character and in turn the more profound thinking. Also, there is not a large agreement upon

the fact that *theoria* can be really translated as the self of the subject its “being”. Especially regarding philosophy of education, many authors tend to refer to *praxis* as activity of thinking deeply embedded with subjectivity (Dunne, 1993; Kristjánsson, 2005). Even with a different basis, Broadie (1999) too states, that *theoria* and *praxis* may be seen as similar. The two kinds of reasoning just diverge in reason of life dimensions, the latter acted upon by the philosopher, the former by the politician. For all these reasons, we consider *praxis* as the highest profile of action/acting with the highest level of creation of meanings. Probably this perspective of *praxis* has some degrees of overlapping with *theoria* in a modern sense.

In our vision *praxis* responds to demands of meanings during action/acting and it is related to the humanistic capacity of acting in reason of objectives. *Praxis* makes possible to interpret what is experienced by the subject and thus to determine agent’s own objectives and values. We may see as *praxis*’ effects of an action/act its reflection on personal mood as disappointment or happiness, an increment of tacit knowledge etc.

On the other hand, a simple consideration of *poiesis* as production may be reductive (Squires, 2003; Sennet, 2008). As examples of activities of *poiesis*, the very same Aristotle cites medicine (*NE*, VI, 1180b13-1181b3), sailing, and poetry that are rather difficult to be intended as a mere application of thinking to an end. In this case, a kind of “acquired knowledge” has to be elaborated before being applied and this reveals a mediate variable in-between (Broadie, 1991). Yet, a mere execution that just points to an end is almost never preferable, purely related tradition concept of making or *poiesis*. Without any kind of “curiosity” in relation to why of acting, properly related to some kind of *praxis*, the agent would end in a deep sense of alienation (Sennet, 2008). In order to take into account also such issues and as other authors did, we consider pragmatic philosophy, with Peirce as its main supporter (1905, 1965), as a modern “interpretation” of facet of the traditional *poiesis* and a bridge to let enter such activities with full right in the philosophic debate (Sennet, 2008;

Volanen, 2012). These philosophers convey the idea that theoretical and practical reasoning were in many aspect similar and act on abstraction (Broadie, 1991) while a thinking should be directed toward “real” effect of action and acting (Moore, 1985). Thus, *poiesis* especially in a modern world, can be understood as composed of two levels (Arendt, 1994)³.

The upper level, that we may call *pragma* (fact) governed by a new kind of virtue the “*phrometis*” (*phronesis* and *metis*), a “shrewd wisdom”. The myth of *metis* is even older than Classical philosophy, she was “mother” of Athena (goodness of knowledge), who was devoured by Zeus in order to absorb her faculties, but through a stratagem she could survive originating the daughter directly from the head of the assassin. *Metis* is “intuition, shrewdness, prediction, self-confidence, subterfuge, resourcefulness, an instinct for of opportunity” coupled with technical skill and experience (Detienne, Vernant, 1977). *Pragma*, thus, fills gaps between *praxis* and *poiesis*, coupling logic of goals and values with logic of technical efficiency and effectiveness.

The lower level of *poiesis*, instead, presents the height for the production of energy, typical values for controlling actions and lesser values related to the development of latent meanings. In this level, *poiesis* becomes almost as to execute, generally conditioned by a bounded rationality and a given setting of the context and thus it simply “functions”.

3.3 A recomposed model of agent-acting

Apart from description of dichotomies, we may also construct a model to explain the relation agent-action. To such a scope, we may cross our philosophical variables in order to obtain a matrix with four quadrants: *praxis-autos*, *praxis-nomos*, (*pragma*)/*poiesis-autos*, (*pragma*)/*poiesis-nomos*.

³ Arendt (1994) in particular individuates two categories the activities of *poiesis*: labor activities that concern behavioral outputs, while work is associated with a traditional concept of making.

