Abstract

Despite growing interest in critical entrepreneurship, there remain relatively few examples of researchers employing non-conventional ontologies. The hegemony of the conventional limits the scope of research outcomes and this paper explores the contribution to research available from adopting a critical realist paradigm. Principal dimensions of critical realism are highlighted and their influence illustrated through an example of empirical research. The example explicitly concerns social change and demonstrates data analysis is broadened and deepened by adopting a critical realist lens. The implications of broadening and deepening understanding and explanation are discussed in the context of aspects of critical research. Conclusions for the relationship between critical entrepreneurship and critical realism are drawn.

Introduction

Criticality in critical research in social sciences normally equates with research that challenges dominant themes, taken-for-granted assumptions, or norms, and exposes underlying structures of power and domination (Alvesson et al., 2009). Cannella and Lincoln (2009) direct attention toward four themes of particular significance to critical researchers: the hidden structures of power and disempowerment of others; the role of discourse in social life; the interrelationships between socioeconomics, gender and race; and colonialism, neo-
colonialism and post-colonialism. Critical research is characterised by adopting paradigms that have the ultimate objective of both analysing and facilitating social action that induces change in society. In terms of Burrell and Morgan’s sociological paradigms (1979), conventional paradigms are either functional or interpretive, whilst paradigms that would correspond to subsequently defined critical research are classified as either radical humanist or radical structuralist.

Across the broad spectrum of social sciences, and touching upon entrepreneurship, criticality embraces critical theory and the hegemony of conventional approaches (Ogbor, 2001), feminism (Ahl, 2006 and 2007), social change (Calas et al., 2009), power (Goss et al., 2011) and emancipation (Rindova et al., 2009). Critical entrepreneurship has followed critical management studies adopting a broadly post-structuralist approach (Jones and Spicer 2005, Ogbor 2001, Ahl 2007, Ahl 2006). Recent critical research has invoked the twin notions of agency and constraint to explain the concept of entrepreneuring (Goss et al., 2011, Rindova et al., 2009) as an example of social change (Calas et al., 2009). The research underpinning these papers has, nonetheless, still adopted conventional ontologies: Goss et al. using an ethno-methodological approach – autobiographical narrative - to explore a case study of emancipation; Rindova et al. present an objective review of core themes in an emancipatory perspective of entrepreneurship, whilst Calas et al. take a similarly rational view in highlighting the potential contribution of methodological pluralism to feminist perspectives of entrepreneurship. Hence, adopting non-conventional methodologies in critical research is not axiomatic providing the research design gives support to a critical paradigm.

The purpose of this paper is to highlight issues concerning ontologies and epistemologies in research in critical entrepreneurship by exploring the contribution made by Bhaskar’s (2008) philosophy of critical realism. Theories of emancipation, agency, constraint and social change are central themes in Roy Bhaskar’s concept, including his Transformational Model of Social Action (TMSA). Critical realism seeks understanding and explanation of how and why events occur in the form that we observe. It presupposes that events are generated by complex interrelationships between hidden, unobservable mechanisms (Reed, 2009). This paper contributes to critical management studies of entrepreneurship by highlighting the impact that critical realism can make to broadening and deepening understanding and explanation of entrepreneurial behaviour. Taking the lead from Danermark et al. ’s (2002) discussion of social sciences in general, the implications of adopting a critical realist lens for
researching entrepreneurial behaviour are emphasised in terms of methodology, generalisations, inference, theory, explanation/prediction, and TMSA.

**Literature**

Since the turn towards critical management studies, usually attributed to Alvesson and Wilmott (1992), arguably one of slowest and least prominent fields to address critical themes has been entrepreneurship. In general, both management studies and entrepreneurship are dominated by the hegemony of positivism and objectivism, whilst interpretivism dominates qualitative research, but unlike other fields within management studies, in entrepreneurship there are comparatively few examples of researchers adopting critical methodologies (Perren and Jennings, 2012). Discursive and narrative approaches within interpretivism are found in this minority grouping, but few research papers in entrepreneurship explicitly discuss, or adopt, alternative ontologies and epistemologies (Blackburn and Kovalainen, 2009).

