

Article

Systemic Approach to Entrepreneurial Identity and Its Educational Projection

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Abstract: Although it has acquired an extraordinary social diffusion, entrepreneurial education has a certain lack of definition associated with its conceptualisation and meaning. It seems clear that entrepreneurial education is linked to the economic sphere, but it is not limited to the productive sector. The idea of entrepreneurial education has been progressively enriched, being linked to the development of skills for personal growth and social progress. Further clarification of the meaning and scope of entrepreneurial education is, therefore, needed. Thus, it is relevant to analyse entrepreneurial identity in the context of personal identity via the theoretical–explanatory investigation of a model developed in two phases. A critical analysis leads us to study the different factors that intervene in the configuration of this identity in an attempt to construct a systemic map of entrepreneurial action. Between the private and the public, entrepreneurs seek new ways of facing the challenges of our times, trying to find new ways of regenerating the links between individuals and institutions and with society in general. In this sense, we show how entrepreneurial educational ecosystems acquire relevance insofar as they consider the subject as the principle of action rather than merely the result of various contextual factors.

Keywords: entrepreneurial identity; entrepreneurship education; entrepreneurial education; philosophy of education



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1. Introduction

The interdisciplinary nature of the entrepreneurial phenomenon does not facilitate the advancement of research in the methodological field, and new perspectives need to be introduced to change the nature and understanding of entrepreneurship education in society [1]. Internationally, various terms have been used to conceptualise the relationship between entrepreneurship and education. Among others: “enterprise education”, “entrepreneurship education”, “entrepreneurial education”, “enterprise and entrepreneurship education” or “enterprise education pedagogy” [2–5]. Possibly, the most recurring expressions are “entrepreneurship education” and “entrepreneurial education”, but perhaps the most significant aspect of this terminological plurality is that the semantic field involves much more than the economic or technological dimension. Rather, it suggests that business acumen is a necessary but insufficient foundation for sustained human development. Thus, “entrepreneurial education” is also associated with personal development, with the gestation of new citizenship that demands more entrepreneurial capacity in the search for access to welfare, social inclusion and employability.

Entrepreneurship education can nowadays be considered a part of the education system across Europe, but it is not without controversy. For wider acceptance, entrepreneurship education implemented in educational institutions is expected to serve various stakeholders, not only students and teachers but society itself. Some studies show that both teachers and students question entrepreneurial education [6–12]. Analyses are needed,

which, in light of a holistic perspective, examine the attempts to make sense of it by aligning the various interests involved in its practice and impact. Thus, some research calls for more investigation into the relationship between training and social entrepreneurship and productive agencies in the context of implementation [13].

But the procedural and methodological problems do not prevent us from detecting what is perhaps the main problem of entrepreneurial education today: the teleological problem. What do we propose with entrepreneurial education? The notion of entrepreneurial education has been progressively broadened [3,4,14–16], adding to the classic meaning related to the creation of companies and businesses and the development of generic skills associated with the projection of life in countless situations. Today we are in a better position to understand that an authentic entrepreneurial education aims to develop the skills and mentality necessary to carry out entrepreneurial actions from the generation of creative ideas. An entrepreneurial culture is undeniably linked to economic growth but also, essentially, to personal and social growth. However, most studies, regulations, pedagogical proposals and diverse training experiences continue to insist almost exclusively on its productive aspect. Entrepreneurship is a multidimensional phenomenon that is also connected to the achievement of values related to responsibility, project management and the construction of ethical criteria. The generation and transfer of knowledge, which promote the productive fabric and create structures that favour innovation, should take into account this multidimensional nature of entrepreneurship.

Serious thought is needed concerning these limitations of current entrepreneurial education, which reflect shortcomings in its field of action but also in its ultimate meaning. Although, theoretically, there has been progress, there is still a long way to go in terms of the practical extension of entrepreneurial action. But, above all, with regard to the very meaning of entrepreneurial action, the debate is still wide open. Some progress has been made with the introduction of the construct “entrepreneurial identity”, but its use is generally limited to the business sphere. It is necessary to critically examine this issue, not so much because the construct is considered inappropriate, but because of the meaning usually given to it. It is also problematic to fit together the set of elements involved in the creation of this entrepreneurial identity capable of providing a plausible and systemic vision. Hence, the emergence of the “entrepreneurial education ecosystems” as a concept that favours the understanding of interactions between contextual and personal elements in the development of entrepreneurial identity (see Sections 6 and 7).

Two main objectives emerge from the problem posed: (1) to elucidate the meaning and scope of the construct “entrepreneurial identity”; (2) to design a systemic map of entrepreneurial action based on identity.

2. Methodology

The framework of conceptual contributions made by MacInnis [17], understood as a detailed description of the types and entities around which conceptualization can occur, and the classification of Jaakkola [18] allow us to define this study as a theoretical–explanatory investigation of a conceptual model, in which its focal phenomenon is the ecosystem of entrepreneurial education based on the person. In relation to the research design, we have proposed a biphasic study. Thus, according to decision-making procedures based on sequentiality and priority [19], we define the temporal sequence as the delineating phase (F1) and the summarizing phase (F2), developed using deductive and inductive reasoning, respectively [20]. In addition, it was considered that both phases have a primary priority, resulting in the following protocol: F1 → F2.

The F1 was developed from March to August 2022 and consisted of qualitative research from an interpretative–hermeneutic approach, considered the most appropriate for conceptual and theoretical research that seeks to describe and understand the theoretical and practical requirements of the entrepreneurial education ecosystem, with its complexity of the internal and external elements integrated. In this phase, a study based on academic literature has been carried out, which arises as a development of textual criticism and

seeks reflection to propose lines of improvement in entrepreneurial education based on the advances that can be derived from the models analysed. As selection criteria, the theories and models linked to entrepreneurial identity and to the areas of the entrepreneurial ecosystem, previously used as method theories in the study of entrepreneurial identity education [21,22], were adopted, identifying the following method theories: Theory of Planned Behavior [23], Ecological Model of Human Development [24], Quintuple Helix innovation Model [25], Capacities or Human Development Approach [26,27], Theory of Perspectives [28] and Theory of Structuring [29] (see Sections 3 and 7). Subsequently, the foundations, elements and constitutive processes of the selected method theories were interpretatively analysed by each researcher participating in this study. Once this analysis was performed, a sharing was carried out, where the foundations, elements and constitutive processes of the method theories were defined, submitting each one of them to debate and reflection. As a guiding principle to develop the debate, the relevance or value of the entrepreneurial identity was established as the central nucleus of the model for development, considered as the origin of the action, and not only as a result of the structure.

