**Introduction: Synergies by linking**

This article aims to investigate the links between project work and entrepreneur­ship, to explore potential synergies between them through connecting academic research to practice. This involves investigating project management and entrepreneurship as research fields; and project management and entrepreneur­ship as practice. The planning and implementation of projects and acts of entrepreneurial behaviour are, in practice, both considered to be ‘ancient’ activities. Yet, surprisingly, both areas have developed quite separately in the academic literature and are relatively young within the social sciences. Entrepreneurship has been characterized as eclectic, without an overarching conceptual and coherent framework and having permeable boundaries; and project management has been called a ‘Cinderella subject’ because of immature (or even missing) theory and memes like “if you can move a mouse you can manage a project” abound. However, both areas are emerging and promising, and it is arguable that the most common characterisations are mutually valid.

Entrepreneurs act as project leaders at certain stages of running a business – starting up a business, its development, relocation, renewal, closure and/or transfer. However, the project-related aspects of the entrepreneurship process are almost absent in the entrepreneurship literature and, vice versa, entrepreneurial behaviour usually peripheral in the project management literature. Thus, in the academic literature, there are potential missing links between the two areas whereas in practical work there appears to be some organic links.

We consider the view that entrepreneurship and project manage­ment[[1]](#footnote-1) are inherently linked. As a result, we argue that there are several benefits in developing theory and practice for mutual learning. We explore whether identifying links between the two practice fields and the two research domains, and particularly cross-linkages between them, can unlock possible synergies for the development of theories and practices on both sides.

As we look into two research domains and two practice fields, there is a need to clarify what is meant by practice. According to Kemmis (2009), practice is constituted in three aspects: “sayings”, “doings” and “relatings”. These aspects comprise arrangements of language in particular discourses, actions and things in particular activities, and people in particular patterns of social relationships or connections. In this article we proceed mainly from the second aspect – particular kinds and patterns of activities and work, associating with particular “set-ups” where these activities are typically carried out. An example is the work of a conductor of a symphony orchestra – what is often compared to the work of a project manager. All symphony orchestras use a standard layout and therefore, a visiting conductor can direct the orchestra even without repetition. When needed, we also concern ourselves with social connections but we do not deepen language-related aspects. Hereby we recognise that this is a limitation, because even word “project” may have different meanings for professional “project people” and entrepreneurs.

In the next section we provide a comparative overview of the practice and academic fields. Initially, we take a closer look at the existing academic literature, trying to reveal significant ‘early’ linkages with practice. Following this, we then bring out the links between the two fields and suggest further possible linkages for mutual enrichment. Finally, we present a construct of an entrepreneurial project

**Entrepreneurship and Project Management: A comparison of the fields**

**Entrepreneurship** is considered to be an ‘ancient’ practice field. Bitros and Karayiannis (2004) analysed the texts of Athenian writers (particularly ancient philosophers including Aristotle) and concluded that ancient Athens applied a consistent policy in support of entrepreneurial activities. This can be taken as a sign that standard levels of treating entrepreneurship – the micro and the macro – were somehow already recognised in ancient times. Numerous definitions continue to exist in the literature providing an impression of diversity depending on context and this is compounded by the use of different terms such as “self-employed”, “small business owner/manager” that are often used interchangeably. An overview of widespread definitions of entrepreneurship is provided by Davidsson (2004) and even wider overview on ‘entre­preneurial’ definitions (including “entrepreneur” and “entrepreneurial” issues such as process and culture) is provided by Lundström and Stevenson (2005). As a longer discussion of definitions would not fit in the scope of this article, we will follow with the latter authors, considering it useful to adopt the process perspective. This perspective, proposed by Gartner (1989), considers emergence and evolution in entrepreneurship, particularly in the creation of new ventures. The process perspective is related to behavioural perspective, developed further by Baron (2002) and other authors. We also agree with Davidsson (2004) who notes that a good description has been provided by Drucker (1985) when associating entrepreneurship with innovative and change-oriented behaviour rather than merely starting, or running, a business.

Attempts by policy and government agencies to define entrepreneurship have tended to acknowledge the underlying concepts of ‘innovation’ and ‘change’. The definition of the European Commission (2006: 20), for example, specifies entrepreneurship as *“… a dynamic and social process where individuals, alone or in collaboration, identify opportunities for innovation and act upon these by transforming ideas into practical and targeted activities, whether in a social, cultural or economic context*.” We will follow mainly this broad definition but in doing so do not want to discredit other widely quoted definitions and properties of entrepreneurship such as new entry, creation of (new) organization, profit-seeking and risk-taking.

The significance of entrepreneurship to the economy seems to be almost irrefutable, chiefly in policy literature. However, although wide definitions of entrepreneurship are plentiful, under­standing it as a process and activity is problematic. There tends to be an emphasis on measuring business formation and numbers of Small and Medium-sized Enterprises (SMEs), rather than unpacking the processes behind the numbers. Therefore, we rely upon van Praag and Versloot (2007) in bringing out the significance (or value) of entrepreneurship (in Table 1). Most qualitative approaches have shown that SMEs and new enterprises are crucial in the innovation process, either as adaptors of existing technologies, or part of a wider innovation network, collaborating with suppliers and clients (Fayolle, 2007; Gallego, Rubalcaba, & Hipp, 2013).

In acknowledging the significance or impact of entrepreneurship on economies, most sources refer to the share of SMEs in the total number of enterprises and the contribution of SMEs to the generation of employment and GDP or value added (e.g. European Commission, 2010; Blackburn & Schaper, 2012). There are obvious reasons for this: SMEs are easily identifiable as they have clear and verifiable characteristics (as the number of employees, annual turnover). As a corollary, this often leads researchers to equate entrepreneurship with SMEs. However, this macro view may not be analytically satisfactory, or indeed reflect reality: many small businesses are not entre­preneurial in the sense of being innovative and stimulating change in the economy and society in contrast to some large organizations. Hence, we take care not to simply suggest that entrepreneurship is a function of organizational size: our definition is based on the notion that it involves change and is a dynamic phenomenon.

Thus, for the purpose of this article, we adopt a broad meaning of entre­preneurship and define it as *changes in existing practices and processes, or the establishment of new activities that lead to changes in the economy and society.*

As an academic discipline, entrepreneurship is certainly much younger than its practice. to several authors (e.g. Katz, 2003; Cooper, 2003; Lohrke & Landström, 2010), its history (in the modern sense) began in mid-20th century when Mace and Drucker with the first entrepreneurship courses. Katz (2003) provided an extensive (more than 100-item) chronology of entrepreneurship education (in the USA), starting from 1876. Murphy, Liao and Welsch (2006) presented a conceptual history of entrepre­neurial thought, discerning three major periods: prehistoric (until the end of the 18th century), economic (from the end of the 18th to the 1970s) and multidisciplinary (since the 1980s). Their historical approach has good match to the main standpoint of Stevenson and Jarillo (1990) who distinguished three main streams (also contributing disciplines) of entrepreneurship research: (1) psychology and sociology, (2) management, and (3) economics, answering three important questions – (1) why and (2) how entrepreneurs act and (3) what happens as result.