Research in entrepreneurship currently straddles the intersection of economics, sociology and psychology (Sanchez, 2011). The vast majority of both research and theory in entrepreneurship would be classified as functionalist, underpinned by a relatively narrow range of objectivist metatheoretical assumptions (Jennings et al., 2005). As Blackburn and Kovalainen (2009) highlight, researchers are only recently embracing ontological and epistemological diversity, suggesting that the hegemony of the conventional may be just beginning to crumble. However, the key issue is that researchers need to provide strong(er) arguments to justify the approach taken and to emphasise their contribution to knowledge as a route toward avoiding replication. Separating ontology and epistemology, and privileging ontology is fundamental to conducting research with a critical realist perspective and is the principal characteristic that differentiates it from more conventional positivistic or phenomenological paradigms (Day, 2007). Critical realist approaches tend to address explicitly ontological and epistemological issues, which, at best, remain implicit in management research (Miller and Tsang, 2011).

Entrepreneurship is considered to be a particular form of social action where the entrepreneur chooses to establish a new business venture (Baron, 2007; Shane et al., 2003). However, this understates the role of structure in conditioning and constraining the ability of the
entrepreneur to facilitate the successful implementation of decisions that they make (Mole and Mole, 2010; Sarason et al., 2006). Structure provides the pre-existing conditions within which entrepreneurship is enacted (Jack and Anderson, 2002). For example, the receptiveness of society dictates the extent to which the entrepreneur is enabled to exploit opportunity. Additionally, society provides pre-requisite elements, such as resources, required for the act of entrepreneurship to take place (Arora and Nandkumar, 2012). In an attempt to facilitate entrepreneurship, given the widely acknowledged assumption of perceived benefits accruing to society, some governments seek to influence structural conditions, through the provision of a wide variety of support services, to encourage entrepreneurial action, but this simultaneously constrains agency (Rasmussen and Gulbrandsen, 2012). In theory, support services are available to any individual, in a democratic society who seeks to pursue entrepreneurial intentions, but this masks the reality of constraints imposed by structural conditions (Korsgaard, 2011).

Critical entrepreneurship tends to adopt post-structuralist approaches, focused on the ideological, and seeks to reveal unspoken assumptions, such as entrepreneurship as always a ‘good thing’ (Down, 2012; Lerner and Shalman, 2012; and Ribeiro-Soriano and Galindo-Martín, 2012). There is a pervasive discourse of entrepreneurship contributing to economic growth and prosperity (Perren and Jennings, 2005), with entrepreneurship being presented as the engine of growth and the route out of recessionary conditions (Galindo and Mendez-Picazo, 2013). Jones and Spicer (2009 p.27) have shown how entrepreneurship interpolates individuals as entrepreneurial subjects, who then "...further the cause of post-industrial capital through their own volition...". Although the majority of entrepreneurial scholars usually regard entrepreneurship as beneficial to society and the economy, even a number of broadly functionalist researchers have questioned whether the propensity to advocate increasing numbers of entrepreneurs is necessarily always an improvement (Huggins and Williams, 2011).

Critical realism is an alternative perspective for critical entrepreneuring because the construct incorporates two key attributes: the structural constraints that frustrate and limit the capacity of individuals, such as financial wherewithal; and the agency to overcome or navigate one’s way around the social constrictions and exercise a growing power. The outcome of critical entrepreneurship emerges from the interaction between constraint and agency. The concept
of critical entrepreneurship is therefore based on the interaction that emerges from a dualism, which is precisely consistent with the critical realist perspective.

**Critical Realism**

Critical entrepreneurship shares the fundamental perspective of critical realism concerning social science, yet rarely takes account of the core principals of critical realism as metatheory. For example, Imas et al. (2012) make use of a Bhaskarian dialectical framework in their analytical approach to microstorias, even “…challeng[ing] us to seek better explanations for how these individuals apply their entrepreneurial practices, discourses, (social) creativity and novel organizational skills to maintain communal, organizational, familial and personal wellbeing.”(p.563). However, they stop short of following through the use of a critical realist lens to examine core elements such as retrodiction, abduction and generative mechanisms in seeking answers and explanations for the questions they pose. Our empirical research clearly demonstrates that the factors that differentiate research inspired by critical realism from both conventional research, and other examples of critical research, is not whether an intrinsic or extrinsic design is adopted in data gathering and analysis, but interpreting outcomes in the light of depth ontology, extending analysis to embrace retrodiction and abduction and recognising the role of emergence, generative mechanisms and constraining conditions in explaining outcomes.

Critical realism reflects four key features of the social world (Danermark et al., 2002). Firstly, the social world comprises an open system in which the closed conditions necessary for causal laws to operate infallibly are not present in natural circumstances. Secondly, the social world exhibits ontological depth within multiple domains. Thirdly, combining multiple domains and strata involves emergence rendering the resultant irreducible to constituent elements. Fourthly, there is no neutral, objective perspective and hence, all knowledge and statements about knowledge is necessarily theory-laden. Critical realism is a metatheoretical perspective (Blom and Morén, 2011) with a core principle of ontological depth, which asserts that reality is divided into different, but inter-related, domains and strata (Bhaskar, 2008). Ontological depth, in contrast to more conventional ontologies, provides the opportunity to reappraise the person-society relationship, which is summarised in Bhaskar’s (1998) Transformational Model of Social Activity (TMSA). Bhaskar’s argument
is based on realist ontology. This contends that we have to learn to perceive entities as both scientists and humans, and, since that is the case, there must be a level of events that is independent of our perception of them. This is known as ‘the intransitive domain’ where events occur outside of our ability to perceive or observe them (Hartwig, 2007). The next stage of the argument concerns how scientists work. Scientists design experiments to control conditions. The better that they can control conditions the more that they enable the causal factors or mechanisms to reveal themselves. The result of all this is that there are three levels of reality: the empirical, the level of events, and the level of the generative (causal) mechanisms, which Bhaskar called the real (2008).

Critical realism is not a research methodology. Instead, critical realists design and develop their research to reflect three specific perspectives in social science. Firstly, the view that the approaches common in natural science cannot be replicated meaningfully in the open system that characterises society, and therefore, social science. Secondly, social reality is not synonymous with social construction since social reality is, by definition, an interpreted objective reality. Thirdly, the sentient characteristic of the object/subject of social science requires that subjective intentions are fully integrated within any study/research.

The emancipatory credentials of critical realism are manifested in its drive to explain social phenomenon through understanding social causes grounded in generative mechanisms. Mahoney J (2003) reviews the major explicit definitions of mechanisms and concludes that there are four principal categories found in social science. These are a) causes of outcomes; (b) intervening processes; (c) causal propositions not yet fully or properly defined; and (d) an unobserved entity that generates an outcome. As many taxonomies, the boundaries between categories are not watertight and the groupings should not be regarded as mutually exclusive. Identification of a mechanism or series of causal stages could, therefore, be both the cause of an observed outcome and a description of the intervening process linking trigger event to outcome and explaining how and why the events and process give rise to the outcome. Critical realists tend to differentiate between the term ‘mechanism’, which describes the way or ways in which the causal powers of an object are exercised and the term ‘generative mechanism’ which describes the way or ways in which causal powers are exercised that lead to an event that is visible or detectable to a human observer (Blundel, 2007). The visible outcomes detected by the observer arise from the complex relationship between powers, structures and tendencies that create generative mechanisms (Fleetwood, 2011).
Critical realists agree that reductionist ontologies, such as objectivism and subjectivism grounded in the Humean tradition, do not contribute to establishing more powerful explanations of causality. Elster (1999) states that mechanisms may provide explanations of observed phenomenon, but they do not contain the regularities required for prediction (p.1). The basis of causality, explanation and prediction in critical realism lies in the interaction of the properties, causal powers, of objects. Objects within a single strata or crossing the boundaries between strata may combine and, through a process known as ‘emergence’, give rise to a new object or phenomenon. The new object or phenomenon is qualitatively differentiated from any of the initial, independent objects and possess new independent properties – new structure, new causal power, new mechanisms – that arise from, but cannot be reduced to, the properties of their originators (Bhaskar, 2008; Danermark et al., 2002; Sayer 2000). Bhaskar, in particular, denotes a hierarchical dimension to emergence suggesting that emergent properties are necessarily at a higher level than the properties of the constituent elements. For example, the Unquoted Companies Group may, indeed does, possess more power to influence Government policy on issues such as inheritance tax than any one single member acting in isolation.

Theories of generative mechanisms, and causal powers/capabilities, are exemplified by Harré and Madden (1975) and Cartwright (2007). Harré and Madden (1975), advocate a generative theory of causality, tempered with a cautionary note that causal explanations have only a minor role in understanding social phenomena. For Harré and Madden (1975,) causal power is an aspect of the inherent characteristics or nature of an object, a powerful particular, which cannot be separated from the object. Power is a potential that exists whether active or latent. It may be constant or variable, depending upon whether the nature of the object changes. Cause results from the nature of the powerful particular and the conditions, which trigger power to be exercised (Harré and Madden, 1975). The effect is conditioned by the nature and characteristics of the object being influenced, and the existence of constraining conditions.

Mayntz (2004) adopts the term ‘generative mechanism’ to link the concept of mechanism to explanation and states that the structure of a mechanism must remain constant or the sequence of activities contained within the mechanism will describe a separate mechanism. However, Mayntz does not restrict the term to fundamental causes in the same way that Bhaskar does in naturalism as the foundation of critical realism.
Reiss (2007) opposes the ‘new mechanist perspective’ (NMP) which is said to regard the sole purpose of social science as providing theoretical explanation linked inextricably to causal mechanisms. He mentions several perspectives that discuss mechanisms and points out that whilst each is subtly different, they share common features including a belief that theoretical explanation is paramount, the concept of segmented and stratified reality, and that causal mechanisms residing in lower strata are the only satisfactory form of explanation for social occurrences at higher levels. The crux of Reiss’s argument is that whilst mechanisms might contribute to explanation it does not contribute significantly to the pursuit of other social science aims such as description, prediction and control.

In following the generative mechanisms stance the discussion is extended into the application of abduction and retroduction, exemplified by the writings of Aastrup and Hallórsson, 2008; Downward and Merriman, 2007; Martin, 2009; and Steele, 2005, as a means for developing and assessing plausible explanations. Abduction is a form of ‘...ampliative inference...’ (Psillos, 2007 p.257) and can mean a formal process of logic to develop a plausible, but not logically necessary, conclusion, and/or a creative and imaginative way of recontextualising phenomena (Danermark et al., 2002). Retroduction is also a form of inference that, by utilising counterfactual thinking, enables the researcher to move from observations made in the empirical domain and experience stratum to the prerequisite conditions necessary for the structures and mechanisms in the actual and real domain to create the observed/experienced outcomes (Danermark et al., 2002). It is a style of thought experimentation using inference to hypothesise the unknown, hidden generative mechanisms that could/must have been present and operating to give rise to a given, known, observable outcome. The crux of abduction and retroduction is deriving ampliative inference from the various clues hidden within the analysis – like a Dennis Potter play there will be many clues but very few answers, except those lying within the interpretation of data by the observer.

Bhaskar (1979) conceded that there were three limits to naturalistic sociology. First, social structures are not entirely independent of the activities that they influence; for example, social structures like the relationship of landlord and tenant influence the obligation to pay rent. Second, social structures are not independent of the agent’s understandings of their actions. Most tenants believe it is natural to pay rent. Third, social structures are only relatively enduring rather than iron laws. Thus, structures change over time, even if it is only over the
long-term (Archer 1995): the mutual obligations between landlord and tenants have altered over time.

The plausible existence of a mechanism linking two variables may support causal inference but the absence of a mechanism does not guarantee that any observed correlation may be spurious. Rather, the difficulty lies in identifying plausible mechanisms and discriminating between the mechanisms that may be best explanations and this is dependent upon rigor methodological approaches to explicitly defining the mechanism, accounting in detail for the component elements and in providing support for the contention through valid empirical evidence.

**Empirical Research**

The research underpinning this paper is drawn from an empirical evaluation of a support intervention that operated in the West Midlands region of the UK between 2008 and 2010. The scheme provided grants to qualifying enterprises seeking to engage in entrepreneurial activity by launching innovative new products, services, or process. The intervention is both an example of, and a facilitator of, social change where the existing structural conditions are deliberately modified by the provision of grant funding to applicant enterprises that satisfied eligibility criteria. Intervention was considered necessary because the West Midlands region was perceived as underperforming in comparison to other comparable regions of the UK with respect to innovation, job creation and the retention of wealth created within the region. The structural conditions existing in 2006 and 2007 were not thought to be sufficiently attractive to encourage ‘home grown’ (defined as already located within the region) entrepreneurs to use their entrepreneurial talent to begin new ventures, including starting new enterprises. Hence, the, then, Regional Development Agency (RDA) articulated a proposal to support new ventures by providing a grant in tightly specified circumstances.

Scheme Management conducted an evaluation, employing conventional approaches, approximately twelve months after closure. This evaluation concluded that the intervention was broadly successful in terms of achieving pre-determined key performance indicators and fostering innovation by enabling projects to proceed that otherwise would not have done so. Subsequently, our research, which overlapped the conventional evaluation and continued for
a further twenty-four months, was designed to explore whether adopting a critical realist lens would enhance the outcomes from evaluation, especially in terms of explaining which dimensions of the intervention led to successful outcomes and why and how those elements functioned.

We employed a mixed method approach making use of four principal sources of data. First, a database, which had been compiled in real time from the initial opening of the scheme and extending beyond closure, recording details and progression of all enterprises who formally enquired about receiving the grant. Second, self-reported data, gathered from sixty-two grant applicants by unsolicited postal questionnaires (approximately twenty-seven per cent response rate). Third, semi-structured interviews with fifteen representatives of institutions providing and managing the grant. Fourth, semi-structured interviews with thirty-three enterprises who applied for a total of thirty-six grant awards (approximately sixteen per cent of all applicants). All interviews were recorded, transcribed verbatim and analysed using NVivo 9 and 10. The interviewees’ comments were ascribed the status of a record of the visible outcomes of their experiences and perceptions concerning their efforts to foster innovation, or their attempts to act entrepreneurially, and the constraints and/or facilitation provided through modified structural conditions. The important point, however, is that in critical realism, empirical data analysis is not an end in itself but serves as a facilitation mechanism preparing the data needed to enable retroduction and abduction to be practiced and to enable the predictive and explanatory power of plausible causal propositions to be assessed.

Drawing upon the results emerging from the empirical work undertaken reveals that a critical realist interpretation of the data gathered led to the identification of outcomes that had not, probably could not have, been detected using solely the conventional approach grounded in positivist ontology. For example, the results of our research provide the basis for deepening plausible explanations of which elements of the intervention appear to be directly associated with which outcomes and why that association may have been effective. In particular, the intervention assisted emancipation by providing much-needed resources, which in turn led to a range of beneficial outcomes such as increased confidence, reputation and credibility, which boosted the potential for positive outcomes. In reducing the constraints imposed by limited resources, the intervention facilitated agency allowing grant recipients to proceed with projects that otherwise would not have gone ahead. Unfortunately, other Governmental
and regional priorities led to the early closure of this specific support intervention and the inability of some grant recipients to complete their projects satisfactorily.

Evaluation of the scheme, conducted with a deterministic paradigm underpinning the assumptions embodied in the intervention led simply to the conclusion that the intervention had succeed, but was unable to explain which elements of the intervention were efficacious, nor to explain why the observed effects arose. Given the desire to facilitate social change to stimulate entrepreneurship to enhance any benefits accruing to the community, adopting a critical realist paradigm as an alternative enables explanation to be developed, and hence would have enabled a continuing scheme to be modified in the light of the explanation developed to further enhance effectiveness and efficiency.

However, for the purposes of this paper, a comparison of conventional versus critical realist evaluation is not mainstream to our argument; our interest lies in exploring how critical realism may contribute towards furthering research in critical entrepreneurship. The empirical research undertaken acts as an illustration of where and how research inspired by critical realism impacts upon key dimensions of critical research with particular reference to critical entrepreneurship.

Critical Realism and Critical Entrepreneurship

The empirical research briefly described above illustrates the potential impact that adopting a critical realist perspective has for critical research, especially critical research in entrepreneurship. As Danermark et al. (2002) indicate, both quantitative and qualitative methods have a role in critical research investigating social phenomena and the crucial element in framing research design is recognising the implications of the relationship between metatheory and methodology. Neither positivism nor phenomenology/hermeneutic metatheory adequately addresses the underlying characteristics of the social world, therefore, an alternative metatheory is needed, which in turn, will facilitate the use of alternative methodologies. Critical realism is suggested as an appropriate metatheory and intensive or extensive empirical procedures are advocated as alternative methodologies. Intensive empirical procedures draw upon elements and techniques familiar in qualitative research whilst extensive empirical procedures would be familiar to a researcher steeped in
quantitative research. However, as our empirical research illustrates, the key point is that the research methods adopted are complementary and used and interpreted in the context of critical realist ontology.

The use of quantitative techniques in data collection and analysis does not automatically presuppose a positivist metatheoretical foundation. Positivism assumes that knowledge derives from and resides solely in the empirical domain and experiences strata. Both inductive and deductive inference are contained within the positivistic cycle of research. Qualitative research methodologies do not have as strong an association with a single metatheoretical foundation and may be conceptualised as deriving from either phenomenology or hermeneutics. The core of exploratory and explanatory research, and theory building, in social science is located in the concept of generative mechanisms; a central construct in critical realism. Consequently, the choice of methodological approach should reflect the extent to which the methods selected can provide access to knowledge concerning generative mechanisms. Lawson (1997) noted that mechanisms do not normally arise unsystematically or at random. Hence, in clusters or over short periods of time it may be possible to identify ‘demi-regularities’; mechanisms that appear dominant. In this example, the important point is that methodology is extended to embrace retroduction and abduction in data interpretation to understand and explain the plausible generative mechanisms that account for the visible outcomes observed. Conventional empirical research would probably have finished with simple reporting of associations and relationships between common or frequently observed visible outcomes and characteristics of the context in which the outcomes were observed. For example, simply indicating that respondents of a certain size of enterprise reported a particular impact of the grant upon patent registrations or that there is a consistency in comments made by both male and female interviewees, but a lack of consistency when comparing male with female. By continuing to probe for concealed underlying influences by further data interpretation employing retroduction and abduction understanding and explanation are enhanced.

Much depends upon the purpose of the research, the characteristics of the subjects targeted and the nature of the relationships that are central to the study. Individuals possess many characteristics that may be used to define a taxonomy to categorise the group for study; for example, gender, age, employment and so on, but there may be no other association or relationship between members of the grouping other than simply the fact that they possess the
defining characteristic. In other contexts, the target research group may be defined by a substantive relationship that they share. Intensive research designs are suited to studying a limited number of examples where substantive relationships are meaningful whilst extensive elements are more appropriate when the focus is placed upon an entire population, which may be defined by a single criterion or selection of criteria in the taxonomy. Adopting a mixed approach and simultaneously employing both intensive and extensive empirical procedures allows the researcher to gain knowledge of not only the impact of a given situation in a specific context, but also how widespread that context may be and how frequently the same implications might be expected to arise. The important characteristics of the subjects in this research were largely determined by the specification of eligibility for the grant. Indeed, the need to meet eligibility criteria illustrates the power asymmetry that existed that subjugated grant recipients and heightened the influence of grant providers.

From a critical entrepreneurship perspective our empirical research illustrates that the approach would enable researchers to challenge the dominant theme underpinning this type of support intervention, to highlight the concealed taken-for-granted assumptions that underpin the scheme, to expose issues of the balance of power affecting domination and to question the prevailing discourse underpinning the justification for intervention. These four dimensions are intertwined and come into focus more sharply in this context because the intervention was funded from public resources, including funding from the European Region Development Fund. The scope of the original evaluation, conducted by scheme management, was undoubtedly primarily concerned with building an evidence base to justify the use of public resources by the return to the community measured in terms defined within key performance indicators. As indicated previously, these were based upon rational data analysis and demonstrate a dominant belief in the power of using quantified evidence in justification. However, the empirical research undertaken clearly demonstrates that only a limited impression of the outcomes arising from the intervention is provided through this approach. A critical realist approach both broadened and deepened understanding and explanation by providing a more comprehensive account of the range of outcomes arising, and this adds to justifying the intervention.

Taken-for-granted assumptions, power and domination and prevalent discourse supported one another throughout the total process of the intervention. The design of the intervention was based upon an unquestioned assumption the best way of bringing (re-establishing?) economic
growth and prosperity in the West Midlands region was through innovation and entrepreneurship. However, it was recognised that the existing structural conditions were not propitious and the lack of innovation and entrepreneurship was assumed to be a reflection of the inability of current providers of support services to meet the needs of nascent entrepreneurs. Furthermore, it was assumed that intervention needed to directly target nascent entrepreneurs rather than seek approaches that would stimulate support service providers to offer mechanisms that would meet perceived needs. Nascent entrepreneurs were regarded as being unable to help themselves and hence, the ‘only’ actors in the scenario with the capability to provide the required support were the Regional Development Agency partnering an experienced local provider of services. The RDA brought with it the power to leverage financial resources from Local Government budgets and European sources of development funding whilst the local support provider brought networking and experience in administration to make the proposed intervention work. Since both the RDA and the local service provider were instrumental in designing and managing the scheme, they acquired substantial power vis-à-vis nascent entrepreneurs, which manifested itself in their ability to control who was eligible to access the available funding. Control enabled the scheme providers to dominate by enforcing a particular point of view upon grant applicants.