Figure 2 ABOUT HERE

First quadrant is referring to orientations of desire. This orientation, at highest level or *praxis*, indicates conducts to be taken in order to satisfy a desire. Consequences of such conducts are as well mostly internal and directly affect the sense of wellbeing of the agent itself. Thus, preferences are here shaped in terms of goals and consequential feedbacks coming from real experience of such goals. This represents also a highest level of freedom that gives a self-direction for the agent. In the second quadrant such preferable goals are stressed under a first kind of restrictions given by the internal structure of the agent itself. The agent may have a set of preferable goals but during the selection of potential best conducts are faced “restrictions” that may hinder a correct development of the conducts. Thus, this dimension is a mental order that must be given to the conduct, in order to coherently trying to pursue it. Here works also the ethic of the subject and its character dispositions; the self tries to match his beliefs with its conducts, recognizing preferred conducts as suiting for his own self-description. These two quadrants refer to the very mental and internal structure of the acting that to become effective has to be articulated in a more concrete level of acting as (*pragma*)/*poiesis* context. Also at this lower level acting of (*pragma*)/*poiesis* inasmuch as in *praxis*, the agent experiences a tension between goals and means. However, this tension is issued in order to produce modifications of the external world; seeds of real actions are created at this level. The self in the third quadrants takes care of “translating” potential preferred goals into objectives and micro tasks. Such objectives are simple in terms of a general complexity but nevertheless they add problems in terms of “practical implications” such as coordination of sub-objective and task, coherent behaviour with regarded to the general goals etc. This function is basically a propelling function of the self. Finally, in fourth quadrant, the self looks for resource to attain

to objective, finds technique useful etc. In this way the self organizes its acting with order and non-chaotic procedures.

4. Interpretative Model

4.1 Interpretative model

In this section, we will apply our philosophical framework in relation to the entrepreneurial education, explicating how it may represent a conceptual “compass” for teachers and curricula developers too. Our idea of an entrepreneur is inspired to a new kind of “entrepreneurial Renaissance’s man” that blends a “technician” with a “thinkers” forming an “active thinker” and a true leader who can inspire the whole organization. To use the words of Mintzberg (2004: 64): *“Everything that every effective manager does is sandwiched between action on the ground and reflection in the abstract. Action without reflection is thoughtless; reflection without action is passive”*.

From the entrepreneurial literature, as presented before, the first concepts considered are those about the content of the entrepreneurial education, as hard core (science) and soft core (art) of entrepreneurship. Then, according to the interpretation of entrepreneurial event model, in order to stimulate students’ intentions a combination of credibility, as desirability and feasibility, and propensity act is required (Shapero, 1982; Krueger, Brazeal, 1994). A complete and holistic model needs to simultaneously take into account all these facets and to do so we use our philosophical analysis.

We may suggest that the bundle of skills forming the soft core of entrepreneurial education is associated with and impacts on students’ subjectivity in particular shaping and confirming conducts, viz. *praxis*. As we saw in the philosophical discourse, a satisfactory conduct is obtained with an increment of the auto-nomy, in other words, when a preferable behavior, oriented by *autos*, is recognized as a viable alternative, acting of *nomos*. This condition is

almost to say that a behavior, to be at least tentatively pursued, has to be desirable and feasible at the same time (Shapero, 1982; Krueger, Brazeal, 1994). Thus, we consider possible to say that the soft core of entrepreneurial education is intimately tied to the task of forming ideas of credibility. This consideration is quite reasoned because bundle of skills and traits contained in the soft core of entrepreneurial education is strongly subject-orientated and its aim is that of promoting entrepreneurial mind and mindsets (Hood, Young, 1993; Jack Anderson, 1999; Liñán, 2004). We can so present of first relation in entrepreneurial education: *Praxis* → Soft core of entrepreneurial education → Credibility in terms of Desirability and Feasibility, and postulate this proposition:

Proposition 1: A “good” entrepreneurial program needs to impact on students’ conducts and subjectivities. To fulfill such condition it is necessary to act upon the formation of a bundle of contents, skills and traits related to the “art” of entrepreneurship. Yet, this “soft” core must tend to modify both preferences of students, as desirability of the entrepreneurial behavior, and criteria and methods to recognize as viable such preferences, as feasibility of it.