A number of academics have commented on the development of the field of entrepreneurship and its level of maturity. The scope of entrepreneurship research is apparently reflected in its breadth of agendas (Blackburn & Kovalainen, 2009). For some, the absence of clearly defined conceptual boundaries of entrepreneurship denotes a lack of maturity (Shane & Venkataraman, 2000). Without clear definitions, terminology and focus, it is argued that entrepreneurship suffers from a lack of intellectual identity and therefore, levels of theorising, hindering its legitimacy (see Busenitz et al., 2003). Characterising the field of entrepreneurship in the early 21st century, Acs and Audretsch (2003) note that it includes such a wide-ranging set of topics that it is impossible to include them all under one umbrella. Some have argued in favour of entrepreneurship as a permeable field which draws upon, and contributes to, mainstream fields (Blackburn & Kovalainen, ibid) as well as looking at empirical phenomena from a variety of disciplinary lenses (Sorensen and Stuart, 2008). This school of thought suggests that there is another way for the field to develop: to draw upon the ‘mainstream’ disciplines, such as economics, sociology, psychology, and use flavour from other business fields, such as management, marketing, finance and then feed back into such domains.

Davidsson (2003) perceived progress of the status of the field based on the growth in papers on entrepreneurship in highly respected, mainstream journals, as well as manuals and textbooks compiled, providing the field with more of a common body of knowledge. Furthermore, taking stock of European entre­preneurship research, Welter and Lasch (2008) pointed out the need to ground entrepreneur­ship research in its national context. According to their opinion, the field can benefit from accepting wider diversity instead of looking for “norm” theories, concepts and methods. Thus, we can conclude that the once ‘emerging field’ is now beyond its adolescence but has not yet reached maturity.

In addition to the issue of entrepreneurship we should point out some closely related concepts germane to this article. The first concept is *intrapreneurship* – referring to initiatives taken by employees in organizations to undertake new business activities (Bosma, Stam, & Wennekers, 2010). They noted that there is a conceptual diversity in the literature on entrepreneurial behaviour and this is reflected in the concepts of intrapreneurship.

Closely related to intrapreneurship, is *corporate entrepreneurship*. Bosma et al. (2010) defined corporate entrepreneurship at the level of organizations, referring to a top-down process (i.e. a strategy to foster initiatives and/or efforts from the employees), whilst intrapreneurship relates to the bottom-up process (i.e. proactive work-related initiatives of individual employees). The most popular research area within corporate entrepreneurship is the formation of new corporate ventures, particularly the types of new ventures and their fit with the parent corporation (Kuratko, 2007). Morris, Kuratko and Covin (2008) developed further the notion of corporate entrepreneurship, distinguishing two modes: “corporate venturing” and “strategic entrepreneurship”. The first can be accomplished through internal, cooperative, and external corporate venturing; the second through large-scale or highly consequential innovations (such as strategic renewal, business model reconstruction and the like) to sustain competitive advantage.

The common denominator for intrapreneurship and corporate entrepreneurship is obviously *entrepreneurship in existing organizations.*This may be regarded as a broad phenomenon that can be studied at the individual, organizational and macro level (Bosma et al. 2010). Yet, this leads us to rise to one more related subfield – *entrepreneurial orientation* introduced by Covin and Slevin (1991), drawing principally from the strategic management literature. They modelled entrepreneurship as firm level behaviour that is affected by external, strategic and internal variables and related entrepreneurial orientation to firm’s performance. Their ideas were significantly developed by Lumpkin and Dess (1996), pointing out five salient dimensions: autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness. Entrepreneurial orientation has also been related to market(ing) orientation (Miles & Arnold, 1991), to strategy process (Covin, Green, & Slevin, 2006), and even to time (Wiklund, 1999) through the long-term sustainability of its relationship to firm’s performance.

Overall, therefore, we argue that entrepreneurship is more than simply starting, or running, a small business. Entrepreneurship comprises a much wider range of activities. It can occur also in larger companies and other organizations, including non-profit and public bodies. It means that all organizations and most people, from a CEO to a municipal clerk, can be entrepreneurial. Moreover, such view provides place for contemporary trends like social and environmental entrepreneurship.

**Project management** also concerns an ‘ancient’ phenomenon. Throughout recorded human history working on projects has been common. Cleland and Ireland (2006) cite three types of evidence – artefacts (like the Great Pyramids), cultural strategies (like the Magna Charta), and literature/documents. All types of evidence concern the output of project work, but more recently the emphasis been on the management of projects. Examples are major civil engineering projects, such a railway construction in the 19th century planned and organized by railway engineers. It appears that engineers played an important, overall role in the development of project management conceptions. Pinney (2001) analysed the history of projects and how engineering projects have developed a special form of management, to be called ‘project management’. The best and easily understandable examples of projects and their management can obviously be derived from construction industry, which goes back to the building of the pyramids (Smith 2004). Engwall (1995) labelled these developments “the project management movement” by alluding to the development of special techniques for effective project work and to the professional associations which have become active in the project management field globally.

However, the date when project management actually became recognised as a subject field, or profession in itself, is open to debate. Artto, Martinsuo and Kujala (2006) distinguished three viewpoints to what constitutes a project: 1) tasks or phases in a process, 2) product or work break­down structures of a project, 3) temporary organizations. The three have implications for management. The first two encompass most aspects that appear in ‘classical’ understandings of a project, where prescriptions or normative issues are emphasised and also guides what is appropriate management for the project. Also, the first two comprise the notion of ‘project work’ we use to distinguish with the third viewpoint – temporary organizations – which is relatively recent and is about how projects are handled, stressing descriptions on how projects, in fact, are run by focusing on behaviours (Lundin & Söderholm, 1995). The third viewpoint on what a project is – a temporary organization – implies that the most important managerial task is to focus on the projects as an organization. Planning and implementing are still important issues, but traditional organizational issues cannot be neglected.

The literature provides several definitions of project management. Artto et al. (2006) have distinguished three meanings in relation to what project management involves: 1) tools and documentation, 2) competences and characteristics (of the project manager) and 3) knowledge areas or (sub-) processes. Just as we provided a definition of entrepreneurship, we provide a suitable definition of projects, as defined in a traditional project management context. “*Project management is the process by which projects are defined, planned, monitored, controlled and delivered such that the agreed benefits are realised. … Projects bring about change and project management is recognised as the most efficient way of managing such change.*” (APM BOK 2006: 3). This definition emphasises process and innovation and thus resonates with the definition of entrepreneurship given above.

Cleland and Ireland (2006) claim that projects, in whatever form and no matter how rudimentary, have been used to create, or helped deal with, change in societies. This position is important because it links projects to the management of innovation. However, it is also necessary to consider that not all projects are innovative – as not all SMEs and new businesses are innovative or entrepreneurial.

There appears to be no definitive agreement on the history of project manage­ment even though most would trace the more serious attempts at formalization to either the construction industry, or the so called ‘military-industrial complex’. Most scholars agree that ‘modern’ project management came into being in 1950s but even before that, techniques such as Gantt charts were already used in projects (Stober & Hansmann, 2010). In its rudimentary forms, project management was used over many centuries but the literature started to reflect the evolving theory and practice of this discipline only in 1950s (Cleland & Ireland 2006). This ‘take-off’ can be connected with the development of managerial tools, planning and implementation techniques for major and complicated projects. As project management began as a ‘practice-driven’ field, and it still is, the practice and academic sides appear well-linked. This connectivity has not always been the case during the 60 years of history of the discipline. According to Lundin (2011a), more than 20 years ago research in the field was very scattered and bifurcated, that is being almost totally practice-oriented on the one hand or purely theoretical and abstract on the other. The latter was understandably unintelligible for most practitioners and therefore had little influence on their activities. More recently, the situation has changed and practitioners in project management are so much interested in research developments that researchers are not always able (or willing) to meet their expectations.

The fruitful partnership of practice and research has led to successful developments in the areas of project and project management field during recent decades. Turner, Huemann, Anbari and Bredillet (2010) discern nine schools in project management and show that the needs of projects and project management are much more diverse than they used to be in older or ‘classical’ understandings, characterised by the ‘iron’ or ‘golden’ triangle (time, cost and scope/quality). These schools provide a perspective on the theory of project management and support for the development of the theory; and can help practitioners gain a much wider understanding of the key issues on their projects.