The first control point took the form of an explicit preference for applicants to be active in certain ‘preferred’ sectors of the local economy. These sectors were assumed to be those most likely to grow and develop in the future and hence, most likely to deliver sustainable, tangible benefit to economic activity on the region. Other eligibility criteria including the ability to provide a proportion of the funding required to cover the estimated cost of the innovation and the ability to manage cash flow, since the grant was recoverable retrospectively. The second control point took the form of providing direct assistance to grant applicants in preparing their application for a grant. Many applicants were heavily dependent upon the quality of the advice provided by the Business Development Advisor (BDA) assigned to them. Thirdly, control was exercised because the BDA actually presented the application to the grant awarding panel; the applicant themselves did not have direct contact with those charged with responsibility for making award/reject decisions. Finally, control was exercised by specifying precise qualifying activities upon which grant funding could be spent. Non-qualifying activities were funded by the applicants themselves or from other sources.
Our empirical research illustrates how a critical realist approach amasses evidence to question the validity of the underlying assumptions, the asymmetric balance of power and the dominant discourse justifying intervention. For example, retroduction clearly demonstrates that whilst the provision of the grant acted as a generative mechanism to reduce risk; essential for some enterprises, other enterprises who were perfectly capable of bearing the risk of innovation from their own resources, took advantage of the scheme on the basis that it more efficient to make use of someone else’s resources rather that their own. Additionally, our research demonstrates that the power asymmetry led to the definition of qualifying activities that embraced issues not perceived as particularly significant by applicants (expenditure on management development), but yet omitted others regarded as highly important (covering internal costs). Similarly, the dominant discourse can be summarised as “entrepreneurship is essential, but only we have the capability to make it happen”; again a reflection of the desire to maintain a power asymmetry. However, our research demonstrates that applicants, whilst typically grateful for the assistance provided, did not perceive themselves to be wholly reliant upon local providers of quasi-governmental resources for support.

Both intrinsic and extrinsic research designs can shed light upon significant issues such as the underrepresentation of gender and/or race. Intrinsic designs in particular can help bring a voice to underrepresented groups or categories of subjects. For example, the grant scheme attracted neither female nor ethnic minority applicants to any significant extent and, of course, the scheme was theoretically open to all comers who could satisfy the eligibility criteria. Extrinsic research would enable a judgement to be made concerning representativeness and intrinsic research may allow the ‘voice’ of underrepresented or disadvantaged potential applicants to be placed on record, but neither this, nor critical research inspired by critical realism will guarantee that their ‘voice’ is heard by agents with power to act appropriately. However, critical realism will allow understanding and explanation of the structural conditions that lead/led to insufficient action amongst disadvantaged groups, plausible explanation of their subjugation, and may provide the basis for positive change to be induced to elicit change.

As indicated earlier, our empirical research explored an intervention that was simultaneously an example of, and a facilitator of, social change. We draw upon Bhaskar’s TMSA (1979), his response to issues of structure and agency, to offer a conception consistent with notions of emancipation, agency, constraint and social change within critical entrepreneurship.
Bhaskar’s TMSA is a general approach to the problem of how change occurs within society and provides an approach to explaining the relationships exemplified in the intervention. The problem that Bhaskar’s TMSA sets out was to navigate a passage between the individualist and holist approaches to social science and to develop an emergent view of structure and agency. Structure is equivalent to social forms, and social forms are considered the material causes of, and/or constraints upon, outcomes. Bhaskar’s TMSA is therefore, a useful approach to consider aspects of social change within entrepreneuring. It does not privilege either structure or agency, but considers the outcomes as a combination of both. Neither does it elide one into the other as in structuration approaches (Giddens 1984).

In The Possibility of Naturalism Bhaskar (1979) sets out six points to develop his TMSA. He argued that:

a) society was irreducible to people;
b) social forms are necessary conditions for people to act;
c) that the pre-existence of social forms and their autonomy makes them possible objects of investigation;
d) that social form’s causality establishes their reality;
e) the pre-existence of social forms entails a transformational mode of social activity; and
f) the causal power of social forms is mediated through human agency.

“To use the Aristotelian terms, then, in every process of productive activity a material as well as an efficient cause is necessary. And, following Marx, one can regard social activity as consisting, analytically, in production, that is in work on (and with), entailing the transformation of, those material causes. Now if, following Durkheim, one regards society as providing the material causes of human action, and following Weber, one refuses to reify it, it is easy to see that both society and human praxis possess a dual character.” (Bhaskar 1979 :34)

At the heart of TMSA is the relationship between social agency and social structure. Social forms are autonomous, real objects, which can be studied independently, whose causal power is prerequisite to any form of intentional act (Engholm, 2007). Yet, as Engholm explains, social forms, society, exist only because of human agency being both necessary and a pre-existing condition to action. Wan (2011) argues that social forms do not produce change in
themselves, but act through structuring the beliefs, intentions and schemas (although this hints at a structuration approach), but also contributes to the types of social actions that in turn produce change. Society is continually transformed and/or reproduced through social action. It is the latter element that Archer (1995) argued distanced Bhaskar’s approach from Giddens (Archer 1982); hence “…society is the ever-present condition (material cause) and the continually reproduced outcome.” (Bhaskar 1979, p. 34).

Social structure is an emergent effect of social agency (Archer, 1998). Hence, TMSA is an emergentist theory. Emergentist theory refers the idea that the world is made up of entities which are not simply the sum of their parts (Elder-Vass 2010) and rejects an individual reductionist approach (Hollis 1994). Bhaskar (1979) argued that different subjects conceived of human being in different ways, so the biological emphasizes the neuroscience, the psychological the cognitive and the sociological the social interactions. Each of these approaches has something to offer. Another aspect of emergence is the idea that outcomes are caused by interactions between different elements such as structure and agency and, therefore, they cannot simply be returned to their initial states (Elder-Vass, 2010).

The basis of the intervention was to induce change in behaviour such that nascent entrepreneurs were motivated to move from inaction to action with respect to start new ventures. It was based on the assumption that the existing social forms (structure) did not provide the necessary conditions for the target group, nascent entrepreneurs satisfying qualifying conditions, to act (agency). No intervention could be influential unless based upon the belief that social forms are real and pre-existed the event or events that were the target for influence via powerful objects – human mediation was essential to influencing outcomes. Here, human mediation takes the form of designing appropriate structures to facilitate awareness of the existence of grant funding, processes for applying for a grant and making an award decision and payment of the grant against suitable evidence of qualifying expenditure. Emancipation is achieved by liberating nascent entrepreneurs from the constraints imposed by inappropriate or ineffective social forms that pre-existed the intervention. Ideally, once freed individual enterprises would be able to develop themselves to reach a position where their venture would become sustainable, possibly by enabling access to other social forms, for examples mechanisms for providing larger injections of funding, that would allow the venture to grow and prosper. Archer’s modified version of TMSA (Archer, 1998), known as the Morphogenetic Cycle, which explicitly, rather than implicitly, highlights the time
dimension assumes that the intervention would lead to a modification of structural conditions. In our research this was partially true for eligible applicants, but was not sustained because the scheme was closed after operating for approximately eighteen months. It would probably not be true to say that the pre-existing conditions were resumed because closure of the scheme coincided with a host of other modifications to support services, which our research indicates was/is perceived as detrimental to innovation and entrepreneurship in the West Midlands. Hence, TMSA proves to be a valid representation explaining how, in this example, the interaction between structure and agency leads to the reproduction or transformation of social forms, butSadly generative mechanisms influencing the provision of support interventions did not provide ‘improvements’ as perceived by grant recipients beyond the life of the grant. This also illustrates that generative mechanisms act and interact and, where outcomes result, those outcomes may be positive, neutral or negative for specific agents.

**Conclusions**

The paper proposes a match between two critical elements: critical entrepreneurship and critical realism. Critical realism adds a way to analyse the interaction between the structured world that constrains agents and the intentionality and reflexivity of agents and the potentially emancipating action of entrepreneurs.

The role of critical realism can help us to better understand the mechanisms and contexts that can enable critical entrepreneurship as a construct. In this way it is part of an emancipatory alternative approach to entrepreneurship that can seek to enable critical entrepreneuring behaviour as an addition to understanding entrepreneurship as a rhetorical device or a discourse with an encompassing hold on agent’s behaviours. This seems to point to rapprochement between critical entrepreneurship and social entrepreneurship where social entrepreneurship is part of an emancipatory project; however, the conditions under which social entrepreneurship is truly emancipatory may need to be better understood.

The second issue that is work in progress for critical realism is the retroductive process. The better understanding of the methods surrounding retroductive inference requires more clarity.
Clarifying the ontological base when selecting research methodology strengthens the likelihood that only conclusions that can be fully justified by the selected methodology will be drawn.

Thirdly, critical realism privileges no particular research agenda and no specific methodology. Researchers select research designs that best facilitate the achievement of their research agenda and critical realism is an alternative perspective that both encourages and facilitates moving beyond the confines of conventional paradigms to broaden and deepen outcomes. In turn, this may broaden and deepen future research in critical entrepreneurship by enhancing understanding and explanation.

Finally, accepting methodological pluralism is challenging, but this should not pose an obstacle for those familiar with critical management research. Instead, critical realism is itself emancipatory, helping to guide researchers out of the constraints imposed by conventional paradigms. With emancipation comes responsibility to provide well-argued, fully justified accounts of research undertaken to underscore the quality of the outcomes achieved. Heterogeneity in critical research is part of its appeal, its potential and simultaneously, its strength. Critical entrepreneurship and critical realism in harmony offer the opportunity to drive forward the entrepreneurship research agenda.

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