On the other hand, we may also suggest that skills of the hard core of entrepreneurial education and training are definitely practical-oriented, capable of producing effects and of effectively modifying a situation and pursuing an entrepreneurial opportunity. This context is basically the profile of acting that we described as *pragma* and *poiesis*. *Pragma* and *poiesis* foster further the acting of the subject, translating what has been set at the level of *praxis* into real actions. This process is obtained thanks to a reduction of abstraction into more concrete objectives. This condition offers an orientation for acting too and an ordinate searching for means in relation to such objective that is giving an order to acting. So, in entrepreneurial terms, skills belonging to the “hard” core of entrepreneurial education may encourage

propensity of students to concretely pursue an opportunity. This final consideration is also quite sounded because this core of the entrepreneurial education prepares students to real-life problems offering techniques and operative habits to start and manage a venture (Morris *et al.*, 2013).

The second relation existing in entrepreneurial education is: *Pragma/Poiesis* → Hard core of entrepreneurial education → Propensity to act in terms of strategy (for objectives) and organization (of actions and means). On this line we may postulate this proposition

Proposition 2: A “good” entrepreneurial program needs to impact on students’ ability of concretely act. To fulfill such condition it is necessary to act upon the formation of a bundle of contents and skills related to the “science” of entrepreneurship. Yet, this “hard” core must aim to both defining strategies, as orientation and objectives for acting, and organizing methods, resources and means to attain such objectives, as order of acting.

Thus, we assume that entrepreneurial education has a mixed nature that mediates between two extremes (as e.g. Kristjánsson, 2005): education as a *techné* thus *poiesis* (Squires, 2001), when we consider the hard core of this education; or as *praxis* (Dunne, 1993) when it is oriented to soft skills and to forming entrepreneurial experience. Yet, entrepreneurial education has also other two functions: orienting desire and acting, influencing desirability and strategy; ordering criteria to recognize opportunity (feasibility) and methods to pursue it (organization). We can finally state a comprehensive proposition that is:

Proposition 3: A “balanced” entrepreneurial program aims to impact both on conducts and on acts. To fulfil such condition it is necessary to act upon contents of “art” and “science” of entrepreneurship, specifically modifying preferences and criteria for conducts and defining strategies and organization for acting.

Figure 3 ABOUT HERE

4.2 Components of the model

To clarify our point of view, we consider useful to describe each component of our model. We reported some example of skills, competences and contents that may belong to the components of a balanced entrepreneurial program. Before moving further, we need to make some clarifications. First, we reported *only* some example easier to identify and such lists are not exhaustive. One of the advantages of our model is exactly that has been drawn from a theoretical standpoint and is generalizable even beyond these demonstrative contents. Second, many skills and competences may span over more than one component. However, also this condition does not hamper the validity of the model.

Personality

In this specific area are located all those conscious and unconscious processes of stimulation, e.g. for dissatisfaction or emancipation, what the subject desires. Surely this is most difficult area to develop and to be tested. In this area, it is possible to find many aspects of the theory of traits and Big Five Theory, (McCrae, Costa, 1992): openness, conscientiousness, extraversion, agreeableness, and neuroticism. In addition to this, not in entrepreneurial terms, we would have self-motivation, risk taking and common sense. The literature has provided different solutions to the problem (e.g. McClelland, 1973; Boyatzis, 1982; Spencer, Spencer, 1993). We may think that by acting on seemingly unrelated parameters is possible to increase quality and help to let flourish some already present but hidden factors e.g. tolerance for the ambiguity (Harmeling *et al.*, 2009). Also *Experiential learning* seems a suiting method to

develop this area, bringing to the attention of students successful stories of entrepreneurs (Boyd, Vozikis, 1994; Eriksson, 2003). Story-telling of such “epic” life-experience may render people aware of their hidden motivation and desire (Rae, 2005). This type of teaching can help students in the process of emancipation, reshaping their conducts which find here its reason to exist. As a general list, we can also ascribe to this area: emotional stability (Leiba-O’Sullivan 1999; Tannenbaum, Yukl 1992); social skills such as social adaptability (Hood, Young 1993; Vesper, McMullan 1988); resilience, tenacity, perseverance and vision (Morris *et al.*, 2013).