The significance of projects (and/or temporary organizations) and project management in contemporary societies is growing. The past 60 years has seen the increasing use of projects and project management for achieving the strategic objectives of organizations; as well as for dealing with increasing complexity, uncertainty and ambiguity in the contemporary socio-economic environment (Bredillet, 2010; Gareis, 2005). Projects (and other temporary settings) are used to mobilise (or pool) resources, including competencies, to effectuate strategic change and thereby competitive advantage. Until the mid-1980s, they were limited to engineering, construction, defence, and information technology, but by now, they have diversified into many other (perhaps all) areas. The importance of projects is also related to bootstrapping (finance) as some of bootstrapping methods (Ebben, 2009) are project-related. The most project-related is obviously the use of government subsidies, especially when connected with EU´s cohesion policy and structural fund programmes (Godenhjelm, Lundin, & Sjöblom, 2011). In the new member states, such developments have resulted in significant social changes, particularly in emergence of ‘project class’ (Kovach & Kucherova, 2009).

The importance of projects and project management can also be measured, albeit simply. Estimates suggest that at least 20% of global economic activity takes place as projects, and this exceeds 30% in some emerging economies (Turner et al., 2010; Bredillet, 2010). In many organizations, some operating expenditures are also project-based. According to Turner, Ledwith and Kelly (2009), projects account for an average of one third of the turnover of SMEs. Taking into account the share of SMEs in the whole economy (in the EU the SMEs generate 56% of GDP) they estimate that the average overall share of projects in the world economy is more than one third. Thus, projects and project management make an important (and probably growing) contribution to global value creation. Thomas and Mullaly (2007; 2008) uncover the value of project management for permanent organisations, distinguishing tangible and intangible component.

The importance of projects and project management are also characterised by development phenomena. *Projectization* indicates the extent to which a business is based on projects and the degree the project way of working pervades practice within an organization (Müller 2009). The term *projectification* was intro­duced by Midler (1995) in his seminal article where he examined Renault’s path towards project orientation. The concept of *project orientation* was taken from Gareis (1989). This trend lies on the simultaneous performing of a network of projects which creates a demand for a new approach – *management by projects*. Later Gareis (2002) expanded this concept also to societies, using a construct of ‘project-oriented society’ and claimed that more projects are performed in new social areas, such as (small) municipalities, associations, and even families. Maylor, Brady, Cooke-Davies and Hodgson (2006) explained that the main idea of projectification was not so much a trend in the organizing of work through projects but in concurrent organizational changes. In addition Maylor et al. introduced a new concept – *programmification*, that is, the implementation of programmes, portfolios of projects or programmes as management mechanisms in organizations. In other words, they (*ibid*.) brought in the multi-project dimension, which should be an area of great interest for both practitioners and scholars.

Projectification, therefore, is a typical trend in post-industrial organizations for several reasons, spanning supply and demand in the economy. In other words, there are push and pull effects, which can act simultaneously. For instance, an increase in service activities has led to the use of more temporary solutions (projects) in organizations. So ‘projectization’ has a visible role in contemporary economy and society, including in the labour market (Ekstedt, Lundin, Söderholm, & Wirdenius, 2005). Moreover, Lundin (2011b) found not only the number of projects to be increasing, but also an emergence of new areas of application. One example is the European Union that has a project management approach to achieving objectives in the Union.

Given this on-going projectification (or just proliferation of projects), it is surprising how many governments pay little conscious attention to project management. However, there are a few strongholds such as in China, the UK and Australia (Turner et al., 2010). Bredillet (2010) argues that developing relevant competence at all levels, from individual to society, is the key to improved performance and brings out educational programs in project management, which have (at least quantitatively) grown rapidly during the recent decades. We have also seen a growth in the number of academic journals on project management, including *International Journal of Project Management* (Elsevier/IPMA); *Project Management Journal* (Wiley/PMI); and (since 2008) *International Journal of Managing Projects in Business*.

To summarise, in reviewing the state of entrepreneurship and project management, we provide a brief comparison in Table 1. As seen, the two examined practice fields and academic disciplines have a lot in common – in terms of history, significance, nature, status of theory and profession. The main distinctive aspect seems to be in relation to public support and policies – in this respect, entrepreneurship is flourishing while project management is developing beyond its ‘Cinderella’ status.

(Table 1 about here)

**Existing linkages**

The analysis of entrepreneurship and project management highlights a number of similarities between the two as practice fields and academic disciplines. Against this background, it is somewhat surprising that the two academic fields have, ostensibly, developed separately. For example, widely quoted names in entrepreneurship do not appear in the project management literature and vice versa. In this section we explore the developing linkages in the literature between the two research domains. We used a loosely structured method, starting with keyword searches in academic databases, but this provided very few results. For instance, the keyword search for “Project Management” and “Entrepreneurship” across scholarly journals in EBSCOhost provided only 22 matches. We also examined the content of these articles and only three of 22 turned out to be relevant in the sense of addressing both topics at the time and/or in substantial relationships. Then we adopted a ‘bottom-up’ approach, following the references of examined articles and again examined their contents. Some sources are found by virtue of our own research and some (especially non-academic) using general internet search engines. The review of discovered existing linkages between entrepreneurship and project management is summarised chronologically in Table 2.

 (Table 2 about here)

Table 2 shows that there have been several ‘linking attempts’ and some dating back over two decades. The most common historical linkage seems to be (new) product (and/or process) development (hereafter NPD) literature. This literature recognises that the NPD process is a project and consequently addresses recognised (sub)areas of project management. Examples include work of Wheelwright and Clark (1992) and Clark and Wheelwright (1993). Moreover, normative statements like “*Every company must pursue the projects that match its opportunities, business strategy, and available resources*.” (Wheelwright & Clark, 1992: 78) is an affirmation that central aspects of project portfolio management are addressed as well. Yet, in the NPD literature one can hardly find the words entrepreneur or entrepreneurship: they speak about business in general but often deal with entrepreneurial matters, such as (the recognition of) ‘opportunities’ and ‘available resources’, which are very common in the entrepreneurship literature.

Another historical linking concept is entrepreneurial orientation. As already pointed out above, connections between the two domains are rare but there is one remarkable exception – Dennis Slevin, whose name appears in both literatures. In entrepreneurship his name relates *prima facie* with the construct of entrepreneurial orientation; in project management he has authored and edited several popular books. (University of Pittsburgh Names …, 2009) However, Slevin seems to be a rare exception.

Historical linkages between entrepreneurship and projects are not easy to reveal because these might be not explicit. The French-origin ‘entrepreneur’ may be not used in project management literature and projects (or temporary organizations) not mentioned in entrepreneurship literature but essentially the concepts used may have synergies. An example is the theory of temporary organizations (Lundin & Söderholm, 1995) where the first sequencing concept – action-based entrepreneurialism – has obvious relationship with entrepreneurship, because there is a need for entrepreneurial acts to initiate and provide the impetus for the creation of a temporary organization. It means that temporary organizational settings (i.e. projects) are ‘a priori’ entrepreneurial. Lundin and Söderholm (ibid) also stressed the differences between repetitive tasks (providing a typical example – construction industry) and unique tasks requiring the fulfilment of entre­preneurial role, charac­terised by risk-taking etc. Entrepreneurial behaviour is mostly based on ‘action’ and this has also an important place in rhetoric, helping in legitimatisation of temporary organizational settings (ibid).