In the F2, carried out from September 2022 to February 2023, the information analysed in the F1 was synthesised, following two subphases. In the first one, the data on the foundation, elements and constitutive processes of the method theories were catalogued into three categories: internal elements of the person, external elements of the person and dual elements of the structure. The first category refers to the central level of the model or entrepreneurial identity, related to the theories of Planned Behavior [23], the Capacities or Human Development Approach [26,27] and the Theory of Perspectives [28]. The second category refers to the contexts where the person operates (micro, meso, exo and macro), linked to the Ecological models of Human Development [24] and the Quintuple Helix innovation Model [25]. The last category is linked to the interaction between entrepreneurial identity and structure, corresponding to the Structuring Theory [29]. It is in this last category where a higher level of reflection was produced since it involves the analysis of the structure and the agency without giving prevalence to any of them. In the second subphase, the researchers jointly prepared three conceptual maps, one for each category [30], showing the arrangement and relationship between its components (foundations, elements and processes). Based on these conceptual maps, the researchers concentrically mapped the model, from the internal elements of the person (entrepreneurial identity), as its central core, to the external and more distant elements of the person (micro, meso, exo and macro), delimiting the different levels of the system and establishing the concepts and their relationships at each level, according to the models and theories studied [30] (see Section 6) (Table 1).

Table 1. Description of the research.

Type of study	Theoretical–explanatory investigation of a conceptual model	
Focal phenomenon	Ecosystem of entrepreneurial education based on the person	
Phases	F1. Delineating	F2. Summarising
Reasoning	Deductive	Inductive
Sequence	F1 → F2	
Priority	Primary	
Date	From March to August 2022	From September 2022 to February 2023
Processes	Interpretative analysis Sharing between researchers	Information cataloguing Design of conceptual maps Model mapping

3. Emergence of Identity in Today’s Fields of Entrepreneurial Education

In recent years, there has been a particular concern to relate the processes of formation of entrepreneurial skills to the deepest layers of the individual, generating a discourse

on identity as a manifestation of this concern. Thus, we can find various studies that try to highlight this need to focus our attention on the configuration of identity beyond the knowledge and skills required to achieve acceptable entrepreneurial skills [31–34]. This treatment of identity is generally confined to the entrepreneurial domain [35] and is therefore often taken to refer to an individual's identity as an entrepreneur. This claim is more in line with a more in-depth approach to entrepreneurship, offering new training possibilities for industrial, commercial and productive circles.

Entrepreneurship, however, is not limited to the world of work, production and economics. Entrepreneurial education originated in the business and economic sphere but has progressively become associated with the intellectual, social, emotional and ethical development of the individual [36,37], as the notion of entrepreneurial action has been extended to other areas. Nevertheless, entrepreneurial individual conduct has been linked to the infiltration of neo-liberal ideology in all areas of society, as can be gathered from the Foucauldian critique [38], according to his technological vision of power, provided through a network in which the individuals always are on the situation of suffering or exercising it. The *Homo economicus*, overlapped with the *Homo juridicus*, according to Foucault's analysis, which means taking measures of the government practices conform with the effectiveness, not the rights. This is how logic has permeated private spheres and has redefined the political economy as a foundation to make society an economic market. In this way, the interests of individuals have become a productive nucleus that allows the generation of new competitive and entrepreneurship forms. Humans being entrepreneurs of themselves are individualising identity devices that inwardly and outwardly maintain an instrumental reifying relationship in terms of investments and economic calculations [39]. The Foucault critique towards this government technologies, however, leaves open the question of how we can be governed in an alternative way. Ultimately, it shows the relevance of freedom not only for its central role in control mechanisms but also for its essential importance in the self-creation process as a subject. Freedom has constituted the target of all the controls but, at the same time, is the centre of the processes of subjectivation. Such processes are constantly undergoing intervention, but their subjective nature, singular, complex and unique shows that freedom continues to be a relationship between governors and the governed and cannot be completely covered. Liberty, in spite of the multiple processes of power of coercion, is an unrepeatable process in each subject and appears as a continuous process of self-reinvention [40].

As the recently deceased Alain Touraine [41,42] pointed out, at the present time, with globalisation, each one of us, immersed in the production and mass culture, strives to step out of them and self-build ourselves as being the subject of our own life. A major change has taken place, now symbolised by the "cultural paradigm". This new order bears the risk of the value of the contingency, somehow imposed by the unlock institutional mechanisms referred to by Giddens [43]. No facet of our activities is based on a predetermined direction; everyone can be affected by contingent events. The "life politics" defended by Giddens [29] refer to political matters derived from the realization processes of the individual in the current sociocultural contexts between the processes of self-realization and their influence on global strategies. In this sense, the interpretation of ourselves can and should be carried out as an imagination of social actors externally undetermined due to the impersonal logic of markets, technological change or the horrors and calamities that have ravaged and still devastate the planet. It is a recognition of the subject, that is to say, of the conscience construction against the unconsciousness. Being human implies coming with personal initiative, entrepreneurial capacity in its broader sense, with that capability of self-determination without which we renounce our human condition.

This approach assumes that material issues are relevant and can explain a great part of human behaviour, but it does not reduce them. Some authors [44,45] have revealed the loopholes in a simple interpretation of the economic theory, deepening the existence of cognitive distortions and risk management. The expected utility, which depends on the absolute level of wealth acquired, is in contradiction with the "prospective theory" o

“theory of perspectives”, evolved by the Nobel Economy Prize Daniel Kahneman and by Amos Tversky [28]. This theory brings to bear the individual valuation of the gains or losses that may have regarding a certain reference point; in other words, the preferences are set based on a situation and under specific circumstances and not in absolute terms. People not only yearn for externals, but they also require favourable assessments of their dignity or value, which amplifies our interpretation towards a dimension more properly linked to what we could consider their identity [46].