Meta-competences

One of the essential tasks of this component is a primary selection of preferable behaviors coming from personality. Selection is based on values and criteria of the subject that s/he wants to adopt as a conduct. Therein the sense of limits lies and makes possible to avoid misleading behavior as megalomania or doing anything disconnected from moral structure. Practical reasoning or *phronesis*, as in the later Latin tradition *prudence*, is one fundamental quality identified by occidental ethics to allow a calm and rational research of means for action considering also contingencies (NE, VI, 1144a 8-11).

In this section resides also the opportunistic mentality that deals to translate what subject desires in a way to achieve that desire, picking out alternatives and forming the preferred base for acting, a very remote seed. This area is strongly influenced by *locus of control* in order to evaluate feasibility of a project or entrepreneurial action. Indeed, a person who does not believe to be able to affect reality or at least control its contingencies will have an aversion to risk. This consideration leads him/her to discard desirable ideas considering them as not feasible. So this is the part of the practical thinking enact acting and empowerment, using the words of Kant (1959: 85): “[...] is man’s emergence from his self-imposed nonage. Nonage

is the inability to use one's own understanding without another's guidance. This nonage is self-imposed if its cause lies not in lack of understanding but in indecision and lack of courage to use one's own mind without another's guidance".

We consider belonging to this area also the concept of Kirzner's (1973) alertness as the intuitive ability to recognize market opportunities where others have not seen anything (Shane, Venkataraman 2000), or the more general opportunity recognition ability (Chandler, Hanks 1994; McMullan, Long 1990; Mitchelmore, Rowley, 2010). We can also include relationship building, interpersonal relations, communications, conceptualizing, personal commitment, building and using social networks (Man *et al.*, 2002).

Strategy

In this area we can find a part of managerial activity that translates chosen preferences into seed of action/acting. In particular, skills that put an entrepreneur at the center stage of his venture. This component is related to application of strategic thinking to action aiming to concrete and desirable outputs. Qualities such as *charisma* cannot be inserted in this area because psychology believes it to be innate but is possible to educate in communication, justice, and human relationships that often make a successful organization as a good management. From an economic point of view, it is possible to insert the capacity planning of future projects with business plan or the ability to attract new investors with communication skills such as elevator pitch making entrepreneurial action desirable to external subjects. Adopting the vision of the planning school (Armstrong, 1982; Karlsoon, Honig, 2009; Bewaio, 2010), this area is also connected ability of the subject in formulating strategies. In particular, planning performs two essential issues that an entrepreneur has to bear: the fund raising and communication to stakeholders. In addition, planning shall act as the self-assessment of abilities. An explicit planning can define first and stress later, paths and

objective come to a deeper understanding. Finally, the planning fulfills a function that needs to be internalized by every person who aspires to entrepreneurial behavior: a roadmap for testing and setting an effective behavior (Ford *et al.*, 2007).

In this area, we can also find functional business skills like risk management/mitigation (Freel 1999; Hofer, Charan, 1984).

Organization

In this section we can find the most technical competences, e.g. finance and cash management, operation management, accounting and engineering. Here we may have a more tradition way of teaching based on explicit and codified knowledge.

These types of skills are those that allow a firm to operate as a system; however such “knowledge” would be blind without the other three. Tools are central topics here: to support business decisions, to help in a calculus and various technical means to generate value. In this particular case, the entrepreneur will be asked to select those projects that will bring more value to the company. In our vision this area is the “hardest” of our model. As an example, we can associate to this quadrant: general managerial skills such as accounting, budgeting, organization of function and coordination of work, allocation of resources, and process of delegation (Chandler and Jansen 1992; Colombo and Grilli 2005; Orser and Riding 2003).

4.3 Process Approach

In this type of representation is it easier to understand the magnitude that each object under analysis, in particular, it is immediate to note that the personality and meta-competences will impact on the decisions and the assessment that each person will have on many aspects of her life. As we move lower, we reach a component of extreme specialization that is relating to a very managerial area. In the middle, strategies may stand between pure thinking and pure

action. With this point of view, education in the upper and middle parts of the pyramid is necessary so that the potential of the subject can be transformed into generating value action.

If we look at the issue in philosophical terms, we can draw a parallel with the Aquinas' philosophy that identifies ends, means and execution (Aquinas, *Summa Theologiae*, 1947)

The process starts from the ends to be achieved and proceed with a top-down approach, first identifying the means necessary for the fulfilment of our action then switching to the proactive phase in which it shall implement the plan (Grassl 2010). On the other hand, there is also possibility of a bottom-up logic that reverses the process.

This vision of the model allows us to go beyond the static use of the matrix; grasping the scope of education in proactive terms as a continuum which leads thought into concrete action and with a retroactive loop action can inform conducts.

4. Final conclusions

Many studies have been focused on mapping necessary entrepreneurial and business skills and competences (e.g. McMullan, Long 1987; Hood, Young, 1993; Morris *et al.*, 2013).

This work has been created in a provocative way to stimulate a reflection about how much the philosophical thought appeals the entrepreneurial studies. To such a scope, we propose that a model based on a reconstruction of two famous different philosophical theories. We reinterpret the dichotomy freedom versus determinism (Kant, *Critique of Judgment*, 1790/1914, *CoJ*) and the Aristotelian profile of as *praxis* and *poiesis* (Aristotle, *Nicomachean Ethics*, 1968, *NE*).

Elaborating on these concepts, we aimed to give reply to our fundamental research question: *Does a possible general model for entrepreneurial education exist?*

Proposing again our finale proposition (3) we may say that: a “*balanced*” entrepreneurial program should impact both on *conducts* and *acts* of students. In doing so, it is necessary to

teach both “*art*” and “*science*” of entrepreneurship, specifically *modifying preferences* and *criteria* for conducts and *defining strategies* and *organization* for acting.

We have created a “scorecard” to support development of coherent entrepreneurial programs. This model shows in a clear way, “existential and pragmatic” needs of interested people and students to become potential entrepreneurs. Each component may also be used also by wannabe entrepreneurs to test possible personal lack in each area of the model and acting consequentially. For example, talking about personality, the potential entrepreneur should have at least a vague idea of some question: Which goals this acting would satisfy if it accomplished? Which kind of disagreement it can cause? This conduct will have reflex on my personal mood? The same results may be achieved through other ways? For each of these questions a subject should be able to answer; If not s/he should searched for a solution, taking proper courses, training, making experience etc.

Second, this model being deductively developed on philosophical bases may open new streams of research in the entrepreneurial education. Indeed, usually models that deal with skills and contents of entrepreneurial programs use inductive methods of enquiries.

The biggest limitation of this study and of its model is the same that can be stated as main advantage: a strong reduction of the complex world of the relation agent/acting. If on the bright side the resulted model of our paper is quite simple to be understood even from not expert; on the contrary the model has been created posing strong philosophical limit to the theoretical debate. However, this model could represent an easy framework for empirical studies that could assess also the empirical validity of it.

