Social Intelligence and the Creative Process

Jon Hopwood PhD

Institute of Live Communications, Melbourne, Australia

jon@institutelc.com.au

Abstract. This paper explores the relationship between the creative process and social intelligence. Creativity has established value in modern, knowledge-based economies but is complex, multi-faceted and often group-led. Social intelligence is one method for navigating this complexity using intuition, communication, collaboration and empathy. A 'creative vortex' model (originally derived from PhD thesis research) has been proposed. This forms the basis of theoretical framework from which further empirical research on social intelligence and the creative process can be conducted.

Keywords: Social Intelligence; creativity; creative process; creative industries; soft skills; group creativity

1   Introduction

Ideas are the currency of success. In modern economies creativity is seen as a major driver of social wellbeing and economic prosperity. In many developed societies there is an established infrastructure of creative industries (Cunningham, 2002; Garnham, 2005; Potts, Cunningham, Hartley, & Ormerod, 2008). These industries include communications, advertising, film, media and the arts (Caves, 2000; O'Connor, 2007; Hartley, 2005; Leadbeater & Oakley, 1999). They contribute to the knowledge economy (OECD, 1998; Roodhouse, 2001; Throsby, 2001) through creativity and imaginative intellectual property (Smith E. A., 2001; Howkins, 2002). Creativity is required to extend and adapt current thinking and meet new social and economic challenges (Amabile, 1996; Csikszentmihalyi, 1996; Fairholm & Card, 2009; Fischer, 2005; Montuori & Purser, 1996; Townley, Beech, & McKinlay, 2009) .

Creativity is therefore important and influences the way we consume and communicate. There is a shift to a conceptual age where divergent thinking and innovation are desired skill sets. The left brain influence of information is giving way to more right brain values at work: inventiveness, meaning and empathy (Pink, 2006).

Given the impact of right brain values the creative process is influenced by social intelligence. The importance of social intelligence as an enabler of performance and flexibility in human relationships is becoming increasingly valued in business and society (Hahn, Kun, & Choi, 2011). The ability to engage in 'complex' relationships with other humans leads to social success (Goleman, 2007) (Rahim, 2014) (Druskat, Mount, & Sala, 2013). Such practical intelligences are required in 21st Century knowledge and creative economies.

Much of the literature explores the creative process as it applies to individuals. More recent research acknowledges the emergence of social creativity as it applies to groups. Empirical research conducted as part of a PhD thesis explored the social creative process within a festival organisation in Melbourne, Australia. This qualitative-based ethnographic and longitudinal research provided deep insights into the creative process as expressed in a group environment. From this research a creative vortex model was derived. This paper presents this empirically derived vortex model in a new context through the social intelligence literature. This paper argues that while individual creativity remains an important attribute in the creative process, the key driver of creativity in the conceptual, collaborative age is group creativity and that social intelligence is a necessary but under-researched attribute of this group creative process.

1.1   The Significance of Creativity

Understanding more about the significance and structure of creativity will lead to a clearer understanding of how to harness social intelligence in the creative process. Creativity has been

the subject of academic research for over a century and philosophical discourse since the time of ancient civilisations (Welling, 2007). The consensus across the literature is that creativity is of significance to society. From a philosophical perspective creativity is viewed as a quest for knowledge and the advancement of humankind through such knowledge (McKeon, 1973). Creativity can be universally applied across all human cultures in both a contemporary and a historical context. Since ancient times civilisations have possessed a form of creative expression through literature, art or music and in contemporary terms are able to express this creativity through scientific and technological breakthroughs (Simonton & Ting, 2010).

Creativity can in part define a civilisation: 'to some extent we can claim that civilisations are defined by the creative geniuses who are responsible for the exceptional achievements – the great inventions, theories, philosophies, poems, paintings, and other creative products that compose a civilisation's intellectual and aesthetic legacy' (Simonton & Ting, 2010). This creativity has its origins amongst the ancient Greek philosophers and later in the Industrial Revolution. For Aristotle the process of making and creating something *new and useful* was distinct from *existing* practical wisdom (Wall, 2003). Adam Smith (1776) suggested that the ingenuity of invention, combined with the skill, dexterity and judgement of labour would bring prosperity and wealth to nations and society through positive economic value (Ville, 2011; Goldbard, 2006). For psychologists, creativity is presented in the context of the individual and their cognitive approach to idea generation (Glaveanu, 2010; Runco, 2004; Hennessey, 2003; Csikszentmihalyi, 1996; Nijstad & Paulus, 2003; Simonton, 2003). Much has been published on the thought processes of creative individuals and how this is influenced and understood (Guilford J. , 1950; Barron & Harrington, 1981).

Creativity should generate advances by producing something novel and original (Whitehead, 1933; Amabile, 1996; Barron & Harrington, 1981; Guilford J. , 1950; DiLiello & Houghton, 2008). The ideas of creative people should hold novelty outside the sphere of conventional thought. The unique idea must however also possess some appropriate use. It will require a practical application in some context in order to be creative (Amabile, 1996; DiLiello & Houghton, 2008; Sternberg & Lubart, 1999).

More recently, there is evidence that an emergent 'creative class' makes a positive contribution to businesses and communities through workplace innovation, consumption of arts and other cultural activities (Florida, 2004; Howkins, 2002). Twenty-first century developed economies increasingly value creativity over more traditional factors of production such as manufacturing (Florida, 2004; Lundvall & Johnson, 1994). This is particularly significant to the relationship between social intelligence and the creative process. In knowledge and experience economies such as Australia where manufacturing has declined in favour of cheaper overseas imports there is an increased consumption of experiences and leisure activities (Kollmeyer, 2009). The delivery of such experiences is the remit of the creative industries (Caves, 2000; Cunningham, 2002; Hartley, 2005). Such socially derived and socially consumed experiences harness the power of social intelligence.

Finally creativity is subjective. Some ideas are considered more novel and useful than others. This will depend on the context and environment in which these ideas are created and expressed (Bourdieu, 1984). Such novelty in creativity for the pursuit of useful ideas has become important for maintaining our quality of life. Einstein or Darwin's initially abstract work has proved to have practical significance (Gruber & Wallace, 2001). Individuals and societies are inextricably linked through this creative process, each contributing to the other's development and wellbeing. Creative imaginations establish links between activities and the answers to multi-faceted questions (Pérez-Fabello & Campos, 2011). Creativity is concerned with how idea generation can impact on society such as through art, science or medical research (Gardner, 2006). However, creativity also occurs on a smaller but widespread scale as people try to solve day-to-day problems and challenges such as how to save household water (Gardner, 2006). Creativity in society can further be seen as a process of renewal and replacement. Creative destruction (Amin, 1994; Bullen, Robb, & Kenway, 2004; Schumpeter, 1934) occurs as creativity transforms the old into something new. The refrigerator replaces the icebox. The Apple iPod replaces the Sony cassette Walkman.

This section has identified the significance of creativity and how this significance relates to social intelligence as the subject of this paper. The next section discusses the dimensions of creativity and in particular the creative process. Understanding more about the creative process from the literature will validate the relevance and significance of this process to social intelligence.

1.2   The Dimensions of Creativity

The dimensions of creativity have been a subject of academic discourse for decades and have been discussed in a range of contexts, including business and management, sociology, philosophy and psychology. The creative process is identified as a method and approach to thinking and ideas. This paper seeks to understand more about this method in relation to social intelligence.

Thoughts on the dimensions of creativity have been widely published. The work on creativity is broadly categorised into four dimensions also known as the Four Ps of Creativity (Drazin, Glynn, & Kazanjian, 1999; Rhodes, 1961; Simonton, 1988). These dimensions are explained as follows:
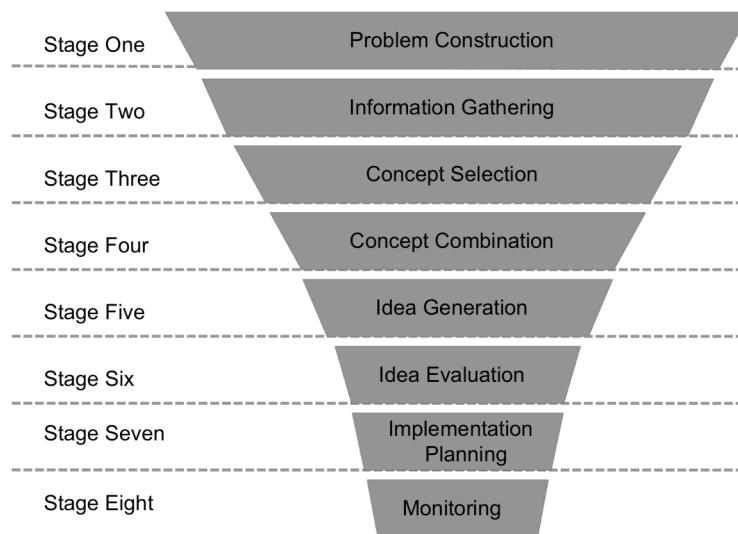
Creative products. Creative products are by implication more unusual than other products. As such they deviate in some manner from a normal or ordinary solution to an issue or problem (Amabile, 1996; Sternberg, 1999). The creative product is anything that produces 'effective surprise' in the consumer or audience (Bruner, 1962, p. 5). In order to be creative, this product must demonstrate some form of originality (Runco & Sakamoto, 1999). This originality does not only refer to the newness of a creative product, rather also to its usefulness and value (Ekvall, 1997). The creative product is only of value if it responds to a particular problem or situation. This value is likely to exist within a specific situation and for a specific person, group or organisation (Besemer & O'Quin, 1987). For example, a system of water delivery for a desert village is unique and of value to that group and situation. It will not hold the same value for another group in another situation such as a modern city by a freshwater river. The creative product therefore is an idea, action or object held as both original and useful in a particular context (Mayer, 1999). Another aspect of the creative product relates to the realisation of that product. How viable is it for the creative idea to emerge as something physically novel and useful? The capability and capacity to transform a conceptual idea into a tangible outcome is considered when defining a product as creative or not (Paulus, 2000).

Creative Person. There is much written about the dimensions of creativity (Runco, 2003; Sternberg & Lubart, 1995; Rentschler, 2001; 2002). As such it can be overlooked that despite these different dimensions, the protagonist of creativity is invariably still a person: 'In its narrow sense, creativity refers to the abilities that are most characteristic of creative people' (Guilford J. , 1950, p. 144). The creative person in the literature is characterised by a range of specific attributes (Martinsen, 2011; King, McKee Walker, & Broyles, 1996). Personality, cognitive styles and motivation variables play a role in defining what extent a person is creative (Barron & Harrington, 1981; Lubart, 1994). From a personality perspective the literature suggests that those who are open minded about new experiences, have a desire to grow and succeed, have a willingness to take risks and have high levels of self-esteem are more likely to be creative (Abuhamdeh & Csikszentmihalyi, 2004; Martinsen, 2011). Equally an above average level of dominance, hostility and impulsiveness in creative people balances the more positive personality traits (Feist, 1999). This suggests the creative person is a contradictory and complex phenomenon. One clear view relates to the common theme of originality present across much of the literature on creativity (Lack, Kumar, & Arevalo, 2003). In this context the originality of thinking driven by the cognitive style of the individual is impacted by other factors such as external influences, milieu and personal ability (Helson, 1999; Martinsen, 2011). This originality is derived from openness to new ideas alongside divergent thinking styles (Csikszentmihalyi, 1999).

Creative Place. There is an attraction attached to the creative place or field (Bourdieu, 1993; Drake, 2003). People invest effort in seeking out what they consider different to the everyday

spaces they occupy. This can be for a range of reasons. First in the context of *visitation*, tourists and locals will visit places of creative interest such as art exhibitions or aesthetically pleasing design environments (Förster, 2009). In terms of *habitation*, certain communities will migrate to creative spaces to live, work and contribute (Florida, 2004). Others still will gain creative benefit from the mere *suggestion* of a place. The image or memory of a creative place is enough to invoke creative thought (Drake, 2003). There is a range of reasons why certain places facilitate creative ways of thinking. To be accepted and to gain influence from a more diverse community which demonstrates an original and non-conformist approach (Barron F. , 1955; Negus & Pickering, 2000). The building of networks to share ideas, to gather input from other creative persons, or to develop a team for a particular goal or project is at the core of social intelligence. The setting in which an individual or group is situated can catalyse creativity (Scott, 2000). Particular kinds of project and knowledge based workers such as those in the creative industries will be attracted to these environments (Scott, 2000). There is a perception that the creative space will be a prompt for individual and group levels of inspiration and creative buzz (Syrett & Lammiman, 1997). The space forms a backdrop for a series of collective activities all of which serve the creative purpose. Individuals are 'surrounded by a concoction of rumours, impressions, recommendations, trade folklore' (Grabher, 2002, p. 209) incorporating diverse thinking, new trends, ideas and fashions (Ekinsmyth, 2002). These creative networks are relevant to the more transient based collective or cluster of creative persons as they work on a project in a setting whilst connected to a temporary creative hub. This collective effect will be substantially impacted through the key aspects of social intelligence and 'soft skills'.

Creative Process. The creative process requires high levels of social intelligence through personal judgement, flexibility and autonomy (Hall & Johnson, 2009). This open-ended view of the creative process as more of an art than a science implies a paradigm that is difficult to define or standardise through traditional management processes (Hall & Johnson, 2009). The collaborative and organic nature of the process is difficult to structure when it predominantly takes place in people's heads and is shared by diverse groups (Davenport, 2005). The mental and cognitive processes used in creative thought become unique as 'principles and elements of knowledge and insights that have not been connected before' (Ekvall, 1997, p. 195). New and viable solutions for creative and original outcomes can only emerge from activity with action. It is necessary for meetings and exchanges to take place for unknown and new information to be shared (Förster, 2009; Kristensson, Gustafsson, & Archer, 2004). This social process becomes the catalyst for creative thought. Divergent thinking has been used to describe these thought processes (Guilford J. P., 1967; McCrae, 1987; Runco, 1991). Such thinking creates a flexible and unstructured platform for combining a vision of alternative realities with the practical aspects of established and current principles. This combining and reorganising of socially derived knowledge and information to advance the thinking process and in turn to generate new ideas appears to be key to the creative process and is a vital aspect of social intelligence (Mumford, 2000). The creative process can be summarized in 8 stages as follows:

Stage One	Problem Construction
Stage Two	Information Gathering
Stage Three	Concept Selection
Stage Four	Concept Combination
Stage Five	Idea Generation
Stage Six	Idea Evaluation
Stage Seven	Implementation Planning
Stage Eight	Monitoring

Source: Adapted for this research from Hunter, Friedrich, Bedell-Avers, & Mumford (2007)

Fig. 1.   *The Creative Process Funnel*

Creative options start at the top with the most relevant and refined distilled at the bottom. The top of the funnel represents the broad *construction of the problem* in stage one. Situations requiring creative ideas are often poorly defined or complex. Developing a framework for understanding the problem can enhance creative performance (Isaksen, Dorval, & Treffinger, 2010). Often framework development is conducted in a social context such as a workshop or brainstorming session. Searching for information relevant to the creative problem commences in stage two. *Information gathering* before generation of new ideas is more likely to produce creative output (Hunter & Cushenbery, 2011). Again, information gathering can be a socially driven process with various team members bringing different aspects and views of the information gathered to the table. Given the large amount of data possibly collected by this stage, the concepts most relevant to the task can be *selected and organized* in stage three (Wierzbicki, 2007). *Combining* the relevant concepts in stage four will generate new and unique concepts for exploration (Unsworth, 2001). Once concepts have been recombined as unique then ideas can be *generated* from these unique concepts in stage five (Girotra, Terwiesch, & Ulrich, 2009). The ideas at this stage will be new but need to be *evaluated* in the context of the task during stage six so workable activities emerge (Kobayashi & Higashi, 2010). As ideas move from abstract concepts to tangible and workable actions a *plan of implementation* in stage seven is required to move towards execution (Byrne, Mumford, Barrett, & Vessey, 2009). The final and eighth stage is managing a process of feedback from the implementation of ideas. The creative process can evolve and improve as a result of such *monitoring* (Stamm, 2008).

The eight-stage creative process is particularly relevant to this paper in that much of the published work on social intelligence relates to the attributes required to engage in social processes with other members of a group, team or society. This creative process will be influenced by such group interaction. This paper argues that the social intelligence level of the group will have significant impact on the final creative outcome. However, in order to understand how social intelligence can impact on the creative process the generality of the creative process must be considered. Does the nature of the task have an impact on the creative process? Will the creative process in differ depending on whether it is product design, science or other creative industries? The sub-processes identified in the eight-stage model may have very different characteristics and influences depending on the nature of the task (Lubart, 2001). Much of the creativity literature suggests a small number of domain specific models but one size may not fit all cases (Lubart, 2001). There are often many paths to solving a complex or a simple task of cognition and therefore paths to creative outcomes may also be varied (Isaksen, Dorval, & Treffinger, 2010). In understanding these paths those variables that

make the nature of the task unique will be considered here. The first consideration is the internal variables that can impact the creative process. These internal variables are described here as the *characteristics* of the creative process and will vary depending on the creative task, the culture of the group and the skills and experiences of those involved in the process. This is especially valid in the context of social intelligence skills. The second consideration is the external variables that can impact the creative process. These external variables are described here as the *influences* on the creative process and will vary depending on the creative task and the broader environment within which the task is situated. Each of these internal and external variables is now discussed.

Characteristics of the Creative Process. Many characteristics of the creative process are discussed across the literature. Further to the literature, empirical, qualitative research conducted on the group creative process at a festival organisation in Melbourne, Australia has identified a number of characteristics impacting the creative process, in particular at a social group level. Figure II indicates the main characteristics arising from a combination of this original research and the literature. They sit within the funnel as intrinsic to impacting on the creative process. They become the characteristics of that specific process depending on the task at hand and will exist to varying degrees within.
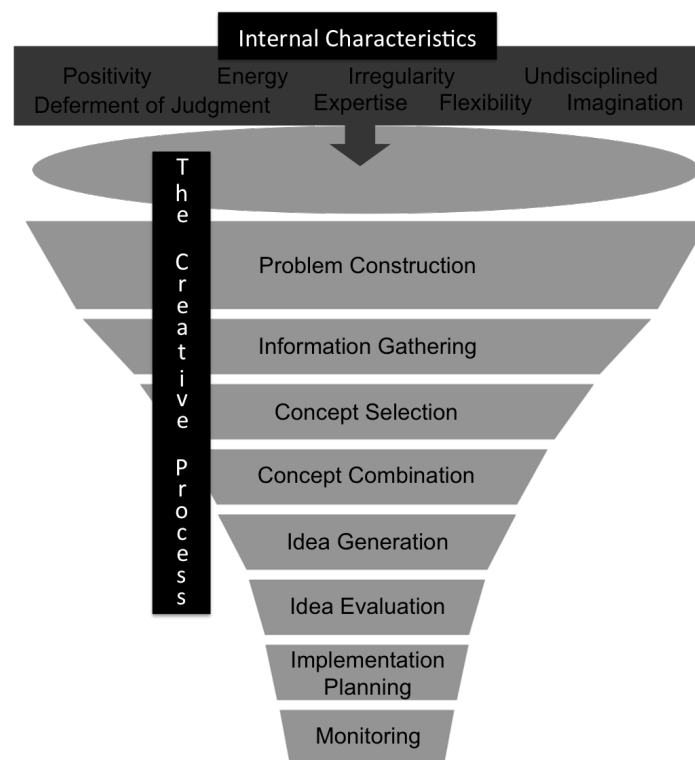

Fig. 2.   Characteristics as Internal Variables to the Creative Process

The first characteristic of the creative process is *positivity*. Despite the inner torment cited by many artists and performers, evidence from original research suggests that the creative process is enjoyable and fun (Henderson, 2004). Positive emotions such as joy and excitement can expand a creative person's range of cognitions (Amabile, Arsade, Mueller, & Staw, 2005; Frederickson, 1998; 2001). Increasing the repertoire of feelings and actions is a component of the original thinking required in the creative process: 'experiences of certain positive emotions prompt individuals to discard time-tested or automatic (everyday) behavioral scripts and to pursue novel, creative, and often unscripted paths of thought and action' (Frederickson, 1998)**.** This positivity can also be related to the frenetic *energy* that can accompany the creative process. This was evidenced in the longitudinal study of a festival organisation. At the

ideation stage participants were engaged in a robust discourse with high levels of connection, positivity and interaction. Such high energy levels are often seen in creative persons, groups or organisations. This energy may be a collective feeling accompanying the accomplishment of a task or the solving of a problem through social intelligence and creative skills. It may also simply be the nature of creative people to have higher than average levels of energy. Building on the energy of the creative process is *irregularity* (Steiner, 1965). This is characterised by long periods of perceived hiatus followed by large and unpredictable leaps forward. This irregular process is quite different to and distinct from those common day-to-day activities, described by Caves as the 'humdrum inputs' of running a project (Caves, 2000, p. 8). Furthermore such irregularity is unpredictable and difficult to manage or measure, posing challenges for management. The softer attributes of social intelligence and the use of intuition, empathy and communication skills can support this process. The irregular nature of the creative process will also be coupled with an *undisciplined exploration* of possible creative outcomes within the eight-stage process. This exploratory characteristic will be unique to the task and creative persons and will comprise of expanding the possible options, divergent and convergent thinking to generate new solution and validation from the individual and the group in terms of idea quality. As exploration is undisciplined then a *deferment of judgement* over the ideas emerging is a further characteristic of the creative process (Steiner, 1965; Osborn, 1963). This deferment is used during brainstorming to ensure that ideas go through the validation process before being rejected. As groups collaborate socially to derive creative outcomes they utilise the core skills of social intelligence through their ability to understand others and to act wisely in human relations (Thorndike, 1920). The creative process further suggests *expertise* is required as a characteristic in the delivery of creative outcomes. This expertise often derives from the creative person but equally can come from the process itself, alongside the *flexibility and imagination* of the thinking and the technical and intellectual tools used.

These characteristics are typical of the creative process as internal variables but which of these are dominant will change depending on the task. For example in the writing of a novel, the characteristic of exploration may be a more emotional and erratic process than the same characteristic applied to the creative scoping of a project to build a bridge. Next the external forces exerting influence on the creative process will be discussed.

Influences on the Creative Process. There is a range of influences on the creative process, both positive and negative discussed in the creativity literature and identified and explored in the original empirical work conducted in a festival organisation . Figure XI indicates the main influences as they arise in the published work and from the empirical study. They sit outside the funnel as extrinsic to impacting on the creative process. They become the influences on that specific process depending on the task at hand and will exist to varying degrees both as constraints and enablers to the creative process.
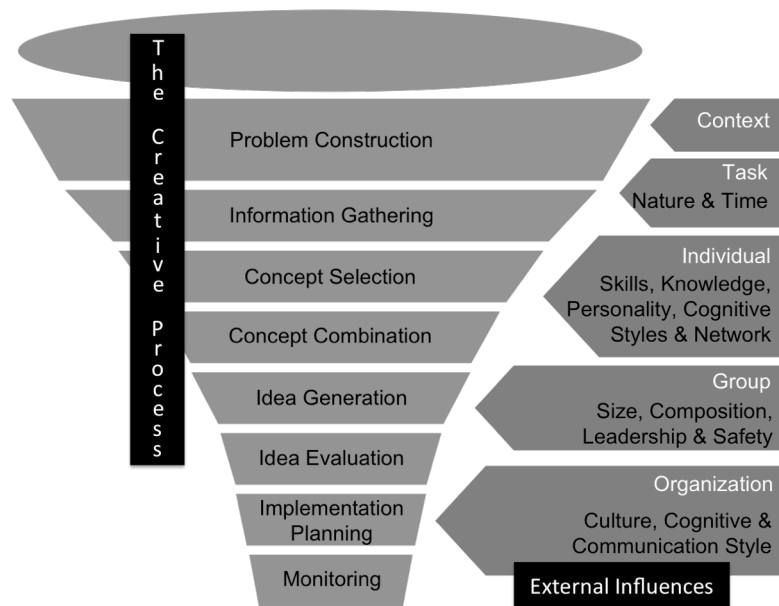
Fig. 3.   Influences as External Variables to the Creative Process

The creative process is a complex interaction between people, places and situations (Woodman, Sawyer, & Griffen, 1993). It can be influenced by the *historical* as well as *current context* of these factors. Furthermore chemical reactions in interacting humans can enhance the creative process through the release of the 'happy hormone' oxytocin (De Dreu, et al., 2013). In this context the core intuitive skills of social intelligence play a significant role in influencing, managing and mediating the outcome. In terms of the creative people involved in the creative process, *knowledge and skills*, *personality* and *cognitive styles* will be of influence. In terms of the group more social influences and the resultant impact of social intelligence can be considered (Kurtzberg, 2005). These social influences will be a combination of the various individual inputs, along with influences such as *group size*, *group composition* and *group leadership style* (Shalley & Gilson, 2004). These influences can be attributed to fostering a sense of trust and justice in the group as well as performance measurement and feedback on the part of supervisors or managers (Janssen, 2005). The *social network* of a group or person can impact profoundly on the nature, type and frequency of their creative process (Perry-Smith, 2006). Highly localized and tightly connected networks can facilitate the creative process. Social intelligence factors can further enhance this and support structure and confidence (Gocłowska, Baas, Crisp, & De Dreu, 2014). However if the connectedness is too strong it may be difficult to break out from the collective mindset (Uzzi & Spiro, 2005). The *nature of the task* as well as the perceived *time constraints* or *time space* allowed to complete the task will influence the creative process. If the group is part of a broader structure, *organisational culture* and the *cognitive and communication styles* adopted to approach the task will impact the process. Furthermore the current context of the creative task, the historical context of the group and how cohesively they work together will affect the level of perceived *fear* or *safety* associated with ideas generation. Social intelligence can be used to mediate the emotional aspects of group creativity and to facilitate trust and understanding (Castelfranchi & Miceli, 2009). This in turn is a determinant of the level of creative contribution (George & Zhou, 2007). The creative process and the creative outcomes of that process will therefore be impacted by the internal characteristics of the creative task, persons and place. Furthermore, external forces will shape and influence the process. These impacts will make each creative process unique to the creative task at hand. The previous funnel based model can be evolved in this context and is illustrated by Figure XII as a 'vortex'. This metaphor has been used to emphasise the unique and dynamic nature of each creative process and is subsequently explained.
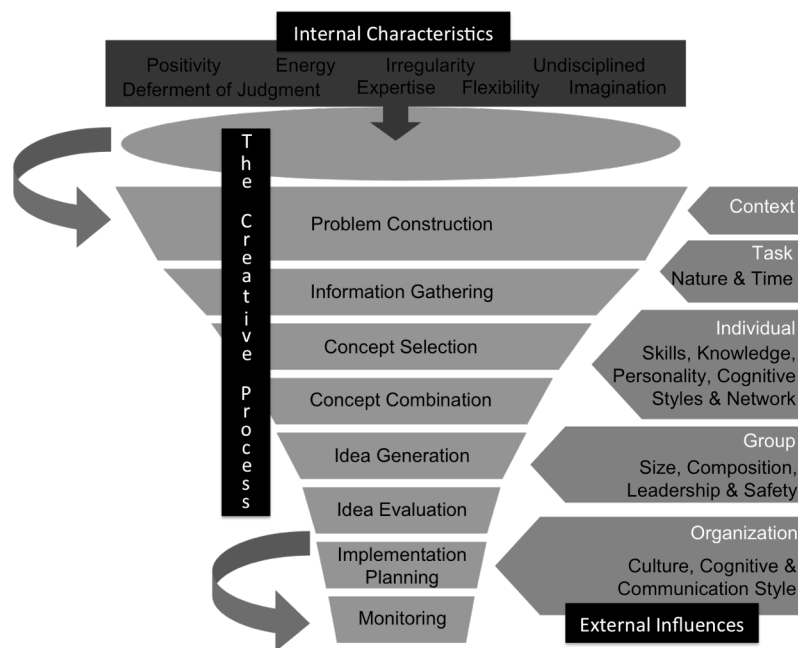
Fig. 4.   The Creative Process Vortex

The term 'vortex' has been used to convey the multi-faceted and freewheeling nature of social creativity. The Oxford English Dictionary (2014) defines a vortex as 'whirling mass of fluid or air, especially a whirlpool or whirlwind.' The model remains a funnel through which creative options are refined. However, the subtleties of the process are determined by internal characteristics and external influences. These forces will shape and distort the funnel in unique ways and as such the funnel is represented as a vortex. The internal characteristics will determine some aspects of its shape and velocity while the external influences enabling or constraining the creative process will determine other aspects of that shape and velocity. This model proposes that a creative process, whilst possessing clearly defined stages of activity, will be highly unique and influenced by a range of forces. Research in groups with high levels of creativity demonstrates that creative synthesis occurs through the combining of a range of these forces. The combination will be unique to the group and task but social intelligence factors play a significant role in the management, navigation and mediation of the process (Harvey, 2014). Empirical research, alongside the literature, suggests that not all is black and white in the creative process. While mathematical algorithms or quantitative studies can explain certain phenomena with clarity and authority, the human nature of the social creative process suggests a less binary approach to understanding is required. The model is informed by a combination of extant literature on the creative process and social intelligence supported by research evidence from a qualitative exploration of the social creative process in a festival organization. Whilst this is a 'narrow and deep' longitudinal study of one organization it does allow initial broad conclusions to be drawn alongside the literature to form a framework for future research. Given that there is little broad empirical research into the relationship between the group creative process and social intelligence the model suggests this is worthy of further investigation.