Not exclusively confined to economic growth, a new conception of development that aspires to be really “human” seems to reconcile in a better way with a holistic gaze centred on the subject as a social actor, as a being capable of taking initiative in their life, with enterprise capabilities in the different dimensions of their existence. The so-called “capability or capabilities approach” gives rise to new ways of understanding and addressing development [26,27]. In this approach, education acquires renewed protagonism in development, both as a means and as an end, because the individual has needs but also values and, particularly, as Amartya Sen has stated, values the ability to reason, evaluate, act and participate. New metrics for human life are needed, better synchronised with individual perceptions about development and progress [47]. It is about going from one model that revolves around production to another centred on wellbeing. There is a need to relate material wellbeing with incomes and consumption, emphasising the real prospect of families, giving importance to the distribution of incomes, consumption and wealth, globally assessing the inequalities and evaluating sustainability. Amartya Sen precisely opened a gap in the traditional notion of development when he enunciated the idea of “human capacity” as something different from what we know as “human capital”. While this focuses on the increase in production possibilities, the perspective of capacity is centred on the possibilities that individuals have to live the life they consider most appropriate and to increase their real options of choice. Thus, we conceive development as an expansion process of fundamental liberties that implies meeting the purposes by which development acquires relevance and not only by some means that play a leading role in the process. In this way, entrepreneurial abilities are linked to the need for the existence of social justice that makes them possible [48], ensuring that all people enjoy equal rights, among which is the power of being or not an entrepreneur, but it should be guaranteed in any case with the possibility of personal growth to the entire population. The approach of capabilities presents an evaluative and ethical vocation [49], supported by the notion of human dignity, trying to articulate economy and ethics in the thinking about development.

This extension of the entrepreneurial phenomenon makes it possible to contemplate entrepreneurial identity from a perspective that is more appropriate to its complexity and linked to the philosophical consideration of personal identity. An overview of the formation of entrepreneurial identity in the current scientific literature offers a heterogeneous panorama in which a diversity of spheres and dimensions can be appreciated [50]. In fact, entrepreneurship can take place in various fields of life (scientific, artistic, sporting, etc.). Social entrepreneurs, who have become increasingly prominent, aspire to produce a positive impact on society, above or beyond the logic of profitability. Entrepreneurship can contribute to the construction of freer, more critical, creative and supportive citizenship. Among the multiplicity of research, experiences and projects on entrepreneurial education, one can distinguish their emphasis on the importance of individual and social initiatives and the ways of channelling it more adequately, with the moral dimension acquiring particular relevance.

We should, therefore, bear in mind that there are critical studies about the entrepreneurship phenomenon [51], which have emphasised the existence of entrepreneurship as a sign of a certain disengagement from social justice and the weakening of the economic and social balance, forcing individuals into an imposed responsibility from the instances of power who are not interested in the common good [52]. However, following this logical reasoning, the very existence of wellbeing remains questioned. Nevertheless, noting from successive reports on human development, most people in the vast majority of countries

have improved their levels in human development; but we must also acknowledge the existence of a widespread feeling of precariousness about the livelihoods, environment, personal safety and global policy. There is an impression of a high vulnerability and a threat of a dramatic step backwards. The unequal distribution of the assets of society only adds to the injustice and the generation of certain structural violence. Thomas Piketty [53], distancing from the traditional positions of the right and the left, has shown the intensification of inequality due to the different unfair tax reforms, claiming a better distribution beyond abstract principles of social justice. Martha Nussbaum [49] has insisted that a just society is one that generates the conditions and the underlying policy objectives in order to make the development of a dignified human life possible, and Amartya Sen [48] has suggested thinking with greater objectivity about the available real options to struggle for greater social justice. Deep in the stated criticisms of the entrepreneurship phenomenon, we may find a discussion between a speech focusing on the “structure”, a social matrix that not only limits us but also configures us, and a discourse more focused on the “agency” in the reflective direction. The complexity of reality perhaps invites us to “another gaze”, which is neither about contemplating the agency against the structure nor the other way around. Anthony Giddens [54] tried to reconcile the agency with the structure, the individual with the society when developing the idea of the “duality of the structure”. In his theory of structuring, the limits of the actions of individuals that, in structuralism, functionalism and Marxism, appear narrowed until their disappearance due to external factors become wider. Socialization fuses constraint and empowerment; individuals produce, whether they know it or not, forms of life through which they reinvent the inherited conditions. The “duality of the structure”, therefore, incorporates both the subjectivity and the conditioning of external forces. Charles Taylor [55], with his concept of “social practices”, does not in any way reduce the person to an epiphenomenon and vindicates the need to recognise the agency as something formed by a network of practices and communities, which emerges from and belongs to them. The person, however, as a being aimed at the development of practices, acts in and on the world.

From a humanising perspective, capable of anchoring entrepreneurial processes in the dignity of people and the communities they form, entrepreneurial education faces the challenge of generating and implementing training models in which business projects can be combined with developmental or socio-cultural projects, putting knowledge into action via the realisation of ideas in specific services and products. Entrepreneurial education acquires singular importance in the process of generating and transforming personal, social and business projects. Ultimately, entrepreneurial education is oriented towards the configuration of entrepreneurial identities, not only business oriented but also distinguished by the mastery of resources that allow them to adapt creatively to the new demands of the world of work and the specifically innovative attention to socially and culturally burning problems while, at the same time, providing for personal growth. Thus, we can understand entrepreneurial identity as the principle or foundation of the set of entrepreneurial processes that people can put into practice.

4. Establishing an Entrepreneurial Identity

Although it has traditionally been considered that identity is a consequence of training or is developed during this process, there are reasons to believe that identity may be a prior element that contributes to the realisation of the intention to become an entrepreneur to the perceived usefulness of training and to the intensification of interest in participating in entrepreneurial processes [56]. In this way, people with a certain entrepreneurial identity tend to be more inclined towards entrepreneurship. This idea does not invalidate the shaping effects of training and experience once the interest in entrepreneurship has been expressed but, rather, provides us with a critical reconsideration of the different elements involved in the origin and development of entrepreneurship. In this sense, identity offers us two possible faces: as a property or as a process [57]. It follows that entrepreneurial education should pay special attention to the formation of the entrepreneurial identity of the

person from childhood to the cultivation of autonomy and personal initiative. Furthermore, we can also deduce the need to recognise the complexity of these formative processes.