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LIST OF FIGURES

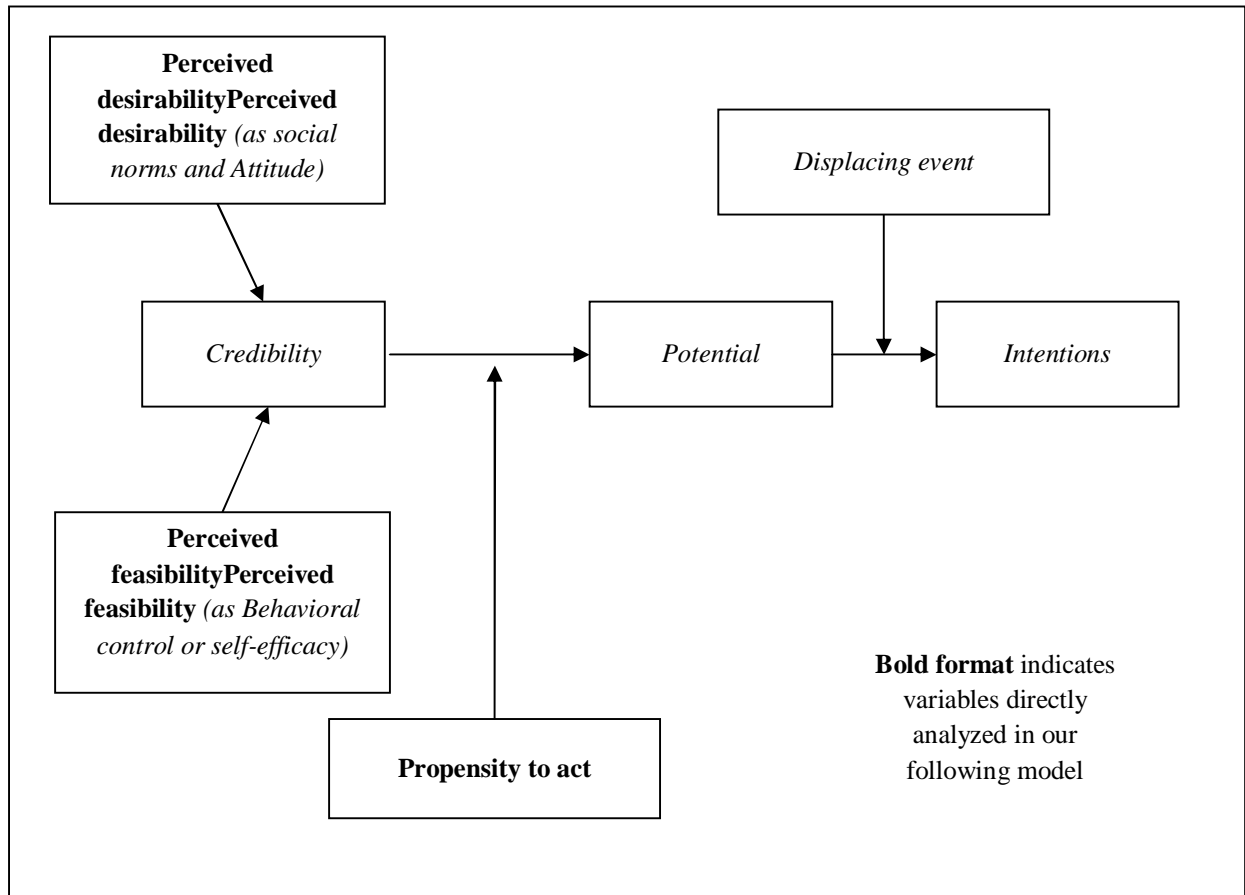


Figure 1. Integration of the Entrepreneurial Event model with the Theory of Planned Behaviors (Adaptation from Krueger and Brazeal, 1994: 95)