A closer look at the academic literature reveals a number of linkages between entrepreneurship and projects. Looking at Table 2, one can quite easily notice a trend – most linking attempts are recent and appear to be steadily growing. Second, the linking concepts cover quite a wide range of subtopics but some keywords appear to ‘straddle’ the two fields – particularly innovation, social networks, and some others. Next we try to explore the main developments and open their ‘linking potential’.

***A potential mainstream: projects–innovation–entrepreneurship***

The prominent (and historical) role of innovation in linking entrepreneurship with projects has already been identified (see Table 1). According to Lindgren and Packendorff (2002) projects intend to bring something new to their original environ­ment, thus projects are innovative and can be considered as ‘entrepreneurial acts’ – but when the ‘entrepreneurial act’ (i.e. project) is over, its result is diffused into permanent context for further exploitation. This is following the ideas of division of roles between permanent and temporary organizational settings (Lundin & Söderholm, 1995; Ekstedt et al., 2005). Lindgren and Packendorff (2003) proposed a project-based view of entrepreneurship, characterised by three keywords: action-orientation, collectivity and seriality. They argued that business start-ups are only one form of an entrepreneurial act – entrepreneurship can also happen in many other forms – and as those acts are temporary by nature, they should be treated as projects. A noteworthy aspect in their project-based view by is seriality, meaning that during their lifetime people can perform several entrepreneurial acts and do so in different ways and with different results. The aspect of seriality is well-known in the entrepreneurship literature as serial entrepreneurship (Ucbasaran, Alsos, Westhead, & Wright, 2008). Serial entrepreneurs exit one business before owning a subsequent one; another kind – portfolio entrepreneurs – start or purchase and retain ownership of several private businesses concurrently. The project-based view of Lindgren and Packendorff (2003) is based on wider understanding of entrepreneurship, emphasising that entrepreneurial acts may also happen in existing organizations, including public authorities and voluntary associations, also in (informal) subgroups of society and even in the private life of individuals.

This stream (‘projects–innovation–entrepreneurship’) was continued by Frederiksen and Davies (2008) who used the concept of a ‘vanguard project’, a first-of-its-kind project, enabling a firm to diversify into a new market or technology (i.e. innovation). Unfortunately, they do not draw upon the contributions of Lindgren and Packendorff but fortunately, they do rely on three linking concepts, shown in the beginning of Table 2: entrepreneurial orientation, (new) product development (NPD literature), and the theory of temporary organization (Lundin & Söderholm, 1995). This is leading to deduction that these three linking concepts are influential. A look at chronologically organised Table 2 will also help to distinguish two main periods in the development of linking concepts: the first period is (the last decade(s) of) 20th century and the second is 21st century. Frederiksen and Davies (2008) also argued that their concept can be broadened into corporate entrepreneurship and paid attention to learning in organizations. Thus their contribution leads to even wider perspective, encompassing intrapreneurship and entrepreneurship in existing organisations, i.e. the wider meaning of entrepreneurship.

The ‘projects–innovation–entrepreneurship’ mainstream has also some branches. For instance, Midler and Silberzahn (2008) explored the managing of start-up development (in a high-tech context) through succession of exploration projects. Particularly, they took common opposition – effectuation vs. planning from entrepreneurship and related it to multi-project management. Thus they illustrated the role of projects in the start-up process – a pristine entrepreneurial act, as Burgers, van den Bosch and Volberda (2008) asserted the role of projects in corporate entrepreneurship. Ferriani, Cattani and Baden-Fuller (2009) stated that in project-based enterprises, the realization of new projects follows a typical process of opportunity identification and team assembly – processes that are essential for any entrepreneurial effort. Especially in these branches comes to light a trend to ‘borrow’ approaches and concepts from one field and to adapt to another field. As this movement is increasingly followed by several researchers, we consider distinguishing another stream, called adaption.

***Export, import and beyond: the adoption stream***

Frederiksen and Davies’ work (2008) also represents another stream, characterised by the adaptation of research from one research domain to another. Their article is seminal in that the references identify names that are well-known in both the project management and entrepreneurship literatures. Similar examples include Dvir, Sadeh and Malach-Pines (2010) who examine the fit between project managers, the type of managed projects and project success. Nogeste (2010) also show how the practice of program management can be used for strategic initiatives, such as mergers and acquisitions (M&As). This approach (to treat M&As as programs) is supported by Noppel and Kuura (2011). They examined the need for project management competences in the reconstruction of companies and found that the appropriate ‘set of competences’ for a reorganization adviser is similar to a program manager’s competences. The last two publications also show that processes of M&As and reconstruction have the typical attributes of a project, or a programme and thus they belong to several streams at the time. In fact, most of the publications examined are not exclusive to one particular stream but two or more. Two publications (Dvir et al, 2010; Noppel & Kuura, 2011), relate also to a sub-stream, labelled ***competencies***. DeFillippi and Spring (2004) linked entrepreneurship and project management through competencies and pointed out four ‘project entrepreneurial competencies’ (visioning, resourcing, organizing and sustaining) and discussed the possible career paths of ‘project entrepreneurs’. Along this, Burgers et al. (2008) examined the success (or failure) of new business development projects against the newness of technological and market knowledge in the firm, stressing on organisational, rather than individual competences. Meanwhile, they recognised that projects are means of business development, which relates their work also to the ‘main­stream’, based on the three basic concepts.

***Networks and collectivity stream***

Another discernible stream can be named social networks and collectivity. These keywords appear already in the project-based view on entrepreneurship (Lindgren & Packendorff, 2003) and are alluded to by several authors. For example, Semolic and Kovac (2008) noted that the formation of inter-corporate networks can benefit from project management and the project form is more effective compared to the classic way of management and functional approaches. As already cited (in the mainstream), Ferriani et al (2009) developed a concept of ‘project-entrepreneurs’, whose performance depends on their position (or centrality) within the social network and their familiarity with the selected project team. Based on these findings, they suggested that network-based arguments may help to illuminate these two crucial dimensions, opportunity identification and team assembly, in the entrepreneurship process. The considerable role of social networks has been widely recognised in the entrepreneurship literature during the past decades (c.f. Hoang & Antoncic, 2003; Johannisson, 2002; Thornton, Ribeiro-Soriano and Urbano, 2011). These results endorse the premise that entrepreneurship is rather a collective than an individual phenomenon. From a project management perspective, the principle of collectivity is even more ubiquitous, especially seeing projects as temporary organisations, where one of four interrelated basic concepts is the team (Lundin & Söderholm, 1995). Among the schools of project management (by Turner et al, 2010) is one named ‘behaviour’, which alone constitutes a group of schools, labelled people.

***Developments in the mainstream: entrepreneurial projects and beyond***

The ‘projects–innovation–entrepreneurship’ mainstream leads to a promising linking concept named ‘entrepreneurial project’. This relatively new notion has been developed by several researchers. Soila-Wadman (2009) examined the initial phase of a film project and considered this to be an ‘entrepreneurial project’ where entrepreneurial networks are crucial. Macheridis (2009) argued that agile project management is an appropriate way to manage entrepreneurial projects, helping to structure entrepreneurial projects and to guide entrepreneurs to success. Manning (2010) analysed the career paths of ‘project entrepreneurs’ with regard to the emergence of professional networks into project networks. Belousova, Gailly and Basso (2010) explored activities associated with the development of entrepreneurial projects within established organizations. They proposed four main phases of entrepreneurial project development: discovery; evaluation; and exploitation of entrepreneurial opportunities; and their legitimation inside and outside an organization. Elsewhere, Asquin, Condor and Schmitt (2011) explained the recent emergence of ‘project’ in the French entrepreneurship literature. They claimed that ‘entrepreneurial project’ has a central role and reveals themes in entrepreneurship that are usually neglected. They invited the researchers in entrepreneurship to reflect on the ‘project’ perspective in entrepreneurship and proposed that “…*the place of the project as a paradigm in entrepreneurship research*”; and “…*methodologies that could be used to tackle the entrepreneurial project*” (ibid: 11).