Entrepreneurial identity is a complex construct with multi-disciplinary roots associated with a range of different conceptual meanings. A review of the scientific literature seems to indicate the need for critical studies of entrepreneurial identity capable of analysing its shaping dynamics [58], distanced from all kinds of easily formulated causalities. Individual and institutional identities can drive entrepreneurial actions, containing the complexity of elements involved in them. In short, entrepreneurial identity can be a substantial antecedent of entrepreneurial intention. Nielsen and Gartner [59] have delved into the different aspects and tensional forces that occur in the process of creating entrepreneurial identity. These authors insist on the need for educational institutions to adopt a more serene vision of the complexity of this whole process, for which they need to perceive themselves as platforms for exploring identity and not as mere propaedeutic systems for the world of work. The numerous training proposals to improve entrepreneurial skills, without taking into account the identity of the participants, run the risk of disassociating the experience and the action from the identity itself.

In a similar way to what happens with the development of personal identity, entrepreneurial identity is shaped by the experience acquired, where human interaction is essential, as is the narrative that ends up giving it meaning [60]. Although until now, research has focused mainly on the business sphere, the analysis of entrepreneurial identity highlights its links with other areas of entrepreneurship and with the configuration of one's own personal identity. The socialised self, defined by its roles with and in relation to others, does not completely encompass identity any more than cultural belonging does. Identity is dynamically delineated by a bundle of identifications that reveal contrasts between the cultural or statutorily assigned and the intimate aspirations that are associated with the person's projects. The recognition of this formative complexity implies the fundamental consideration of the strictly personal in the forging of identity, which, paradoxically, cannot unfold without the active presence of the social.

The current strength of identity denotes a transformation of the modes of social cohesion, of human relations and of the meaning of the symbolic. This structural mutation, repeatedly noted by eminent sociologists of our time [42,61–63], is in the direction of the vindication of subjectivity over mere collectivity and citizen participation in public affairs [64]. The entrepreneurial identity, framed within one's own personal identity, echoes these claims. Its configuration takes place between the private and public spheres, in the complex interactions that are forged between them, thus revealing the actor and entrepreneur with a capacity for initiative and cooperation. The enterprising person seeks new ways of facing challenges, including the community in which they have to develop their projects, trying to find ways of regenerating the links, never free of difficulties, between the individual and society.

It seems necessary, therefore, to consider the training processes within the framework of the configuration of an entrepreneurial identity which, in turn, is part of the construction of individual and collective identities [65]. Thus, if special attention is paid to the formation of the entrepreneurial identity as the basis of the educational action of entrepreneurship, it is not difficult to see how this formative process is structured as a network, both at the individual and social levels. Indeed, at the strictly individual level, entrepreneurial potential constitutes an internalised network that depends on the efficient interaction of certain attitudes towards entrepreneurship, certain social norms and perceived behavioural control. From a social point of view, entrepreneurial education also offers a reticular image of the problems and strategies capable of increasing entrepreneurial potential and generating a firm and relatively stable entrepreneurial culture. Families, educational institutions, various social entities, business organisations, administrations and other agencies virtually involved form a powerful and potentially educational network [66].

5. Systemic Complexity of the Formative Processes of the Entrepreneurial Identity

Entrepreneurship training has evolved significantly in recent years, being identified as a competence and potential rather than a mere skill. As such, it encompasses many different behaviours, attributes and skills, including empathy, creativity, decision making, opportunity identification and some specific training, such as financial literacy [67]. The European Entrepreneurship Competence Framework (Entre-Comp), formulated by the European Commission in 2016, underlines that entrepreneurship focuses on all aspects of society, not just business. Thus, entrepreneurship is defined as created, financial, cultural or social value. The relevance of entrepreneurship as a key facet of life suggests the reinvention of the procedures in which it should be taught, giving rise to the need to propose pedagogical models capable of facilitating the exchange, flow and generation of knowledge between educational institutions, productive institutions and communities [68]. Current research is exploring models capable of meeting the increasingly complex demands of today's societies.

However, when dealing with any developmental gap, it is usual to find a solution as quickly as possible. The urge in the search for responses does not facilitate finding truly effective solutions beneficial for individuals and communities. In this way, quite often are promised magic solutions to meet the challenges ahead, moving on quickly to the proposal of programmes that have not been duly verified. Social networks and digital technology offer new tools that, although having advantages in a few things, really amplify the "problem of the magic bullet" due to the belief that the induction of an idea can be sufficient to have a successful impact. This strategic shortcoming is relatively frequent in the entrepreneurship field [69], which requires reflection and analysis. Adjustments in the processes and in its expectations are required so that they can increase its favourable impact. Nevertheless, the theory of educational change has highlighted that both personal and social meanings reciprocally feed into each other or weaken when there is no smooth interaction between them. Liability affects both strictly personal and collective fields, but its development depends on the search for meaning in a complex framework. Hagg and Kurczewska [70] focus on the relevance of theoretical and philosophical roots of the experience in learning, emphasising the importance of several of the following factors in their proposal of empirical phenomenology: how the learning process and the development of entrepreneurial knowledge take place; the influx of continuity in formative experience; the transcendence of having enough time to process the experience and generate various perspectives, as well as being capable of interacting with the environment; finally, the value of a genuinely significant experience.

The discovery of the dynamics that generate effective changes is not only due to the ideas that promote them but also the impact they produce. And that depends on the existence of a sufficient number of individuals committed to change. Michael Fullan [71] developed the rule of 25/75, namely that twenty-five percent of the solution lies in having valuable ideas related to where the change is headed, and the remaining seventy-five percent lies in finding out how to implement them in each particular context. In the context of a socially responsible market economy, education systems can contribute to the configuration of an entrepreneurial culture from transversality to interdisciplinarity [72]. This direction begins to be meaningful for the transparency in the formation of active citizenship in the configuration of the future of the society that inhabits and enterprises significant initiatives. Such initiatives are essential for the development of the regions and the countries, contributing to social cohesion, especially in the least developed countries, and generating training that diminishes employment and raises the welfare state, with special care for the disadvantaged people [73].

The demand for highly skilled and socially committed people is perhaps the greatest challenge on the European Union's agenda. Training institutions, particularly higher education institutions, are therefore required to develop academic and environmental education programmes capable of enhancing the levels of competencies related to entrepreneurial, autonomous, creative, communication and information management thinking. This requirement

is crucial for these institutions, not only in their educational, research or innovation development but also in the impact they can have on regional development. More entrepreneurial institutions are needed so that entrepreneurial education can be organised more dynamically, taking into account research and the real needs of the natural, economic, social and cultural environment to which they belong. With this orientation, strategies are presented that are likely to meet the current demands of the third mission of the university [74], which is currently struggling to meet the challenges that lead to the improvement of the entrepreneurial culture as a way to prosper in an equally entrepreneurial society.

These implications can be seen in proposals of various kinds. For example, associated with global climate agreements and the European Union's focus on climate-neutral targets for 2050, the development of competencies linked to the so-called "green transformation" has come to the fore. Mets et al. [75] have proposed a conceptual model for applying entrepreneurial education to the design of an integrated transdisciplinary and ecologically engaged framework. In this sense, entrepreneurial education is valued as a key to developing an active, informed, responsible, sustainable and ecosystem-oriented living citizenship orientation in the education system. Building an entrepreneurial culture involves both internal and external innovations.

In this sense, in order to give continuity to the development agenda after the Millennium Development Goals, the SDGs (Sustainable Development Goals, 2015–2030), as an initiative sponsored by the United Nations, count on education as the most valuable pillar for the formation of citizenship, including practices that promote environmentally sustainable attitudes and behaviours. The SDGs and EU strategies aim to address the environmental challenges facing the world today. As part of meeting these challenges, both the UN and the EU emphasise the development of an entrepreneurial education capable of building a uniquely innovative society. In this sense, the need to link entrepreneurial education to sustainable development has been stressed, as, for example, Seikkula-Leino et al. [76] argue in recent research on the importance of teacher training from the primary school level, focusing on how the Nordic curricula (Finland, Sweden and Iceland) involve sustainable and pro-environmental entrepreneurial education.

The proclivity towards the construction of an entrepreneurial culture can be increased via a better understanding of the informal context in which the practice of entrepreneurial education takes place. A discursive analysis centring on the generation and regulation of collective identity based on focus group discussions in two Finnish higher education institutions [77] has shown that the construction of entrepreneurial identity is due to having the right mindset to cope with an uncertain and rapidly changing working life and to break free from old moulds associated with work. Involving all members of the institution in the construction of a collective and coherent identity governed by shared values and a positive mindset implies understanding the institution as a social community while moving away from merely functional interpretative reductionism. A strong collective identity and a sense of commitment to cooperation can mitigate the pressures of being entrepreneurial and taking charge of one's own life.

The possibilities for social and professional mobility are increased within and outside institutions that practice people-centred entrepreneurial training, individually and as inter-subjectively participating members of the institution and beyond. The time people spend in the education system has steadily increased during the contemporary era, becoming a truly universal phenomenon. Education and its development can be considered a relevant indicator of the well-being and sustainable development of any country. There is often a paradoxical situation in this respect, where high expectations in education are confronted with a poor assessment of the education system [78]. Social capital, characterised by a high level of trust in education, does not quite meet the foundational expectations of entrepreneurial identity, which requires the establishment of certain levels of social cohesion both inside and outside organisations, far removed from the depersonalisation entailed by purely instrumental developments. Recently, Dahlstedt and Fejes [79] have analysed the entrepreneurial education discourse in Sweden. Based on a genealogical approach, they

draw attention to how this discourse is shaped in the current curriculum, considering its evolution. Focusing on two fundamental events, responsibility and problem solving, and tracing these events over time, the exploration illustrates how the current discourse on entrepreneurial education shapes a specific type of citizen, responsible for themselves and having a constant willingness and desire to learn, capable of adapting to permanent future change. They oppose this model to the one that emerged in the sixties and eighties, more inclined towards solidarity and with problem-solving skills to actively participate in the development of society. The reality, however, rather than paralysing disjunctions, seems to call for formulas capable of reconciling, in a common unity of destiny, the apparently divergent, from an entrepreneurial approach capable of integrating the individual and the collective, the personal and the social. In the knowledge society, organisations need to implement innovative projects aimed at achieving the greatest possible benefits for society. Higher education institutions acquire a singular relevance insofar as they can establish projects linked to the improvement of society. In this sense, the greatest challenge that arises may lie in overcoming the communication difficulties between the different actors that make up the ecosystem within which the entrepreneurial identity is generated. Two ideas seem necessary to face this challenge: to approach entrepreneurial education from models that prioritise the substantial construction of identity and that are not limited to merely functional approaches to specific learning; and to imaginatively broaden the horizon of entrepreneurial events, not circumscribed, as is often the case, to the sphere of the company and the world of work. The creation of these ideas involves prioritising educational action in people, who ultimately constitute the dynamic cores of all institutions and organisations.

6. Entrepreneurial Education from a Systemic Perspective

The individual traits and characteristics of the entrepreneurial personality have been the subject of numerous studies in the field of entrepreneurial education [80–84]. The characteristics of entrepreneurial personality have been profusely studied based on the theory of personality traits. Coon and Mitterer [85] define personality traits as stable and innate qualities that a person shows most of the time [86]. Scientific evidence does not indicate with sufficient clarity the value of personal characteristics as a predictive factor for entrepreneurial initiative. This approach brought to the entrepreneurship field leads us into the classical dilemma of whether the entrepreneur is born or made [87]. In the educational key, entrepreneurship would even mean an object of teaching and learning, which might contribute to the promotion of entrepreneurial actions. In this regard, studies suggest a robust connection between education and entrepreneurship [88–94]. The so-called personal characteristics are not static qualities but rather a dynamic principle that implies the possibility of personal choice. Thus, we consider the entrepreneurial identity as a selected personality based on the aspirations of the individuals within the limits of human action [60,95]. However, spatial and temporal coordinates are essential for the formation of entrepreneurial identity since identity is not formed in a vacuum but is in interaction with the environment. In this way, the construction of entrepreneurial identity is linked with biographical self-reference processes related to experienced episodes through a lifetime (temporal dimension) and the contexts where the person develops (spatial dimension) [96,97]. The configuration of the entrepreneurial identity is a dynamic process in social interaction, where the narrative story becomes a connecting thread granting a certain consistency and sense to the very existence [98]. As Nussbaum [26] indicated, internal capacities are not enough; personal functioning is also required in close relation to the contexts in which the subject develops. Focusing exclusively on endogenous factors would imply a profound undermining of the formation of entrepreneurial identity. In order to understand entrepreneurial identity, an ecological perspective is needed, which investigates the influence of exogenous factors on the formation of entrepreneurial identity. Assuming approaches from the Theory of Planned Behaviour [23], behavioural intention depends crucially on the judgements we make about people, things or situations, judgements that highlight the perceived social pressure to perform the behaviour. Thus, an ecological view

of the development of entrepreneurial identity will allow us to glimpse the relationships between exogenous and endogenous factors in the formation of the entrepreneurial domain of identity [24].

This ecological perspective on the constitutive processes of entrepreneurial identity is embodied in the concept of the entrepreneurial ecosystem (EE). To the classic economist conception of the EE, with the argument of more sustainable and fairer growth of humanity, we incorporate the notion of human development, transcending mere business creation linked to the generation of economic wealth, and we add the cultural, political and social development of citizenship. Thus, we define the EE as a set of agents, resources, organisations and institutions, whether business-related or not, interconnected and organised in a formal or informal way to create, strengthen and maintain human development in its different aspects [99]. The functioning of the EE is realised via a series of patterns of direct or indirect interaction between its different components, enhancing cooperation, communication and access to knowledge and resources between the different parts of the EE [100]. Over time, increasingly complex explanatory models of the EE have been developed, incorporating different components of the EE, such as formal and informal networks, support systems, governance, markets, finance and economics, regulation, human and social capital, education and training [101–104].

Although each element has its own relevance, education is a central component of the entrepreneurial ecosystem since educational development and its impact contribute decisively to the creation, empowerment and consolidation of values, attitudes, behaviours and skills that constitute the entrepreneurial identity [105]. Although the explanatory models of the EE consider entrepreneurial education as a sub-system due to the characteristics, complexity and extension of education, it could be conceived as an ecosystem with its own entity. Thus, the concept of the entrepreneurial education ecosystem (EEE) arises, understood as the set of interactions between personal components and contextual elements that originate, develop and promote educational actions in favour of the development of the entrepreneurial identity. Thus, the EEE are not only promoters of the entrepreneurial identity but also recipients of the transformations that the subjects themselves may originate within it. In the EEE, people are not characterised by their lack of action; on the contrary, the construction of the entrepreneurial identity involves personal action on the EEE itself, favouring its adaptation and temporal continuity.

7. Identity as the Core of the Entrepreneurial Education Ecosystem

Bibliometric studies provide an overview of how entrepreneurial ecosystems evolve [106]. EEEs play an important role in the development of entrepreneurial ecosystems, and although they have clear economic reminiscences, our understanding of the EEE will focus on the formation of entrepreneurial identity. This perspective distances itself from simple productivity or economic growth and is more oriented towards parameters linked to sustainable, dynamic and equitable human development. As indicated by Sen and Kliksberg [107], from an ethical perspective of the problems of globalisation, people come first. With this person-centred vision, the EEE tends to awaken personal initiative, considering the subject as a principle of action rather than as a result of contextual conditioning factors. A holistic consideration of intentional human action allows the integration of various disciplines. In this sense, we can recognise Austrian economists as the referents of the idea of the capacity of action on development, as Núñez y Núñez-Canal [108] have shown. Hayek [109] conceptualised entrepreneurship as a factor of innovation. Mises [110] insisted on a concept of human action that entails the open framework within which entrepreneurial decisions are made in association with the idea of the entrepreneur as an actor regarding changes that occur in the environment. This process of focusing on the incentives that are capable of generating or creating is what Kirzner [111,112] termed the “alert process”, which is characterised by the finding of opportunities especially in situations of uncertainty and imbalance. The fundamentals about how the EEE impacts entrepreneurial identity are based on Bronfenbrenner’s Ecological Model of Human Development [24] and the Quintuple Helix model [25]. The first model refers to the

development of conduct within the environments defined by a set of structured subsystems, serial and in a concentric way from the most concrete to the most abstract level. The second is a theoretical and practical model for the sharing of knowledge resources based on social subsystems that allow for generating and promoting sustainable development of society and the strengthening of the welfare state via knowledge and innovation [25].

In the EEE focused on the formation of entrepreneurial identity, two levels are differentiated according to the influence on the development of the entrepreneurial domain of identity [113]. On the one hand, the extensive level refers to the external and more distant components in relation to the constitution of the entrepreneurial identity. This level has an indirect influence on entrepreneurial identity and is made up of the macro-, exo-, meso- and micro-subsystems. On the other hand, the concrete level addresses the contexts and formative elements that come into direct contact with the person, mediating directly in the configuration of the entrepreneurial identity. At this level, the formative components of direct interaction are located in formal, non-formal and informal educational spaces, influencing the ontogenetic system as the central nucleus of the rest of the systems. The EEE is understood as a complex and heterogeneous structure with multiple and different degrees of connection and abstraction that enables a dynamic and interrelated functioning of its different components in favour of the construction of the entrepreneurial identity. In the following, we will map, from the most concrete to the most abstract, the five constitutive systems that favour entrepreneurial action from the EEE identity (Figure 1).

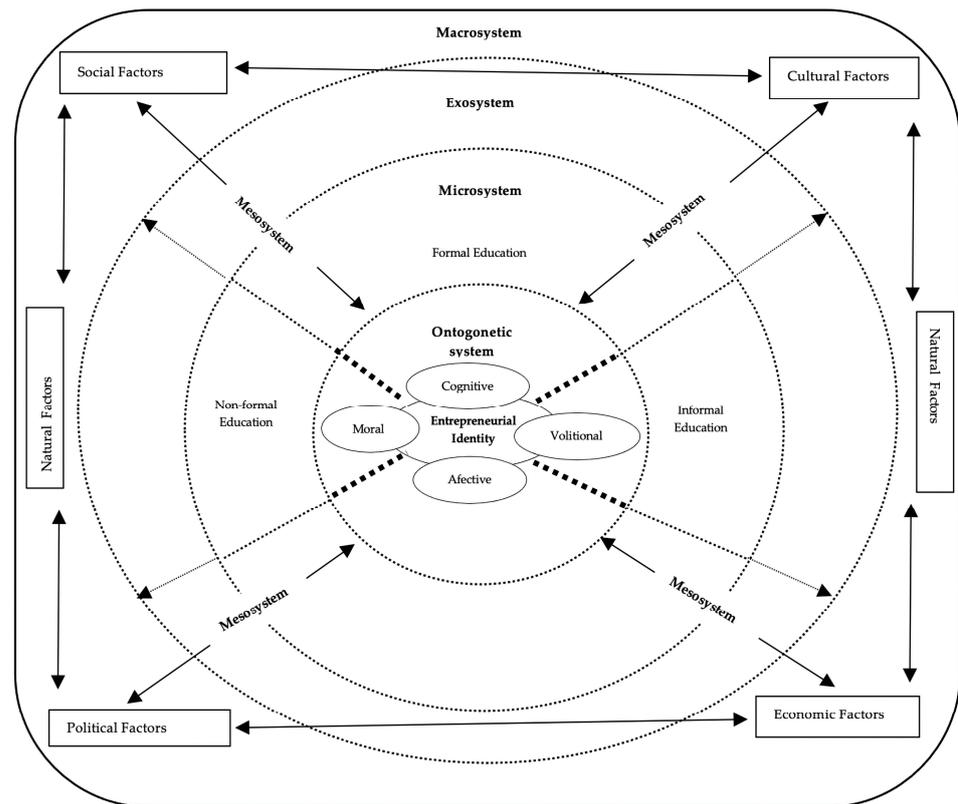


Figure 1. Entrepreneurial educational ecosystem focused on entrepreneurial identity. Note: Adapted from the Ecological Human Development and Quintuple Helix models. The entrepreneurial identity has been added, specifying its components and the fields of formal, non-formal and informal education. Therefore, the graphic representation has been configured by concentric circles and not by helixes, keeping the entrepreneurial identity as the central core of the model. The dashed arrows signify permeability and the solid arrows represent the incidence between model elements.

In the first place, the *ontogenetic system* is considered the central nucleus of the EEE and the priority level on which the rest of the sub-systems are organised. The ontogenetic

system is defined as the set of cognitive, affective, moral and volitional characteristics that can be educated in favour of an entrepreneurial identity, taking into account the personal, productive and social domains (Table 2).

Table 2. Components of the entrepreneurial identity.

	Components	Authors
Cognitive components	Evaluation Decision making Creation Planning Recognition opportunities	Mensah, Asamoah, and Jafari-Sadeghi [114] Rosendahl et al. [115] Mitchell et al. [116]
Emotional components	Consciousness of own emotions and of others Valuation of own emotions and of others Regulation of own emotions and of others Expression of emotions	Mortan, Ripoll, Carvalho [117] Baron [118] Cardon [119] Lackéus [120]
Moral components	Moral consciousness Moral reasoning Moral judgement Moral anticipation Moral mobilisation	Kaptein [121] Yurtsever [122] Kalshoven et al. [123]
Volitional components	Self-regulation Self-determination Uncertainty resistance Maintenance of the targets Monitoring of action Orientation of action	To et al. [124] Nyock [125] Hikkerova [126] Kuhl [127]

The results of previous research [128] indicate the existence of personal indicators related to cognitive, affective, moral and volitional components. Among others, the most relevant personal indicators of entrepreneurial identity refer to creativity, achievement orientation, problem solving, leadership and personal control. The formation of these indicators raises the idea of an active subject with the capacity to act freely and responsibly in favour of good human development. The age characteristics, the degree of development and the maturity of the subject will condition the education of these personal indicators of entrepreneurship.

Secondly, the educational microsystem is the level closest to the individual and is made up of the everyday contexts in which the subject develops and interacts directly. In the EEE, we differentiate three types of microsystems according to the criteria of systematisation, organisation and educational intentionality, such as, on the one hand, the *formal educational microsystem*, that is, the educational programmes and subjects related to entrepreneurial education that are taught in the different stages of the formal educational system. On the other hand, the *non-formal educational microsystem* would be defined as the training actions that are not integrated into the official curricula of the educational system. In this microsystem, entrepreneurial training actions are heterogeneous and are aimed at covering specific entrepreneurial needs. At the same time, the educational agents within this microsystem are also diverse since non-formal education is provided by public and private entities and institutions at the local, regional and national levels. Finally, the *informal educational microsystem* would be formed by all those relationships and interactions that, although not having an explicit educational intention, would affect the development of the entrepreneurial identity. As a whole, the microsystemic components, whether formal, non-formal or informal are, due to their proximity to the subject, considered key elements in the formation of the entrepreneurial identity. The microsystemic incidence in the formation of entrepreneurial identity broadens the subject's capacity to participate in and modify their close educational contexts, feeding back to the sustainability of the EEE.

Thirdly, the *educational mesosystem* would comprise the set of social networks that enable the establishment of interactions between the different sub-systems that make up the EEE. These connection networks would facilitate the possibility of knowledge transfer and the flow of information between the different sub-systems. Metaphorically, the mesosystem would be understood as the thread that weaves the web of connections between the constituent sub-systems of the EEE. The creation of a dense web of connections between actors, resources, public institutions and private entities is indispensable for a well-functioning EEE. The creation of interaction networks in the EEE has extended beyond the geographic spaces themselves. The emergence of the Internet has exponentially facilitated the creation of networks at a global level, becoming a new space for interaction and promoter of the EEE. Virtual spaces in the EEE allow an infinite number of interactions and meeting points for a wide diversity of people, intertwining common interests and values for a better world.

Fourthly, there is the *educational exosystem*, understood as a sub-system outside the individual but has characteristics that indirectly affect the subject or their immediate educational environment. Recent research specifies certain variables that have an impact on educational contexts and which condition the formation of the entrepreneurial identity. In reference to the *formal educational microsystem*, in the case of Spain, we would highlight, among other things, the non-existence of initial undergraduate and postgraduate university training for future teachers related to entrepreneurial education; only the areas of economics and business teach entrepreneurship content but from an eminent economist perspective. There is the non-existence of in-service training plans for active teaching staff to cover teaching needs in this area. On most occasions, one-off educational actions are developed that are unconnected with real practice in schools. Similarly, in relation to the *non-formal educational microsystem*, we would highlight the training offered for the incorporation and maintenance of the job, made up of specific and instrumental training actions with an eminently work-related character and with no impact on the vocational and entrepreneurial domain of identity, which are so important for the creation of significant working life projects. Despite these difficulties, entrepreneurial education is being implemented in formal and non-formal microsystems, promoting entrepreneurial identity among young people as an engine for changing the conditioning factors that hinder human development.

Fifthly, with the highest degree of abstraction, we find the *educational macrosystem*, referring to a holistic space that includes the rest of the sub-systems, which is constituted by social, cultural, natural, political and economic factors specific to a given society. Its functioning is developed with an indirect influence. The macro-systemic factors gradually permeate through the different sub-systems, depositing in the subject, beliefs, values and knowledge that shape the entrepreneurial identity. Evidently, there is a variety of macrosystems depending on the type of society and culture to which they are circumscribed, with certain common patterns of internal functioning being detected in each social and cultural context. Comparative studies contrast the variability of macrosystems and their influence on EEEs. Despite the fact that macrosystems are considered structures distant from the individual, they are the origin of educational actions that have an impact on the formation of the entrepreneurial identity. As an example, in Europe, the Lisbon Council of 2000 was an important milestone for the development of the entrepreneurial culture, with important guidelines for the incorporation of entrepreneurial education in European education systems.

This systemic structure indicates that the EEE is a multi-level structure with different degrees of abstraction and direct or indirect influence on the entrepreneurial identity. Thus, EEEs have specific properties that determine their organisation and functioning, such as, first, the existence of different actors and resources involved at different levels. Second, the establishment of interactions between the actors within the ecosystem. Third, the need for the ecosystem to offer potential and diverse transferable results for the improvement of society. Fourth, the variability of the ecosystem in magnitude and location [129]. These properties operate under the principle of bidirectionality of information and knowledge

between sub-systems, either directly (concrete plane) or indirectly (extensive plane). The bidirectionality of information and knowledge is not only from the higher sub-systems to the lower ones but the ontogenetic system, the central nucleus of this systemic map, affects the rest of the higher sub-systems. The structure and relationship of the components of the EEE do not determine the behaviour of the subject (ontogenetic system) but rather propitiate its agentiality, making possible transformations in the rest of the higher sub-systems. Without the application of the principle of bidirectionality, the EEE would become a set of unconnected components in the form of a collage. Thus, the correct conjunction of the structure–relationship binomial is essential for the functioning of the EEE since its absence would call into question the sustainability of the EEE.

8. Conclusions

Predominantly, entrepreneurship has been confined to the productive sphere. However, the extension of the concept of entrepreneurship has broadened the conceptual boundaries of what entrepreneurship is and how it is formed beyond the established boundaries of entrepreneurship and economics. Nowadays, new ways of materialising entrepreneurial capacity are emerging, increasingly understood as a principle of personal action, regardless of the spheres in which it is developed. The establishment of the entrepreneurial domain of personal identity entails its consideration as a property that can be configured using different types of training processes. The substantial complexity of the formation of the entrepreneurial identity leads us to think that the formative processes must affect the deepest layers of personal identity, avoiding instrumental formulas aimed exclusively at preparation for the world of work.

The construction of entrepreneurial identity is forged in the interaction between culturally established and personal aspirations. In this reciprocity, the subject's capacity for initiative, autonomy and agency emerges, with the clear intention of overcoming the multiple challenges involved in the development of personal projects. The formation of the entrepreneurial identity as the basis of the educative action of the capacity for entrepreneurship is structured reticularly at the internal and external levels of the person. Internally, the entrepreneurial identity is constituted by a network of indicators, social norms and behaviours. Externally, entrepreneurial education is also a network with different nodes with a high educational potential for entrepreneurial identity.

Entrepreneurship has become one of the most powerful options to face the uncertain, open and changing life we live. People are called upon to be highly qualified and committed to the social, cultural, labour and political transformations of their environment. Hence, the need to reflect on the most appropriate procedures for teaching entrepreneurial education. The connectivity and interaction, which are characteristics of our society, are clearly reflected in the different educational institutions. Perhaps the main idea in this sense lies in effectively connecting the different actors, procedures and resources which have an impact on the promotion of an entrepreneurial culture. However, in research on entrepreneurial education, there is a strong orientation towards the study of the traits or characteristics that make up the entrepreneurial identity. While appreciating the interest of this perspective, it is necessary to recognise the influence exerted by contexts on the entrepreneurial education of individuals. Thus, the unilateral vision centred exclusively on the elements that make up the entrepreneurial identity, without appreciating the enriching contextual aspects, is a diminution in the understanding of how the entrepreneurial identity is configured.

From the entrepreneurial ecology and placing the person at the core of the EEEs, the aim has been to map the structures and relationships involved in entrepreneurial education. Thus, it has been proposed that the influence developed by the different sub-systems of the EEEs does not determine entrepreneurial behaviour but rather favours the consideration of the subject as the principle of action. In this way, the subject as the focus of attention of the EEEs becomes a dynamiser of the educational structures and relations of the EEE itself, favouring its adaptability and sustainability over time.

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