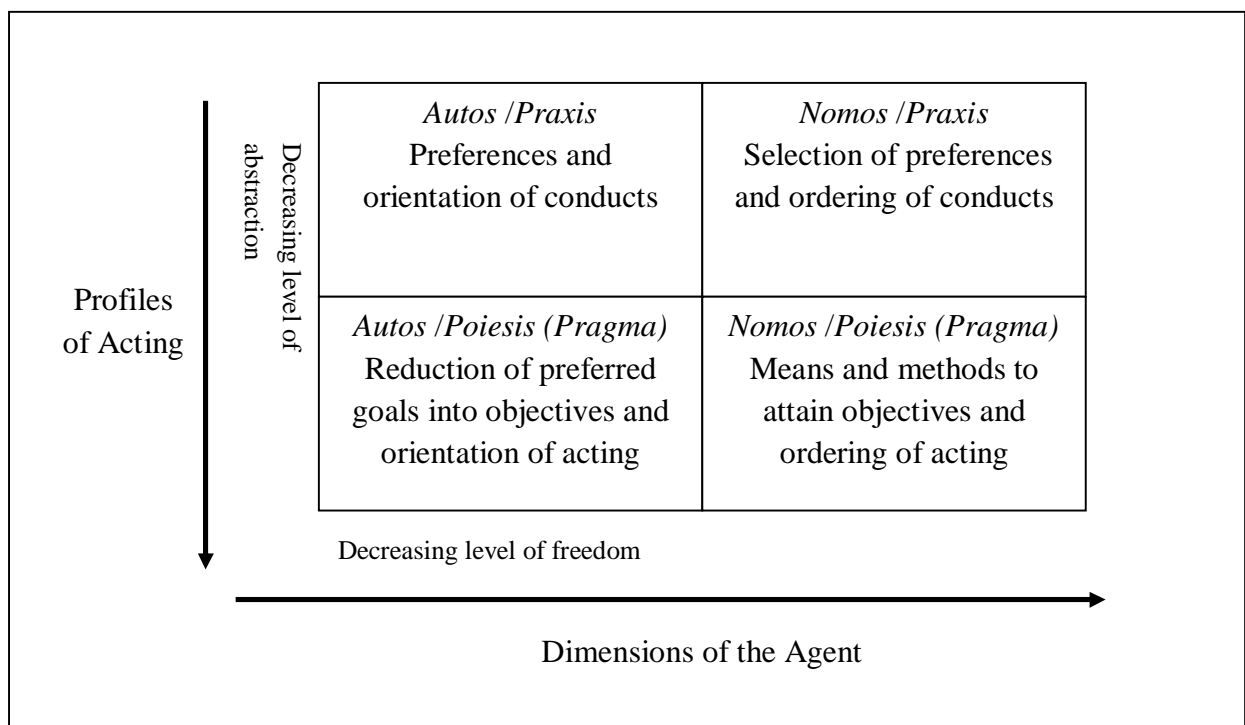


Figure 2. Philosophical construction of the relation agent/acting

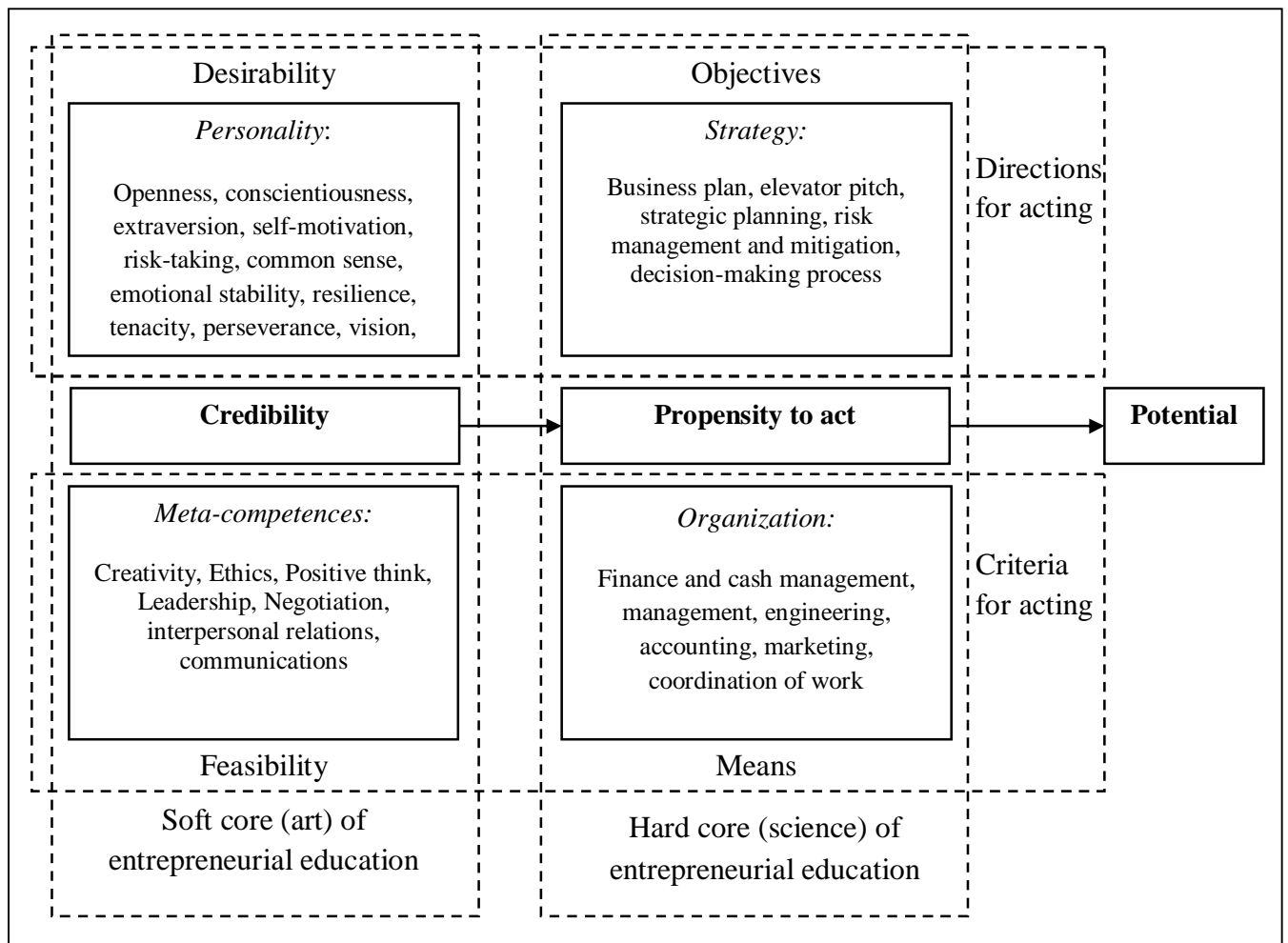


Figure 3. A Holistic model for entrepreneurial education

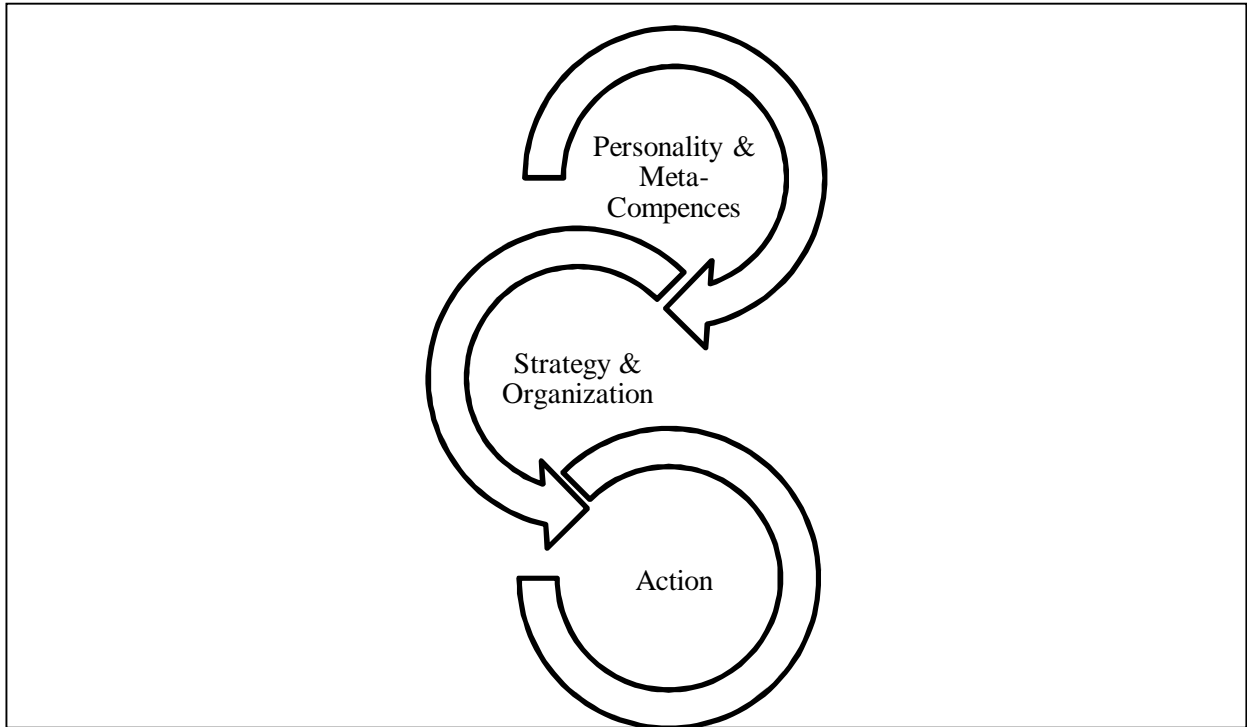


Figure 4. A process approach to entrepreneurial education