More recent developments in the ‘mainstream’ seem to be related to two keywords. The first is ‘process’. In developing their ideas, Lindgren and Packendorff (2011) outlined a view of entrepreneurial processes as temporally, spatially and socially distinct interactions and towards seeing them as projects. However, they used the term ‘project metaphor’ because they did not want to “squeeze entrepreneurial processes into the project management toolbox”, viewing them as discontinuous, discernible and disaggregated series of events, co-constructed by actors as limited in time, scope and social involvement.

The second key concept is ‘corporate entrepreneurship’ which is linked with ‘operations control’ (Goodale, Kuratko, Hornsby, & Covin, 2011). These phenomena may seem polar opposites: the first seeks to stimulate innovations and change within large organizations while the second is often associated with standardization and restricting unusual (entrepreneurial) actions. However, there is growing evidence that both entrepreneurial behaviour and operations control are common characteristics of successful firms. It is, therefore, important to examine the moderating effects of operations control on the relationships between the antecedents of corporate entrepreneur­ship and innovation performance. This approach was developed by Shepherd and Patzelt (2011) who introduced a notion of ‘Operational Entrepreneurship’ as “the selection and management of transformation processes for recognizing, evaluating, and exploiting opportunities for potential value creation” (ibid: 5). They argued that the interface of entrepreneurship and operations management can be a source of research opportunities, and some examples offered in their article are only the “tip of the iceberg”. Here is a good place to reflect the observation of Kwak and Anbari (2008) that project management has its “roots” in operations management. In examining the impact of allied disciplines on project management, they conducted extensive literature reviews and discerned “Technology Management, Entre­preneur­ship, and Information Technology / Systems” as an influencing domain. Although Shepherd and Patzelt (2011) were not motivated to inquire the relations between entrepreneurship and projects, they used the word ‘project’. Yet, in doing this, they also raised an important question – how do *project management techniques* apply when the opportunity (i.e., the project) is the firm? In other words, they argued that starting up of a firm is a project and there is room to apply project management methods.

Significantly, Ajam (2011) published an advisory paper where he explicitly pointed to “the missing link” between project management and business start-up. On the premise that launching a business is a project, he argues for a place for project management in this process. Although existing business planning techniques (focusing on finance, market, operation) are useful, they are not enough. The entre­preneur needs to think about project management in detail, including setting realistic time and cost targets and developing an understanding of project and venture risks. When an entrepreneur starts to implement the business plan they become a project manager who needs to care for two aspects – the project (from idea to initial operations) and the post-project phase – sustaining the business (operations) (Ajam, 2011).

Although some concepts tend to be stand alone, in the sense of not ostensibly bridging the entrepreneurship and project literatures, this does not eliminate their ‘linking potential’. For one, in extending the economic theory of the entrepreneur, Casson and Wadeson (2007) argued that the concepts of ‘opportunity’ and ‘project’ are closely related. They defined ‘opportunity’ as an unexploited project and ‘discovery’ as the identification of an opportunity by scanning the set of possible projects. Moreover, they considered ‘project set’ more useful than popular notion ‘opportunity set’, because the last has (more) intuitive appeal whilst project proposals can be expressed more rigorously. They also argue that “Given the state of the economic environment at any one time, there is a set of projects that would best meet the needs of society” (ibid: 287). Putting this into project literature words, we can interpret this as *there is an optimal project portfolio for a particular society* *(or economy)*. Casson and Wadeson did not say this but this is probably because of an insufficient grounding in the project literature. Project portfolio is usually understood as a set of projects (and programmes) that an organization runs at a certain point of time and this understanding fits their notion of a set of projects. The publication by Casson and Wadeson is a good example about how developments in one field have the potential to permeate another field and benefit from such linkage. Moreover, this links entrepreneurship and projects also on the macro-level.

***Reflections on linkages***

Overall, an examination of the linking attempts reveals that some concepts are used in several approaches or in other words, the streams are often crossed. The best examples seem to be the three oldest and most influencing linking concepts: entrepreneurial orientation, (new) product development, and the theory of temporary organization. These three are used (directly or indirectly) for development of several ‘linking’ concepts, particularly the concept of ‘entrepreneurial project’ and recently, ‘operational entrepreneurship’. The latter seems to have good linking potential, particularly because it also involves corporate entrepreneurship. Yet, the greatest linking potential seems to be concealed in entrepreneurial projects. This is partly the reason why we develop (in the last section) our own view on the nature of entrepreneurial projects.

Considering the number of existing linking attempts, it is reasonable to ask are the two academic fields sufficiently linked or is there still a linkage gap? Our analysis suggests the latter. The main argument is that about 25 examined publications, attempting to link the two fields is quite a small number when set against the sheer mass of literature in each field and the potential benefit from linkages. The analysis also suggests that the linkages between entrepreneurship and project management are much more connected and developed in practice than in the academic literature. When set against this background of practice linkages it is somewhat surprising these two fields are quite distinctive and separate in the academic world. Theory can be inspired from the linkages shown in practice.

**Possible recipes for further advances**

Our suggestions for further advances (see Figure 1) concern the various ways that the two fields (entrepreneurship and projects) and the two sides (practices and research) might be connected. This can essentially be done in four ways. First, by exploring how the two practice fields are essentially interconnected (type 1 link on Figure 1). Second, by concerning the relevance of research to practical work and vice versa (type 2 links), where currently the two fields are distinguishable and thus, partly treated separately. Third, by showing how researchers might receive inspiration from practice of another field; how they might find practical applications in another field; and also how practitioners might receive inspiration from the other theoretical perspective (type 3A and 3B links). And finally, by explicating how both research practices can learn from each other (type 4 links). This simple model is meant to be illustrative rather than definitive since, in principle, it can be adapted to any dyad of areas where there is a potential in connecting areas.

**(**Figure 1 about here)

**Relations between the two practice fields** (type 1 link on Figure 1) can be explored through clarifying the role of projects in contemporary business and in business-related ventures. For that we use a division proposed by Ekstedt (2011): 1) Project Based Organizations (PBOs), where revenue is directly based on project activities and projects are the ‘line’ (some examples: design, advertising, architecture, culture, fashion, film, publishing, IT); 2) Project Supported Organizations (PSOs), where the stress is on project activities (such as R&D and design) in order to support core activities (examples: production, servicing) and to cope with innovation-based competition. Ekstedt (ibid.) discerned also third type – Network-Based Projects, which are inter-organisational or inter-individual formed in networks or clusters, possibly by traditional PBOs and PSOs (examples: TV production, special types of construction, etc.), also community based projects, serving a societal purpose. At this point we will emphasise the first two models. The third adds the complicating inter-organisational aspect and a different type of venture, what is relevant to the social dimension in projects and in entrepreneurship, as well as to the types of new product (process) development projects and our construct of the entrepreneurial project.