1.3   Conclusion and Implications for Future research

This paper explores the relationship between the creative process and social intelligence. Creativity has been established as having value in modern, knowledge-based economies. Social intelligence is seen as a way of connecting with fellow humans using the 'right brain' skills of intuition, communication, collaboration and empathy. This form of intelligence is demonstrated as being particularly useful in navigating the complexities of the creative process and it's various influences. A 'creative vortex' model (derived from original PhD thesis research into the group creative process at a festival organization in Melbourne,

Australia) has been proposed as a way of understanding the complexities and variables at play in the creative process.

It is recommended that future empirical research could use the vortex model as a basis from which social intelligence skills and their impact on creativity could be evaluated.

Social intelligence in the conceptual age of creativity and innovation is an essential form of intelligence in 21st Century humans. Further, detailed exploration of this notion would enable a deeper understanding of how human interaction can facilitate the creative process.

The author acknowledges the complexity of the subject area and as such does not attempt to draw specific conclusions from the evidence presented, rather seeks to initiate discourse on the validity of social intelligence in the context of the creative process in this under-researched area.

References

1. Abuhamdeh, S., & Csikszentmihalyi, M. (2004). The artistic personality: a systems perspective. In R. J. Sternberg, E. L. Grigorenko, & J. L. Singer (Eds.), *Creativity: from potential to realization* (pp. 31–42). Washington, DC: American Psychological Association.
2. Allen, J., O'Toole, W., Harris, R., & McDonnell, I. (2008). *Festival and special event management* (4th ed.). China: John Wiley & Sons Australia.
3. Amabile, T. M. (1996). *Creativity in context: update to the social psychology of creativity.* Boulder, CO, US: Westview Press.
4. Amabile, T. M., Arsade, S. G., Mueller, J. S., & Staw, B. M. (2005). Affect and creativity at work. *Administrative Science Quarterly , 50* (3), 367-403.
5. Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (1996). Assessing the work environment for creativity. *Academy of Management Journal , 39* (5), 1154-1184.
6. Amin, A. (1994). *Post-fordism: a reader.* Oxford: Blackwell.
7. Amin, A., & Thrift, N. (2002). *Cities: reimagining the urban.* Cambridge, UK: Polity Press.
8. Auslander, P. (2008). *Liveness: performance in a mediatized culture.* New York: Routledge.
9. Barron, F. (1955). The disposition towards originality. *Journal of Abnormal and Social Psychology, ,* 478–485.
10. Barron, F., & Harrington, D. M. (1981). Creativity, intelligence and personality. *Annual Review of Psychology* (32), 439–76.
11. Besemer, S. P., & O'Quin, K. (1987). Creative product analysis: testing a model by developing judging instruments. In S. G. Isaksen (Ed.), *Frontiers of Creativity Research* (pp. 341–357). Buffalo, NY: Bearly Limited.
12. Bourdieu, P. (1984). *Distinction: a social critique of the judgement of taste.* London: Routledge and Kegan Paul.
13. Bourdieu, P. (1993). *The field of cultural production.* Cambridge: Polity.
14. Bruner, J. S. (1962). The conditions of creativity. In H. E. Gruber, G. Terrell, & M. Wertheimer (Eds.), *Contemporary approaches to creative thinking: a symposium held at the University of Colorado* (pp. 1-30). New York: Atherton Press.
15. Bullen, E., Robb, S., & Kenway, J. (2004). Creative destruction: knowledge economy policy and the future of arts and humanities in the academy. *Journal of Education Policy , 19* (1), 3-22.
16. Byrne, Mumford, Barrett, & Vessey. (2009). Examining the leaders of creative efforts: what do they do, and what do they think about? *Creativity and Innovation Management , 18* (4), 256–268.
17. Castelfranchi, C., & Miceli, M. (2009). The cognitive-motivational compound of emotional experience. *Emotion Review , 1*, 223-221.
18. Caves, R. E. (2000). *Creative industries: contracts between art and commerce.* Boston: Harvard University Press.
19. Csikszentmihalyi, M. (1996). *Creativity: flow and the psychology of discovery and invention.* New York: HarperCollins.
20. Csikszentmihalyi, M. (1999). Implications of a systems perspective for the study of creativity. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 313–335). Cambridge, UK: Cambridge University Press.
21. Cunningham, S. (2002). From cultural to creative industries: theory, industry, and policy implications. *Culturelink* (Special issue 2001), 19-32.
22. Davenport, T. H. (2005). *Thinking for a living: how to get better performance and results from knowledge workers.* Boston, MA: Harvard Business School Press.

23. De Dreu, C. K., Baas, M., Roskes, M., Sligte, D. J., Ebstein, R. P., Chew, S., et al. (2013). Oxytonergic circuitry sustains and enables creative cognition in humans. *Social cognitive and affective neuroscience* .

24. Department for Culture, Media and Sport (DCMS). (1998). *Creative industries - mapping document.* London: DCMS.

25. DiLiello, T. C., & Houghton, J. D. (2008). Creative potential and practised creativity: identifying untapped creativity in organizations. *Creativity and Innovation Management* , 37-46.

26. Drake, G. (2003). This place gives me space: place and creativity in the creative industries . *Geoforum , 34* (4), 511-524.

27. Drazin, R., Glynn, M. A., & Kazanjian, R. K. (1999). Multilevel theorizing about creativity in organizations: a sensemaking perspective. *Academy of Management Review , 24*, 286–307.

28. Druskat, V. U., Mount, G., & Sala, F. (Eds.). (2013). *Linking emotional intelligence and performance at work: Current research evidence with individuals and groups.* Psychology Press.

29. Ekinsmyth, C. (2002). Project organisation, embeddedness and risk in magazine publishing. *Regional Studies , 36* (3), 229–243.

30. Ekvall, G. (1997). Organizational conditions and levels of creativity. *Creativity and Innovation Management , 6* (4), 195–205.

31. Förster, J. (2009). The unconscious city: how expectancies about creative milieus influence creative performance. In P. Meusburger, J. Funke, & E. Wunder (Eds.), *Milieus of creativity, knowledge and space 2* (pp. 219-233). Amsterdam: Springer Science + Business Media B.V.

32. Förster, J., & Denzler, M. (2006). Selbst-regulation. In W. Bierhoff, & D. Frey (Eds.), *Handbuch der psychologie: vol. 3. sozialpsychologie* (pp. 128–132). Berlin: Hogrefe.

33. Fairholm, M. R., & Card, M. (2009). Perspectives of strategic thinking: from controlling chaos to embracing it. *Journal of Management & Organization , 15* (1), 17-30.

34. Feist, G. J. (1999). The influence of personality on artistic and scientific creativity. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 273–296). New York: Cambridge University Press.

35. Fischer, G. (2005). Distances and diversity: sources for social creativity. *5th Conference on Creativity & Cognition* (pp. 128-136). New York: ACM.

36. Flew, T. (2009). Democracy, participation and convergent media : case studies in contemporary online news journalism in Australia. *Communication, Politics & Culture , 42* (2), 87-109.

37. Florida, R. (2004). *Rise of the creative class.* St Louis, Missouri: San Val.

38. Ford, C. M. (1995). Creativity is a mystery: clues from the investigators' notebooks. In C. M. Ford, & D. A. Gioia (Eds.), *Creative action in organizations: ivory tower visions & real world voices* (pp. 12-52). London: Sage Publications.

39. Frederickson, B. L. (2001). The role of positive emotions in positive psychology. *American Psychologist, , 56*, 218-226.

40. Frederickson, B. L. (1998). What good are positive emotions? *Review of General Psychology , 2*, 300-319.

41. Galloway, S., & Dunlop, S. (2007). A critique of definitions of the cultural and creative industries in public policy. *International Journal of Cultural Policy , 13* (1), 17-32.

42. Gardner, H. (2006). *Five minds for the future.* Boston: Harvard Business School Press.

43. Garnham, N. (2005). From cultural to creative industries: an analysis of the implications of the "creative industries" approach to the arts and media policy making in the United Kingdom. *International Journal of Cultural Policy , 11* (1), 15-29.

44. George, J. M. (2007). Creativity in organizations. *The Academy of Management Annals , 1* (1), 439-477.

45. George, J. M., & Zhou, J. (2007). Dual tuning in a supportive context: joint contributions of positive mood, negative mood, and supervisory behaviors to employee creativity. *The Academy of Management Journal* , 605-622.

46. Getz, D. (2005). *Event management and event tourism.* New York: Cognizant Communication Corporation.

47. Gilson, L. L., & Shalley, C. E. (2004). A little creativity goes a long way: an examination of teams' engagement in creative processes. *Journal of Management , 30*, 453-470.

48. Girotra, K., Terwiesch, C., & Ulrich, K. T. (2009). *Idea generation and the quality of the best idea.* Paris: INSEAD Business School Research Paper.

49. Glaveanu, V.-P. (2010). Principles for a cultural psychology of creativity. *Culture Psychology , 16*, 147.

50. Gocłowska, M. A., Baas, M., Crisp, R. J., & De Dreu, C. K. (2014). Whether Social Schema Violations Help or Hurt Creativity Depends on Need for Structure. *Personality and Social Psychology Bulletin* .

51. Goldbard, A. (2006). *New creative community: the art of cultural development.* Oakland, California: New Village Press.

52. Goleman, D. (2007). *Social intelligence.* Random house.
53. Grabher, G. (2002). Cool projects, boring institutions: temporary collaboration in social context. *Regional Studies* , 205– 214.
54. Graetz, F. (2002). Strategic thinking versus strategic planning: towards understanding the complementarities. *Management Decision , 40* (5), 456-462 .
55. Gruber, H. E., & Wallace, D. B. (2001). Creative work: the case of Charles Darwin. *American Psychologist , 56* (4), 346-349.
56. Guilford, J. (1950). Creativity. *American Psychologist* (5), 444–54.
57. Guilford, J. P. (1967). *The nature of human intelligence.* New York: McGraw-Hill.
58. Hahn, M. H., Kun, C. L., & Choi, D. Y. (2011). Effects of Social and Emotional Intelligence on the Creative Process and Individual Creativity. In *U-and E-Service, Science and Technology* (pp. 217-226). Springer Berlin Heidelberg.
59. Hall, J. M., & Johnson, M. E. (2009). When should a process be art, not science? *Harvard Business Review , 87* (3), 58-65.
60. Hamel, G., & Prahalad, C. K. (1994). Strategy as a field of study: Why search for a new paradigm? *Strategic Management Journal , 15*, 5–16.
61. Hanlon, C., & Jago, L. (2000). Pulsating Sports Events: an organisational structure to optimise performance. *Events Beyond 2000* (pp. 93-104). Sydney: UTS.
62. Hartley, J. (Ed.). (2005). *Creative industries.* Melbourne, VIC, Australia: Wiley-Blackwell.
63. Harvey, S. (2014). Creative Synthesis: Exploring the Process of Extraordinary Group Creativity. *Academy of Management Review* .
64. Helson, R. (1999). Personality and creativity. In M. Runco, & S. Pritzker (Eds.), *Encyclopedia of creativity vol. II* (pp. 785–793). New York: Academic Press.
65. Henderson, S. J. (2004). Product inventors and creativity: the finer dimensions of enjoyment. *Creativity Research Journal , 16* (2-3), 293-312.
66. Hennessey, B. A. (2003). Is the social psychology of creativity really social? moving beyond a focus on the individual. In P. Paulus, & B. Nijstad (Eds.), *Group creativity: innovation through collaboration* (pp. 181–201). New York: Oxford University Press.
67. Hesmondhalgh, D., & Pratt, A. C. (2005). Cultural industries and cultural policy. *International Journal of Cultural Policy , 11* (1), 1-13.
68. Hilgard, E. R., & Bower, G. H. (1975). *Theories of learning.* Englewood Cliffs, NJ: Prentice-Hall.
69. Howkins, J. (2002). *The creative economy: how people make money from ideas.* London: Penguin.
70. Hunter, S. T., & Cushenbery, L. (2011). Leading for innovation: direct and indirect influences. *Advances in Developing Human Resources* .
71. Isaksen, S. G., Dorval, K. B., & Treffinger, D. J. (2010). *Creative approaches to problem solving: a framework for innovation and change.* London: Sage.
72. Jago, L. K., & Shaw, R. N. (1998). Special events: a conceptual and differential framework. *Festival Management and Event Tourism , 5* (1/2), 21-32.
73. Janssen, O. (2005). The joint impact of perceived influence and supervisor supportiveness on employee innovative behaviour. *Journal of Occupational and Organizational Psychology , 78* (4), 573–579.
74. King, L. A., McKee Walker, L., & Broyles, S. J. (1996). Creativity and the five-factor model. *Journal of Research in Personality , 30*, 189–203.
75. Kobayashi, M., & Higashi, M. (2010). Method for analyzing individual differences in idea evaluation and interpretation. *The First International Conference on Design Creativity.* ICDC.
76. Kollmeyer, C. (2009). Explaining deindustrialization: how affluence, productivity growth, and globalization diminish manufacturing employment. *American Journal of Sociology , 114*, 1644–74.
77. Kristensson, P., Gustafsson, A., & Archer, T. (2004). Harnessing the creative potential among users. *Journal of Product Innovation Management , 21*, 4–14.
78. Kurtzberg, T. R. (2005). Feeling creative, being creative: An empirical study of diversity and creativity in teams. *Creativity Research Journal , 17* (1), 51-65.
79. Lack, S. A., Kumar, V. K., & Arevalo, S. (2003). Fantasy proneness, creative capacity, and styles of creativity. *Perceptual and Motor Skills , 96* (1), 9–24.
80. Landry, C. (2000). *The creative city.* London : Earthscan Publications.
81. Leadbeater, C., & Oakley, K. (1999). *The independents: Britain's new cultural entrepreneurs.* London: Demos.
82. Liedtka, J. M. (1998). Linking strategic thinking with strategic planning. *Strategy and Leadership , 26* (4), 30-35.
83. Lubart, T. I. (1994). Creativity. In R. J. Sternberg (Ed.), *Thinking and problem solving. Handbook of perception and cognition* (pp. 289–332). San Diego, CA: Academic Press.
84. Lubart, T. I. (2001). Models of the creative process: past, present and future. *Creativity Research Journal , 13* (3), 295—308.

85. Lundvall, B. Å., & Johnson, B. (1994). The learning economy. *Journal of Industry Studies* , 23-42.

86. Martinsen, Ø. L. (2011). The creative personality: a synthesis and development of the creative person profile. *Creativity Research Journal* , *23* (3), 185-202.

87. Mayer, R. E. (1999). Fifty years of creativity research. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 449–460). Cambridge: Cambridge University Press.

88. McCrae, R. R. (1987). Creativity, divergent thinking, and openness to experience. *Journal of Personality and Social Psychology* , *52* (6), 1258-1265.

89. McKeon, R. (1973). Creativity and the commonplace. *Philosophy & Rhetoric* , *6* (4), 199-210.

90. Mintzberg, H. (1994 йил Jan-Feb). The fall and rise of strategic planning. *Harvard Business Review* , 107-114.

91. Montuori, A., & Purser, R. (1996). *Social creativity: prospects and possibilities* (Vol. I). Cresskill, NJ: Hampton Press.

92. Mumford, M. D. (2000). Managing creative people: strategies and tactics for innovation. *Human Resource Management Review* , *10* (3), 313–351.

93. Näsi, J. (1991). *Arenas of strategic thinking.* Helsinki, Finland: Foundation for Economic Education.

94. Negus, K., & Pickering, M. (2000). Creativity and cultural production. *International Journal of Cultural Policy* , *6* (2), 259–282.

95. Nijstad, B., & Paulus, P. (2003). Group creativity: common themes and future directions. In P. Paulus, & B. Nijstad (Eds.), *Group creativity: innovation through collaboration* (pp. 326–339). New York: Oxford University Press.

96. OECD. (1998). *Content as a new growth industry working party on the information economy.* Paris: OECD.

97. O'Connor, J. (2007). *The cultural and creative industries: a review of the literature.* London: Arts Council England.

98. Osborn, A. F. (1963). *Applied imagination: principles and procedures of creative thinking.* New York: Scribeners and Sons.

99. Paulus, P. B. (2000). Groups, teams, and creativity: the creative potential of idea generating groups. *Applied Psychology—An International Review* , *49* (2), 237–262.

100. Pedersen, E. L., & Burton, K. L. (2009). A concept analysis of creativity: uses of creativity in selected design journals. *Journal of Interior Design* , *35* (1), 15-32.

101. Pérez-Fabello, M. J., & Campos, A. (2011). Dissociative experiences, creative imagination, and artistic production in students of Fine Arts. *Thinking Skills and Creativity* , *6* (1), 44-48.

102. Perry-Smith, J. (2006). Social yet creative: The role of social relationships in facilitating individual creativity. *The Academy of Management Journal* , *49* (1), 85-101.

103. Pink, D. H. (2006). *A Whole New Mind: Why Right-Brainers Will Rule the Future.* USA: Penguin.

104. Potts, J., & Cunningham, S. (2008). Four models of the creative industries. *International Journal of Cultural Policy* , *14* (3), 233-249.

105. Potts, J., Cunningham, S., Hartley, J., & Ormerod, P. (2008). Social network markets: a new definition of creative industries. *Journal of Cultural Economics* , *32* (2), 167-185.

106. