Intellectual capital: direction, not blind faith

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Abstract

This study questions the coupling of "intellectual" with "capital" and the assumption that such a coupling legitimises measurement. It suggests this coupling presents intellectual capital as an uncontested construction that attracts a broad audience. However, this study lays bare intellectual capital by revealing its contestability and multiple meanings using rational and non-rational management perspectives as examples. Such contestability can be seen both as a strength and weakness in making intellectual capital a meaningful or meaningless construction. Using a metalectic framework, a process is presented that exposes a variety of attitudes of mind so that the integration of rational and non-rational management perspectives becomes a possibility. Using this framework, intellectual labour is captured operating within an eco-work system, which relies on the human attributes of independency and interdependency working simultaneously. It suggests that intellectual capital can only indicate a direction when imagination, creativity and learning are at work. The intention is not to provide yet another management model that will control or change people's behaviours. This paper simply presents an alternative thinking process that accommodates a variety of attitudes of mind and argues that such a process is more appropriate than what is currently on offer if intellectual capital is to become more meaningful.

Introduction

Intellectual capital as a construction has recently emerged in response to a number of recognitions that are changing the assumptions upon which organisations are built and run. First, the world is viewed as becoming less labour intensive, less material intensive, less energy intensive, but more knowledge intensive. It is assumed that "knowledge" has a financial impact as knowledge intensive organisations are considered to feature a higher productivity level and innovation rate. Second, there are increasing criticisms of traditional accounting methods such as balance sheets, which look backwards and at tangible assets only, and a growing demand for effective management of intangibles. The new management mantra of intellectual capital as the cure of all organisational crises in tricky markets is, therefore, partly a reaction to a dissatisfaction with the rate of success of conventional financial

measures and its financially based instruments. Guthrie *et al* (2003) divide the perspectives of intellectual capital into three branches: accounting, management control and management. The accounting perspective focuses on specific indicators of intangibles (e.g. research and development expenses, training costs, goodwill, advertising, patents, brands, customer satisfaction, etc) for the purpose of their capitalisation. The management control perspective emphasises how these indicators can be used for management control purposes whilst the management perspective calls forth a new managing approach where intangibles are in the limelight. What is common amongst these perspectives is the new belief that intellectual capital is the key driver of sustainable organisational performance and that it better reflects the actual worth of an organisation. This is shifting the focus of management from the tangibles to the intangibles under the auspices of the old doctrine of "what gets measured gets managed". Such an approach, however, makes intellectual capital meaningless and devalues its nature which is intangible. The key consideration is that it is impossible, and undesirable, to reduce intellectual capital to a calculable number that establishes whether an organisation's intellectual capital has increased or diminished. This is because measurement schemes are jumbles of subjective evaluations and opinions presented as objective phenomena which can serve to mask what really matters. Measurement thus transforms data into biased organisational conversations about what is valuable. It is simply a soft method of intervention, a less visible tool of organisational re-direction and altered meanings; it is not an explanation (Mouritsen 2004).

The accountants and rational managers, who are obsessed with numbers and believe in that part of the theocracy of scientific management which claims truth is revealed by measurement, may argue that intellectual capital is too important to be left to chance because "knowledge" has a financial impact in the perceived, emerging, post-industrial and knowledge intensive society. This context, it is argued, is driving and creating the integration of the measurement of intellectual capital (Mourtisen *et al* 2001). Yet the assumption that measurement of intellectual capital has positive organisational effects lacks empirical confirmation (Marr *et al* 2003). Whilst the current importance of intellectual capital is associated with the competitive advantage of distinctive competence (Selznick 1957, Prahalad and Hamel 1990), how this occurs and what conditions can encourage it are less clear. Neither is it clear whether Intellectual capital is simply the sum of organisational knowledge or something more esoteric about value (Sanchez *et al* 2000). Indeed Chaminade and Johanson (2003) contend that culture alters assumptions about knowledge, its

creation and its implementation. Whist those intent on measurement are making attempts to reduce the components of intellectual capital to generic factors, others have recognised that global dependency relies on a deep and wide interpretation of intellectual capital. This presents opportunities to transcend traditional symbolic order (Allee 2000), replacing control with conditions for cooperation, and in so doing, improving cooperation (Thorbjornsen and Mouritsen 2003).

The problem of intellectual capital is thus created by the technology of management employed to assess the sharing of knowledge between the individual, the team and the organisation. Any attempt to apply measurement and its disembodied logic to the meaning of intellectual capital eliminates emotion and feeling from it, replacing its representation with meaningless numbers. Whilst such arguments are understandable when placed in the context of their self-importance, legitimising them will only reduce intellectual capital to a label behind which accountants and rational managers can hide their limitations. In other words, it will not instigate any useful, meaningful action. Given these considerations, the legitimacy of measurement schemes in the context of intellectual capital is so dubious that makes them unworthy of serious scholarly attention. A more fruitful inquiry, however, would be to reveal how such perspectives determine potential meanings for intellectual capital in reinforcing their legitimacy. The outcome of such an inquiry will shift the emphasis of intellectual capital from measurement to recognition. For this purpose, intellectual capital can be considered, for example, from the perspective of those who believe in a disembodied world where objectivity is achievable, as well as from the perspective of those who believe in an embodied world, where all emotion and meaning is situated.

In shifting the emphasis from measurement to recognition through developing alternative thinking about intellectual capital, it is also crucial to question why intellectual capital as a construction is attracting considerable degree of interest amongst scholars and practitioners. The starting point for addressing this question in this study has been an assumption: that, intellectual capital enjoys a strong rhetorical appeal, and like other fashionable fads, it links together the characteristics of simplicity and ambiguity. Intellectual capital is accepted with a generally positive and highly esteemed status. Perhaps this general attitude is admirable and even noble because who could deny anything that is intellectual in nature and the importance of intellectuals who use their mind creatively. Through its intellectual labour, humankind has indeed been able to overcome many of its own natural limitations. For example,

it has enabled people to develop technologies to fly without wings, and defy nature itself by prolonging their mortal existence. This study does not suggest that intellectual labour is unimportant but contends that the view of intelligence as capital faces fundamental problems with measurability due to its ambiguity. This is significant because it is not possible to explain how such a capital can be accumulated and what results such an accumulation will produce. Ambiguous, fashionable fads with a strong rhetorical appeal, that attract a broad audience, are also essentially contested concepts with no fixed meaning (MacIntyre 1973). Their vagueness lends obvious appeal to those who would seek to use it in legitimising themselves in furthering their interests. In other words, intellectual capital, like other essentially contested concepts such as education, democracy and freedom, that have multiple meanings and usage, is a weasel word, slippery and elusive that can be used in different ways to obscure and deliberately exclude a wide mix of agendas and practices. Scepticism about the view of intelligence as capital is therefore necessary because the ambiguity that surrounds intellectual capital may deliver alternative outcomes from those promised by its advocates.

This paper will demonstrate the limitations of intellectual capital as a construction when it is viewed through either the rational or non-rational management perspectives. It reveals that it is the assumptions that underpin each perspective that enable the existence of such limitations. It also shows that it is possible to make these two seemingly competing perspectives complementary through a metalectic approach. Such an approach provides a richer and broader meaning for intellectual capital by locating both perspectives on their strengths and by giving equal importance to them whilst endlessly remaining critical of them.

Intellectual capital: a rational management perspective

Within the managerial mind frame, rationality is a deliberately constructed abstraction and represents an ideal type. According to Weber (1949: 90):

> An ideal type is framed by the one-sided accentuation of one or more points of view and by the synthesis of a great many diffuse, discrete, more or less present and occasionally absent concrete individual phenomena, which are arranged according to those one-sidedly emphasised viewpoints into a unified analytical construct…In its conceptual purity, this mental construct… cannot be found empirically anywhere in reality.

Rational management consists of a pre-determined, "problem" solving, goal-oriented strategy which assumes that the whole is a closed environment immune to any changing conditions, thereby excluding any emergent properties. Such an abstraction is characterised and described in terms of a disembodied whole where each inner part is unique. A means-end hierarchy ensures the goals revealed by the problem solving strategy it creates are achieved through the domination of that whole-part hierarchy. For these problem-solving strategies to function, individuals are assumed to be programmable.

Economic interests, in particular cost reduction, expressed as the elimination of waste, drive the rational management model (Homans 1961). It has efficiency as its primary value, guiding decisions and actions. It places faith in technologies, tools and techniques that it is argued maximise output and minimise effort, energy and time. The rational management model is based on the assumption that it is possible to create an objective world that can be explained in terms of means-ends and cause-effect relationships, where action is deemed goal driven, rule-based and calculative. This assumption, however, only holds true if predictability can be achieved. As a choosable world cannot be predictable and a predictable world cannot be choosable, in order to function, the rational management model requires the removal of differences between individuals, or groups of individuals, within an organisation. For this purpose, a unitary perspective emphasising sameness or uniformity must be enforced through its logic, language and measurement. This means suppressing individual's emotions from action and judgement by specifying what rational individuals will do in a variety of situations. Rational management is therefore a reductionist model of thinking in that it uses a classification process to reduce the plethora of options and interpretations. In this way, the rational management model categorises the behaviour of individuals and makes them powerless by their judgement of those behaviours. The behaviour of individuals becomes measured against these constructed standards and not by the thinking that determines individual action. Thus, individuals loose their individualism by being type cast as "conformist" or "deviant", "good workers" or "troublemakers". To ensure that the unitary perspective is maintained, surveillance has to be tight. As a result, measurement, monitoring and control increase in intensity. The assumption is that performance is the result of conformity. Any deviance from this choice, this one "truth" or one "best" way of doing things, is judged as irrational which by implication is untrue, bad or unworthy, and therefore becomes a site for increased control and increased regulation.

For this whole to be sustainable, the discourse of the rational management model is soaked in power relations, where the relationships within it are biased towards rank. Heirarchical communication are asymmetrical, emphasising one way relationships such that when two individuals relate, one is designated the "super-ordinate" and the other the "sub-ordinate". The super-ordinate who at all times maintains a higher ranking thus has control over all lower ranks. Authority is used to make sub-ordinates docile, efficient and economically active. The primary task of the super-ordinates is to establish, enforce and maintain the legitimacy of rationality, the criteria for which is defined and imposed by them. A supervisory control process thus drives the problem solving strategy by specifying choices, determining actions, and monitoring the actions that these choices determine, whilst factors such as emotions, feelings and meanings have to be specified and accounted for, or excluded. Whilst the subordinates might be able to see the relevance of the means and ends of their own part defined for them by the hierarchy, the division of parts ensures that they cannot recognise the significance of one part to another. The self-legitimising, self-reinforcing cycle of the ends justifying the means and the means justifying the ends, can therefore potentially lead to conflicts between the parts. In the light of such conflicts, any function that fails to achieve the pre-determined goals is labelled "fault", "error" or "failure" and it is only this that is broadcast upward. Thus, one of the main roles of super-ordinates in the hierarchy is that of a "fault finder" and successful hunting becomes the grounds on which these rational managers can accumulate acclaim. As a feedback loop for communicating disbelief and disquiet does not exist, such voices cannot be heard. It is therefore not surprising that rationally managed organisations such as factories resemble prisons and prisons resemble factories (Foucault 1977).

The rational management model is thus a normalising, disciplinary technology aimed at transforming the polyphony of voices within an organisation into a solo so that regulation and order can be imposed over diversity. Through this normalising process, individuals' choices for action become aligned with the organisational goals and the meaning of those choices becomes reduced to their capabilities to carry out what is expected. Thus, individuals can only use expressions such as, "I can", that is to say "I am competent to do so", or "I cannot", that is to say "I am not competent to do so" and the language of obligation such as "I must" (Schabracq and Cooper 1998). This technology allows the control of the individual and the control of choice, making individuals thoughtless in the name of economic interests. From the rational

management perspective, "intellectual capital" only becomes meaningful when it is defined in a way that gives an illusion of inclusion and excludes choice by allowing the dominant discourse of rational management to impose what kind of intellectual labour is legitimate. This illusion serves to hide a preference for a disembodied worldview and an intolerance of the embodied world. The illusion of inclusion is necessary to obscure the crucial difference that exists between the intellectual labour that is driven by the rational criteria and objectives of management and the non-rational criteria and objectives that are born out of individual's intellectual labour. Unclear semantics thus conditions language in a way that disguises the distinction between sufficient, causal conditions and necessary, enabling conditions. This trickery is best demonstrated by the following treatment of intellectual capital provided by Stewart (1997: xix), one of its main advocates:

> By intellectual capital I don't mean a clutch of PhDs locked up in a lab somewhere. Nor do I mean intellectual property (such as patents and copyrights), though that is one part of intellectual capital. Intellectual capital is the sum of everything everybody in a company knows that gives it a competitive edge. Unlike the assets with which business people and accountants are familiar – land, factories, equipment, cash – intellectual capital is intangible. It is the knowledge of a workforce: the training and intuition of a team of chemists who discover a billiondollar new drug or the know-how of workmen who come up with a thousand different ways to improve the efficiency of a factory. It is the electronic network that transports information at warp speed through a company, so that it can react to the market faster than its rivals. It is the collaboration – the shared learning – between a company and its customers, which forges a bond between them that brings the customer back again and again.

Implicit within the above treatment of intellectual capital that commits itself to a tangible being are the conceptual assumptions that it is possible to develop further productive relations by capturing and rationalising non-instrumental, non-representable, non-rational minds through formalist and instrumentalist descriptions of rational structures and the language practices of rational management (Fayol1949). This perplexing treatment of intellectual capital assumes knowledge to be transmitted and exchanged through a medium that can be stored, atomically accumulated and mined. Intellectual labour thus becomes reduced to a series of predictable steps and knowledge becomes reduced to the technology that can share it. In this way, intellectual capital is assumed to form the basis of productive relations that depend upon the representability, transferability and storability of knowledge. However, the relevance of such knowledge can be potentially questionable and

problematic in a changing environment. This is because knowledge cannot be separated form language, and language cannot be separated from the knower, whose knowledge is imbedded in their historical and social contexts. The work of Michel Foucault (1972 and 1981), "the archaeology of knowledge" and "the order of discourse" provides further clues. In his work, Foucault gave the term "discursive formation" and "discursive practices" to the analysis of the ways in which institutions establish orders of truth or what is accepted as "reality" in a given community or society. In this perspective, an established discursive formation is created by a dominant discourse that governs truth as a regime, which in turn shapes the conditions for "knowing" within a given context. Thus, the limits of codes, conventions and habits of language that reflect a given discourse are the limits of knowledge of the community or society holding that discourse and vice versa. In a changing environment, this implies that, by thinking of intellectual capital in rational terms, management can become the victims of this logic through which they strive to squeeze out more efficiency (Taylor 1911).

The treatment of this logic by those who hold the rational management perspective is valid within the context that makes such logic relevant e.g. when the environment is stable and where the ends are clear, agreed and known. However, those who hold the rational management perspective suffer from a fixation of belief that makes them assume that their logic is valid in all contexts. It is the context free application of this logic that renders it meaningless in other circumstances. The adverse consequences derived from the rational management model being misapplied are assumed to be unintended consequences of the intended action but they are avoidable. In which case, they cannot be mistaken and are therefore intended. For Mills (1959), the increasing rationalisation of society, where families as well as factories, leisure as well as work become parts of a functionally rational totality, is not necessarily a means of increased freedom for the individual or for the society. It rather subjects individuals to uncontrolled and irrational forces that make them not only increasingly self-rationalised but also increasingly uneasy as they are discouraged from using their own independent judgment. Thus, there is a ghost amongst the participants of the rational management model that constantly haunts them and which they fear. This mysterious ghost can only reveal its presence when the participants choose to step outside of their fixation of belief to access an alternative perspective.

Intellectual capital: a non-rational management perspective

Rational behaviour cannot be reduced to managerial rationality. Behaviour can be non-rational in managerial and yet rational in extra-managerial terms (i.e. managerially irrational and non-managerially rational). It is possible to develop an alternative way of thinking about intellectual capital through a non-managerially rational or non-rational management perspective. The logic of the non-rational management perspective instigates trust and diversity as opposed to the disciplinary, normalizing technology for individual regulation and collective control used in the rational management perspective.

The non-rational management model is characterised and described in terms of an embodied whole, where each inner part contributes to the determination of the whole. From this perspective, organisations are seen as a nexus of social treaties created by a diversity of interests. Trust is the key value and guiding principle driving the nonrational management model. It places faith in the capability of individuals to maximise their potential and determine what needs to be done. From this perspective, social cohesion is perceived not through sameness or uniformity but through unity in diversity. The non-rational management model is based on the assumption that organisational life is about making choices in a world where truth is a nebulous notion. Action and choice are not given; instead they are derived from the interactive process between different interests. Variation is seen both as a positive moral social value and as a survival mechanism where the world is uncertain and processes evolve. The assumption is that performance is the result of two tendencies: an integrative tendency, so that individuals work together as a whole and a self-assertive tendency, where individuals retain their autonomy within the whole. The bottom-up representative structure consists of autonomous actors creating together the goals through a process of finding unity in diversity and through shared principles and policies that provide channels of mediation.

The non-rational management model therefore represents an ecological model of thinking in that it celebrates mutual dependency and interdependency. It supports the notion that reality is uncontrolled, and that individuals and organisations are located and embedded in a dynamic, uncertain context. That it is not possible to know in advance when journeying along an unknown road that it might lead to a dead-end. Learning is derived from the history associated with trial and error processes causing change to be incremental and choice to be limited (Nelson and Winter 1982). What emerges is a track record through which change can be traced. Choices are sometimes planned, sometimes unrealised and sometimes emergent (Mintzberg

1994). Individual learning is both conditioned by the technology used to assess it and an individual's response to that technology and its meaning (Weick 1995). However, whilst a shared understanding may be developed and social order may exist this does not imply that meaning is universal. Individuals are quite capable of doing one thing and thinking another. Thus, knowledge and knowing are independent of one another and determined by individual meaning. As a result, differences rather than consensus is the state of play.

In this ecological model each individual has an interdependent and antagonistic relationship with the context within which they are placed. These tensions are balanced by the trust that exists between individuals, where trust is considered to be the self-assertive state of being responsible for the conscientious performance of some task and the integrative state which allows others to use or do something in the belief that they will behave responsibly and honestly. Trust is thus a condition triggered by different emotional and rational intelligences shared with others (Uphoff, 2000). It functions through a belief system where, based on its etymology, the Latin 'credo', belief becomes "I give my heart to", an emotionally comfortable position in which the individual is both engaged and involved. This psychological treaty ensures that individuals feel important, valued and enriched by their work experience (the word "treaty" rather than "contract" is used because the relationship is much more fluid than "contract" suggests). Schein (1965) describes this psychological treaty as a relationship that requires rewards and conditions over and above the pay structure to encourage the commitment, creativity and flexibility required of employees. The psychological relationship is thus always emotionally and individually constructed. Its composition involves a nexus of individually determined treaties with others at work. Such complexity suggests that the more power is disbursed the less likely convergent psychological treaties will become (Rousseau, 2003) because empathy and trust will have to be individually believed rather than socially constructed. For the whole to be sustainable, a pluralist perspective is present in the logic, language and success criteria of the non-rational management model. Individuals use expressions such as, "I will" or "I will not" and the language of belonging such as "we believe". Bottom-up representative structures are symmetrical, where information flows both ways. When two individuals relate both are "expert" in their own working context and both are able to self-regulate their behaviour and act autonomously to specify choice, determine action and monitor the outcomes. The non-rational management model thus serves a self-regulating technology aimed at transforming the polyphony of voices within an organisation into a symphony where self-regulation replaces the

conductor. Through this self-regulating process individuals' choices for action become aligned with the organisational goals.

Whilst the sticking point for the rational managers is cost, expressed as the elimination of waste that paves the way to the maximisation of output and the minimisation of effort, energy and time, the watch word for those holding the non-rational management perspective is investment. This distinction between cost and investment is crucial for the recognition of the effort that "wasted" intellectual labour takes combined with the belief that such "waste" is often not "wasteful" but instead represents an investment because it is a necessary, unavoidable part of the process of the development of new ideas and creating new choices. This contestability of the notion of waste is a good example of how exclusive fixations of belief can be. Waste, for example, assumes a particular meaning for rational managers, which is that of wasted effort and energy, which according to their criteria of success has to be eliminated. A powerful example of how waste can have different meanings can be seen in nature. In ecological terms, waste is an integral part of the conservation of a sustainable environment. Cohen (1977: 11) describes this natural process as follows:

> Female starlings on average lay 16 eggs in a life time. Only two of these go on to breed. This means a pair of parents in one generation makes a pair of parents in the next generation. For every pair of starlings that breed, 14 die. A female frog typically lays about 10,000 eggs in her life. Of those, 9,998 die before breeding. A female cod lays about 40 million eggs in her life, of which 39,999,998 die before breeding. Nearly all-wild creatures actually die without ever breeding, mainly by becoming food for other creatures. This indicates that the ecology is a necessary part of reproduction, and the cod and frog and sparrow are necessary parts of the ecology.

Such natural profligacy is also present in the creative thinking and innovation process, the ignorance of which makes organisations' sustainability fragile. A thought or physical experiment that does not work is an essential and natural by-product of successful exploration that should not be confused with careless work. Thomas Alva Edison's reported observation arising from his experience of inventing the light bulb provides some clues to this natural by-product. According to Edison, "the accomplishment of an inventor takes 1% inspiration, 99% perspiration". It therefore follows that without exploration, experimentation and the inevitable errors that accompany it, organisations will not be able to innovate for their sustainable organisational performance.

From the perspective of non-rational management, "intellectual capital" is therefore a consequence of exploring and searching for possibilities together with the accumulation of, and sharing of, information and ideas. The purpose of this process is to advance, preserve, disseminate and apply ideas where "error" is perceived as a natural consequence of the process of innovation and not as the consequence of individual mistakes. Thus "error" is supported through mutual respect, which removes fear and suspicion whilst strengthening social cohesion that determines how robust and unified the organisation is. In this way, organisations develop a strong sense of identity, coupled with shared values and beliefs, whilst providing their members with a strong sense of community, making them more cohesive than ones without these qualities. Strongly cohesive organisations are thought better able to face the challenges posed by social, economic and technological forces through innovations of its members, providing it with greater choice than its rational management counterpart.

Intellectual capital: a metalectic perspective

Through the process of revealing the meaning of intellectual capital from two seemingly competing perspectives, this study has thus far been able to demonstrate that the application of the rational and non-rational management perspectives causes organisations to be treated like factories and laboratories respectively. The key question to be addressed here is not whether a belief about intellectual capital is reasonable or unreasonable but whether it is maintained on shaky grounds.

The rational and non-rational management models each have limitations, the understanding of which will lead to its alternative. For example, the rational management thinkers consider that releasing diversity results in fragmented organisational goals and that without rational management, the exercise of choice by individuals can only lead to variable, random outcomes. They also argue that increased choice forces individuals to take personal responsibility for decisions that turn out to be less than perfect. As a result, they fear choice and freedom. According to rational management thinkers, this dilemma is well known – it is like an individual who is not quite sure where to park in an empty car park. Thus by freedom people actually mean escaping from having to make choices. Non-rational management thinkers, on the other hand, argue that conformity to one choice and rational controls suppress integrative and self-assertive tendencies that they consider to be the key drivers of performance. Given these considerations, the rational and non-rational

management models appear to contradict each other. In resolving this contradiction, it is important to recognise that although the rational and non-rational management models may appear to be opposites, they support each other's existence. This is because to view two opposites on the same level is to generate a contradiction. But since these opposites are not of the same type, or level, they create no contradictions. The rational and non-rational management models are similar at a deeper, more obscure level of analysis in that they both see the common interest of the organisation in terms of sustainable organisational performance. At this deeper level of analysis an alternative thinking about choice can be established where truth is in transient such that it is possible to engage with the struggle of polar opposites without commitment to a particular position.

In making rational and non-rational management perspectives work with each other in opposition, it is necessary to recognise the artificial, socially constructed nature of the dichotomy between these two opposing perspectives. Such recognition paves the way to an alternative approach, which is henceforth referred to as metalectic. Metalectic thinking is a richer from of discourse that provides equal consideration to the rational and non-rational management perspectives. It is based on the recognition that the world of values is inconsistent because it is made up of antagonistic elements; that full commitment to opposing perspectives simultaneously is impossible, yet each demands total acceptance; that this is not a case of logical contradiction because it involves human values; and that it represents a kind of contradiction that lies at the heart of divergent agendas and practices. Based on these recognitions, metalectics can be considered as a way of describing choice-making through three kinds of complimentary inquiries: namely, an empathetic enquiry, a sympathetic inquiry, and a dialectic inquiry applied dialectically. An empathetic inquiry attempts to understand as much as possible the value assumptions, hidden motivations and arguments of differing positions that support their rationale. A sympathetic inquiry does not deny the value assumptions of assertions, models or paradigms of others but nevertheless raises as many critical questions as possible about them. The idea is to play the devil's advocate in the role of a critical friend and consider whether alternative arguments are more convincing. At the meta-theoretical level of exploration a dialectic applied dialectically goes beyond competing explanations to establish an alternative way of thinking about choice. A dialectic applied dialectically avoids the limitations of compromise that is reached by a dialectic that is applied objectively i.e. the weakening of polarised discourses through a process of denying the strengths of each position. This is an

important point because where compromise between argument positions is reached, individuals have no rational or good reason to accept or reject it. In other words, compromise is founded on an individual's or a group's participation in the solution but weak engagement with the struggle. The artistry involved in metalectics is exposed where the individual perceiving extremes in conflict uses their emotional intelligences such as empathy and sympathy to enable engagement with the struggle without commitment to a particular position. The aim is to keep polarised positions in the struggle of opposition because only through this struggle can true dialectic survive. It is therefore necessary to ensure that each discursive theme is not destroyed. A metalectic discourse is thus one that masters the art of argument using the strengths of each of the diverse argument positions to transform understanding.

It therefore follows that metalectic thinkers actualise and potentialise. They not only exist to act but also exist to think and to doubt. Their reasoning is a composite of feelings and intellect. Their mode of thinking is temporary and contextual. In articulating concern they express care. They hold no allegiance to a belief. They stand within and without their experiences to consider what other possibilities there are. Whilst those who hold the rational and non-rational management perspectives emphasise the exclusive "either/or", the metalectic thinkers are the selectors. They hold both alternative perspectives in their mind simultaneously, and by including the necessary division between the two perspectives, they free themselves from internal contradictions. In this way, they are able to select which opportunities should be exploited and exploit the opportunities they select in the process of exploring and searching for other opportunities. For this purpose, the three underpinning principles they uphold are: limitless opportunities that need to be exploited, selective retention of those ideas judged successful in the context within which they are placed, and disjointed journey towards discovery and invention. By allowing the law of the situation to govern them, when a successful innovation results in an opportunity, they emphasise the rational management model in order to maximise the exploitation of that opportunity. However, when this opportunity loses its relevance they shift the emphasis to the non-rational management model because of the need for creativity to challenge the assumptions upon which things are done and which no longer fit the reality.

From a metalectic perspective, intellectual capital is not seen as a thing but as a process of choice-makers exploring possibilities, identifying necessities and exploiting opportunities when possibilities meet necessities. In other words,

intellectual capital lies at the heart of what organisations do with their individual and collective intellectual labour, the underlying element behind which is an invisible ability to select or choose. It can be argued that this perspective of intellectual capital takes the words "intellectual" and "capital" back to their Latin roots, and in doing so, legitimises their coupling. The word "intelligence", and its variants "intelligent", "intellect" and "intellectual", derive from two Latin words, the preposition *inter*, meaning "between", and the Latin verb *lego*, meaning "to choose or select". According to its etymology, intelligence therefore consists in "choosing between". Intelligent individuals are able to choose by virtue of having or revealing good judgment, keen insight and understanding. The Latin root of the word "capital" is *capitalis*, from the proto-Indo-European *kaput*, which means "head", this being how wealth was measured e.g. the more heads of cattle, the better. The coupling of "intellectual" with "capital" when considered from a metalectic perspective leads to a similar interpretation, which is that the more possibilities there are to explore, the more necessities there are to identify and the more opportunities there are to exploit, the better. In other words, the more choice there is available and the greater the ability of individuals to choose, the better.

Conclusions

Intellectual capital has the potential of unveiling what really matters for the survival and sustainable performance of organisations in the perceived, emerging, post-industrial and knowledge intensive society. This, however, requires a critical approach that provides an insight into the way different discourses are promoted and what their promoters gain from its use. Without the knowledge of such discourses it is not possible to make sense of intellectual capital. By adopting a critical approach, this study has argued that the measurement of intellectual capital does not have any explanatory power. The adoption of measurement of intellectual capital can only serve as a device for control through biasing organisational conversations and legitimising intervention when it assists management need for control. A radical alternative perspective of intellectual capital requires a fundamental change in the assumptions of what management is about and that forcing the discourse about intellectual capital into existing working frameworks will not bring about a change in the attitude of mind of managers or workers. The rational management perspective of intellectual capital has ignored, and made insignificant, the non-rational dimension, and vice versa. Those who hold the rational management perspective see individuals as possessions or connections that they can employ in order to exploit an existing

opportunity more efficiently or productively. Thus, their pursuit of intellectual capital is one of retention and exploitation for the purpose of serving economic interests. This begins with a successful innovation where a possibility meets a necessity thereby resulting in an opportunity that can be exploited. On the other hand, those who hold the non-rational management perspective are looking at potential through supporting variation in individual and collective efforts and aspirations. Their pursuit of intellectual capital swaps directing to enabling exploration so that a journey can take place for the purpose of discovery and invention. Like the reproduction in nature, they see regeneration deriving from the ecology of practice, the variety of possibilities. In this way, each perspective is making, and legitimising, unrealistic assumptions about the survival and sustainable performance of organisations. The major limitation of capturing and exploiting intellectual capital today has thus much to do with managerial mind frames, their limitations and denials. However, carrying on as before is not only a safe position but also a poor option. Rather than freezing incompatible doctrines, metalectic thinking enables the rational and non-rational management perspectives working together separately in a way that maintains their differences whilst celebrating and accommodating the strength of each. When the metalectic, rational and non-rational management perspectives are considered together, intellectual capital is like a flame within an upturned jar, the sustained burning of which is reliant upon the dependent and independent conditions within which it is placed. The burning of the flame alters the conditions that allow it to exist by consuming that on which it is dependent. Thus, if the context in which intellectual capital is placed is not appropriately energized, it will inevitably bring about its own demise, like the uncared for flame in the upturned jar.

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