Their relationship with entrepreneurship is obvious. An entrepreneur who enters the first kind of business – called ‘project business’ (by Artto and Kujala, 2008) – has an essential need to organize the work of a firm by projects. In this case, an entrepreneur is working with abusiness that relates directly or indirectly to projects, with the purpose of achieving business objectives of a firm or several firms. Given that organizations often have several projects running in parallel and join into networks, Artto and Kujala (ibid) proffer the ‘multi-project’ and ‘multi-firm’ perspective to the classical single project – single firm case. In some industries (activity fields) the core activities or processes may be almost entirely project-based. For example, the owner and managers in a SME in some industries such as film, might be better off using project management techniques for the sake of efficiency in relation to coordinating, planning and running the business in a competitive way. Hence, a significant aspect of entrepreneurship might be related to project management by boosting efficiency. Another example is in social entrepreneurship (Bloom 2006) where actors are less concerned with making monetary profits. However, this comprises only certain types of entrepreneurs, but they are still involved in project-based businesses and should strive for efficiencies.

If we now examine the second model, of project supported organizations, where project activities support core activities (or business processes), there are obvious strong connections with entrepreneurship. This is especially the case where the enterprise faces innovation-based competition. Such projects within the enterprise is a matter of strategic effectiveness and includes strategic decisions including developing the right products/services, to enter a right market (or region) – until making a right decision on exiting – terminating or selling the business. This leads to the main conceptual link between entrepreneurship and project work – innovation. Thus, certain stages in the life cycle of a business – like relocation and renewal or (re-) development – meet the substantial criteria of a project and therefore should be treated as projects. This means that, in such stages, entrepreneurs act as project leaders. Unlike project-based business, however, this project-by-project approach, where activities contribute to the performance and direction of the whole organization, is to some extent embedded in all businesses and organizations, irrespective of size. In some cases, these projects may involve a deliberate strategy to make the organization become more ‘entrepreneurial’, such as through teams or the stimulation of intrapreneurship, or in other cases it may be focused on the development of a new process, product or service.

Many network-based projects also have a clear relationship with entrepreneurship; and particularly to ‘social entrepreneurship’. Efforts have been made to distinguish between social and commercial entrepreneurship (Austin, Stevenson, & Wei-Skillern, 2006) where the former involves social objectives in an explicit way whilst the latter concerns the traditional view on entrepreneurship supporting economic development. An upsurge in the literature on social entrepreneurship has also been matched by that on social projects. However, the two literatures seem to differ in one specific way. The ’social project’ literature concentrates of evaluations of social projects (ex post) whereas social entrepreneurship concentrates on theory, or early stages, of social entrepreneurship efforts. It remains to be said that more recent types of project and entrepreneurship research point to some similarities between the areas even though the literatures are quite far apart.

**Relations between practice and research within one field** (type 2 links on Figure 1) represent a long-standing issue, which is topical in general, not only in the two fields examined here. Thus we do not go deeper in these issues but want to stress on the brief comparison presented in Table 1 (row C). Here we dare to point out that the project side (link 2B) is in a bit better situation than entrepreneurship (link 2A), because the project practitioners have more interest to the results of academicians, and the academicians are more interested in practical problems. However, it is worth to point to the growing policy emphasis on entrepreneurial competency development, reflected in recent EU documents (European Commission, 2012). This document recognises entrepreneurship as a key competence in the competences for lifelong learning and sees entrepreneurial education and training as the first of three Action Pillars. On the research side this is paralleled by an emphasis on action (or action-based) research approach. According to Leitch (2007) it embodies a ‘family’ of participative, experiential, action-oriented approaches, which are intended to foster changes on the group, organizational and even societal levels. As projects are designed to deal with changes, there is an obvious relation or feedback loop to projects. Even more – as action research is connected to action learning (i.e. competency development) and is process-oriented (ibid.), there are more feedback loops. Thus, we believe that both sides can learn from each other, especially via cross-links (type 3 on Figure 1), what we shall show in following. Before moving to the next type of links we note that the EU uses word ‘project’ several times in relation to entrepreneurship and not just by chance – for instance, it invites the Member States to *“Offer the opportunity to young people to have at least one practical entrepreneurial experience before leaving compulsory education, such as running a mini-company, being responsible for an entrepreneurial project for a company or a social project*” (European Commission, 2012: 7).

**Relations between practice in one field and research in another field** (type 3 links on Figure 1) have stronger linking potential but it seems to be underutilised so far. On the basis of some examples we try to show, how the potential of to realise these links can be realised.

Clarysse and Moray (2004) explored the process of entrepreneurial team formation in a specific case – the start-up of a high-tech, university and research-based spin-offs – providing a process view on development of an entrepreneurial team within a new venture. They discern four phases – the idea, pre-start-up, start-up and post-start-up phase. Although they rely on the entrepreneurship rather than the project management literature, they name the first (idea) phase as ‘project phase’ and use word ‘project’ several times, often using with suffixes such as ‘team’ and ‘leader’. Thereby we assume that they implicitly recognise that their case was also about a project. In other words, entrepreneurship researchers were studying the constituent of ‘entrepreneurship practice’ but from a different perspective – that of ‘project practice’. Although project researchers tend not use the term ‘start-up’, they are familiar with prefixes including ‘pre’ and ‘post’ and ‘idea’ phases as shown in the project literature. This means that the first phase (idea) has common designation in both literatures (in the project literature synonyms like initiation and conceptualisation are used). Thus, a project researcher may need a little more hints – for instance, to add some explanations or “translations” to the names of other three phases – to see that the pre-start-up is (almost) *planning*, the start-up is *execution* and the post-start-up is *termination* or *close-out* (of project). Hence, we contend that the case could be developed even further and that it is currently understated.

In reflecting on this case (citations in italics are from Clarysse and Moray, 2004) we argue that (in addition to the team) the other main attributes of a temporary organization (by Lundin and Söderholm, 1995) were present – the time, the task and the transition. The time was crucial in several moments (*This process … cannot be forced to quicken its pace, since the team needs a sufficient amount of time …*) and there were obviously tasks (*The goal was to commercialize the datacasting system …*) and transition (even several, occurring when the venture proceeded from one phase of its life cycle to another), influenced by relations between the individuals, the teams and the environment of teams. In addition, the four sequencing concepts were present. The main idea in this case (*… there was a clear objective of valorization of research and the creation of a spin-off …*) and all followed actions can be taken as evidence of action-based entrepreneurialism. We can also see the fragmentation for commitment-building (the teams in idea phase and in pre-start-up phase) and planned isolation (particularly the spin-off from university) but there was no institutionalized termination. According to Lundin and Söderholm (1995) a temporary organization has to be dissolved at some point but if this does not happen, the organization becomes institutionalized and will continue in a (more) permanent form.

In fact, this is an important point in this case, which may also be generalised. With the exception of venture capital funded enterprises, most businesses are started with no plan for when it will close, or the founder will exit – in other words there is an assumed permanence about the venture. However, if we accept that the starting-up of a business is substantially a project, there is a discrepancy with common understandings of a project (or a temporary organization) as a temporary setting (or sub-system) in a permanent organizational environment. For example, an entrepreneur who is going to establish a company will not establish a temporary entity first and later reorganize it into a permanent one. However, it is generally recognised that there are several stages that people pass through in the entrepreneurship process.

The re-examined case (Clarysse & Moray, 2004) is an example mainly for entrepreneurship researchers, bringing out what they can see looking at project practice. An opposite example could be ‘public policy and state intervention’ – a topic that is almost absent on the project side but quite developed in entrepreneurship practice and theory. Studying practice on the side of entrepreneurship is the case how project researchers might receive inspiration from practice of other field. If project researchers start to study entrepreneurship policies and their implementation, they bring with them different backgrounds and conceptual “lenses”. As a result, they are probably able see something that eludes entrepreneurship researchers and may propose something new or different. This may be the way how researchers on one field might find practical applications in other and also how practitioners might receive inspiration from the other theoretical perspective. An additional example could be academic education, particularly action learning courses, which are often used in entrepreneurship. Such courses use cases (for study purposes) which have a strong resemblance with projects. The re-examined before case (Clarysse & Moray, 2004) can be used for study purposes both in entrepreneurship and in project management courses.

Recognising that the cross-links (types 3A and 3B on Figure 2) have great linking potential one may ask – why these cross-links do not work in practice? Up to now we can observe relative independence in the developments of two academic fields. We believe that the main reason is path dependency. Research in a particular field creates its own traditions (also called memes) and is governed by streams of fads in certain (generally recognised) directions. In our opinion this is very much true for research on entrepreneurship, as well as for research on projects and project management, and for research in most fields. As this leads to relations between the two fields of research, we continue this discussion when examining the relations of research fields.

**Relations between the two research fields** (type 4 link on Figure 1 – between the two research practices or academic disciplines) are, despite some progress, still inadequate. In fact, this is not unusual – many academic fields have a tendency to be fragmented where advancement is measured exclusively in relation to research, knowledge and theory development *within* that specific field. This is in line with the on-going specialization of research work and the increase of academic publication outlets with a very narrow focus. Interdisciplinary research has been a popular concept on a discourse level, but in practice, academic research with such ambitions has been frowned upon. However, given the analysis in this paper, we are convinced that there is a need to break out of such academic silos and for a reassessment of the relationship between entrepreneurship and project work. The prospects should be quite good considering the relative closeness between the two practical fields as demonstrated in this article.

Concerning the entrepreneurship and project management literatures, we also want to highlight their very own internal heterogeneity: their different approaches, schools, themes, topics, etc. within these fields. Xheneti and Blackburn (2011) scrutinised the development of Small Business and Entrepreneurship (SBE) research and classified 29 different topic areas. On the side of project management, Themistocleous and Wearne (2000) analysed topic coverage in journals and discerned 42 topic areas. Similarly, nine schools of project management were identified by Turner et al (2010). Hereby we recognise our limitations: there is a need for detailed cross-examination of the two bodies of literature. Yet, our preliminary examination shows that there are common as well as ‘exclusive’ topics in the two domains. For example, a topic represented in both fields is finance and financial management. At the same time, there are topics that are represented only in entrepreneurship or in project research. For instance, ‘risk management’ seems to be almost absent in entrepreneurship. Quite a popular topic as ‘SBE in transition/developing economies’ has virtually no counterpart in project research.

Another example – a topic of gender is emerging in the project literature but regrettably, mostly without drawing upon the extensive coverage in the entrepreneurship literature. This is a major weakness given that ‘gendered entrepreneurship’ is quite a well-developed topic in the SBE literature (Xheneti & Blackburn, 2011) and much could be learned by researchers in the project management field. Moreover, recalling the argument by Welter and Lasch (2008) about grounding entrepreneur­ship research in its national context we want to stress that different theoretical models, concepts etc. are not necessarily exclusive to national boundaries. We consider that project research can also be grounded in its national context but also reach beyond these. In looking for a suitable approach in project management, we propose the ‘Scandinavian School’ which has distinctive attractive aspects. According to Sahlin-Andersson and Söderholm (2002) the Scandinavian school has widened the scope beyond a single project, is theoretically based (in particular organization theory) and is based on in-depth empirical studies. "*The Scandinavian School offers one simple lesson: in order to utilize the complete potential of project organizing for enhancing control, flexibility, and change, more systematic attention must be paid to the ways in which projects develop relative to their corporate and temporal context.*" (ibid: 24). In our opinion, following the ideas of the Scandinavian school is most appropriate in order to ground the research (both in project management and entre­preneurship) in its national context, as well as organizational and even individual levels.

As projects are designed to deal with changes or innovations, and since entrepreneurship and innovation are also inherently linked, there is a *prima facie* case for a link between projects and entrepreneurship. In addition, we want to bring out some unexplored interlocking dimensions. One example is singularism-pluralism. From a ‘classical’ point of view an entrepreneur is often both the owner and manager of an enterprise. But complex, multi-level ownership structures are expanding, and scholars speak about entrepreneurial teams, as well as habitual – serial and portfolio – entrepreneurs. A parallel trend can be seen in the ‘project world’ where multi-project management is proliferating. The main differential is probably the permanent-temporary dilemma. Entrepreneurship is used to be based on permanent processes and organizations, but the average ‘life expectancy’ of SMEs is indeed quite short, high failure rates are common topics in entrepreneurship literature. Hence, the average life cycles of many SMEs could be compared to projects (or even programmes).

Our analyses (see summary in Table 1) acknowledges that there are differences between the two fields, but also shows a number of routes for possible mutual learning and conceptual and practical enrichment. For instance, if practitioners in one field benefit from research in another, they may be prepared to engage with the research community more generally. Similarly, if researchers in one field find practical applications in another, they may become more practice-oriented and devote more interest to practitioners in their field. Thus the relations between practice and research (type 2 links in Figure 1) may turn into feedback loops and even reveal how the two practical worlds might be interconnected, leading to enhanced opportunities for the co-production of knowledge. Several researchers have already alluded to such linkages, including Clarysse and Moray (2004) where the observed “team” had several changes in organizational environment. Moreover, there was also a possibility to rely more on literature on organizational behaviour, particularly on formation of groups (group processes). This can actually support what we argued before: there is a converse way to develop an academic discipline drawing upon other ‘mainstream’ disciplines (hereby management) which in turn, relate to other fields (such as psychology in this case). There are further examples, for one organizational improvisation, which has strong essential relations to bricolage (Cunha, Cunha, & Kamoche, 1999). Their idea was to transpose to organizational contexts the characteristics of improvisation and in jazz and improvisational theatre. Hereby it is worth to mention that both have been “jazzed” – entrepreneurship (Ucbasaran, Lockett, & Humphreys, 2011) and project management (Wikström & Rehn, 2002). In this example we can see even more feedback loops, connecting more than the two research fields and two practice fields – in this case also fine arts like jazz music and improvisational theatre (not pictured on Figure 1). Furthermore, a promising linking concept seems to be effectuation (Sarasvathy, 2008), what has developed in the context of entrepreneurial performance but has obvious relations to projects.

Therefore, our main recommendation for researchers in both fields is to open their eyes for major developments in other fields, and apply appropriate research questions, methods, and paradigms to their studies. There are already some examples of such deliberate ‘bridging’ between two fields of study but these tend to be rare.

Our particular recommendation for researchers in the SBE field is to consider more ‘temporary’ perspectives and recognise that entrepreneurs act in social networks, habitual entrepreneurs proliferate and the business population experiences constant churn. This also means that ‘classical’ views of entrepreneurs as single persons (or small groups) who start and run their ‘one and only’ enterprises, considered to be ‘permanent’ (to be handed over to successors or sold after the founders exit) and static (significant growth, changes in strategy, relocation etc. are rather exclusions than norms) do not reflect activity in our contemporary world.

Our particular recommendation for researchers in the project management field is to look beyond a (single) project and to open their context in terms of time, organizational boundaries, resource ties etc. As identified, there are many potential linkages with the SBE literatures which would be beneficial to researchers in developing the field of project management.

In our opinion, a good object for research, which needs involvement of researchers from both (i.e. entrepreneurship and project) sides, is an entrepreneurial project. We argue that there are a number of entrepreneurial projects in practice but not all projects are really entrepreneurial. Therefore, in the next section we present our view on an entrepreneurial project.

**Entrepreneurship and project management linked: the nature of an entrepreneurial project**

It is generally accepted that in contemporary practice, one can observe a wide range of very different projects. This is reflected also in theory, through a number of different project typologies. In this part we want to bring in a new dimension – a construct of an entrepreneurial project. We believe that it will be useful to substantiate the notion of an entrepreneurial project drawing upon two existing typologies (Turner et al., 2010). These two typologies differentiate projects according to their (a) levels of difference and (b) levels of uncertainty.

According to the first typology (tagged here A) there are four types of projects (Turner 2009: 4-5):

* ***Runners***: very familiar, done repeatedly, routine processes can be used;
* ***Repeaters***: fairly familiar, there is knowledge accumulated on which the project team can draw;
* ***Strangers***: similar projects have undertaken before but there are also unfamiliar elements;
* ***Aliens***: nothing alike has ever been done before, thus with high risk and may be considered not started but quite often might be mandatory (for one, brought on by a change in legislation).

The second typology (tagged here B) was developed by Turner and Cochrane (1993). Their idea was that projects can be judged against two parameters – how well defined are the goals and how well defined are the methods of achieving them. This leads to a 2 x 2 matrix, which has become well-known as ‘goals-and-methods matrix’, implying four types of projects (ibid: 93):

* Type-1: the goals and methods of achieving the project are well defined (*Earth*);
* Type-2: the goals are well defined but the methods are not (*Water*);
* Type-3: the goals are not well defined but the methods are (*Fire*);
* Type-4: neither the goals nor the methods are well defined (*Air*).

Turner and Cochrane (ibid) use apt metaphors, characterising delimited types of projects. The *Earth* (1) projects have a solid foundation and are typified by engineering projects. The *Water* (2) projects flow with purpose but haphazardly and are typified by product development projects. The *Fire* (3) projects can generate much heat (in the definition phase) but can burn with no purpose. These are typified by software development projects, where the users’ requirements are often ill-specified. The *Air* (4) projects usually deliver ‘blue-sky’ research objectives and are typified also by organizational development (or change) projects.

Turner and Cochrane (ibid) recognise that similar matrices exist in the fields of numerical analysis and innovation management. In addition, quite similar matrixes have been developed also in product and process development. An example of such is the matrix developed by Clark and Wheelwright (1993). The two axes on their matrix represent the extent of product change and process change and based on this matrix they mapped five types of development projects – *Derivative*, *Platform*, *Breakthrough* and *Advanced R&D* projects. In this array (hereinafter typology C) the extent of both (product and process) changes increase. The fifth type – *Alliances or partnered projects* – can include any of the basic (first four) project types.

Concerning the fifth type in the last typology C, we can point out a similarity to the models of project organizations by Ekstedt (2011) where the third model – network-based projects – is based on the same idea. The fact that several typologies pick out such types is obviously strengthening the prevalence and importance of alliances, partnerships and networking in contemporary entrepreneurship, also elsewhere, because social entrepreneurship and social projects (used as example before) have wider role in societies. Besides, the momentous role of networks is pointed out in our literature review.

Our view on entrepreneurial projects, deduced on the basis of ‘goals-and-methods matrix’ by Turner and Cochrane (1993) is presented on Figure 2.

(Figure 2 about here)

As presented on Figure 2, only Type 4 (*Air*) projects (as discerned by Turner and Cochrane) are entrepreneurial projects. Obviously most entrepreneurs do not carry out advanced research and research-based development but organizational changes are implemented time after time. (An assertion is the logic of growth phases of Greiner (1972) – at times organizations fall into crises and in certain moments have to take ‘revolutionary’ steps.) The greatest organizational change is at the start-up phase – the very first project in the life cycle of every organization, where there is substantial uncertainty and risk. In the first (A) typology this matches apparently to the last category named *Aliens* – most entrepreneurs undertake such project once in their lifetime, it is risky (the chance of failure is quite big), many people hesitate a long while before starting up, whereby others postpone starting up a business forever. Besides, undertaking a business start-up project might be nearly “mandatory” for some people because they do not have attractive employment and income opportunities - known in the entrepreneurship literature as ‘necessity entrepreneurship’. Even those who start under such conditions, however, are taking on risk and uncertainty.

According to our position (Figure 2), Type 3 (*Fire*) and Type 2 (*Water*) projects may be or may not be entrepreneurial or, in other words, some of them are less entrepreneurial. The key for identification is their relatedness to the first (A) typology because Type 3 or Type 2 projects (software or product development) may be *Strangers* (containing some unfamiliar elements) or *Repeaters* (on the accumulated knowledge). In fact, Type 3 and Type 2 projects have much in common as both are product development projects. Thus, we suggest that to distinguish between *Strangers* and *Repeaters*, it is useful to rely on the product development literature (especially, Clark and Wheelwright (1993). We suggest that all four basic types of their product development projects could be linked with the categories in Figure 2. The most innovative type is (alike Turner and Cochrane) *Research and advanced development* projects; the less innovative *Derivative* projects; between the two extremities are *Platform* and *Breakthrough* projects (where the first is less innovative). *Derivative* projects embody enhancements and hybrids and thus these are quite similar to Type-1 (*Earth* – mainly engineering) projects in typology B and to *Runners* in typology A. Thus, we suggest that the interstice between entrepreneurial and ‘ordinary’ projects should go along *Strangers* / *Repeaters* (typology A) and *Breakthrough / Platform* projects (typology C) whereas the first two belong to entrepreneurial projects. As Clark and Wheelwright (1993) note, breakthrough projects may create a new product category and spearhead the cause a firm to enter into a new business. Here we can exteriorize a parallel with opportunity entrepreneurship.

As already mentioned, *Derivative* projects are the less innovative; usually just product enhancements and developing hybrids and thus they match well with Type-1 (*Earth*) projects in typology B and with *Runners* in typology A. Therefore we consider that types of projects truly ‘ordinary’, not to say non-entrepreneurial. In fact, we do not want to call any project non-entrepreneurial, because even a very routine project may embody some entrepreneurial elements. On the other hand, truly entrepreneurial projects may comprise some familiar, non-innovative elements. In other words, the extent of entrepreneurialism in projects can vary from being an intersection through to almost unison.

**Concluding Summary**

This article has examined the linkages between the fields of entrepreneurship and projects in both the academic literature and in practice. We argue that there will be more and more evidence of mutual enrichment deriving from linkages between these fields, its theory and practice. This may appear idealistic but we hope that the respected journals in entrepreneur­ship shall have project-related keywords in their lists and vice versa. This will certainly be a big challenge given a tendency towards specialisation in literatures. There may be a risk – to fall into total eclecticism and open rather than narrow the boundaries of the field. Thus, there is a need for a theoretical and/or methodological baseline. Hereby we can refer to Lindgren and Packendorff (2009) who have proposed to apply the social constructionist perspective to entrepreneurship research. The social constructivist perspectives have significantly spread in project management research (see Bredillet, 2010; Turner et al, 2010; Gareis, 2005), as well as in entrepreneurship research (see Downing, 2005; Fletcher, 2006; Chell, 2000; Rae, 2005).

Our analysis has shown deliberate and partly successful efforts to connect the two academic fields. However, discussions on a conceptual level between the two academic fields remain inadequate and are not drawing upon the breakthroughs in practice. We argue for a more concerted effort on behalf of researchers in both fields to seek synergies. This may raise challenges to those seeking to encourage a more clearly defined academic field of entrepreneurship. However, our evidence suggests that a failure to embrace the benefits of linking entrepreneurship with project management may stifle rather than promote the development of the field.

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1. From now on, we use ”project management” rather than alternative terms. The reason is that we want a stable terminology. It should be mentioned however, that project management for many researchers and practitioners refers to the dominating model for prescriptions on how to manage projects. [↑](#footnote-ref-1)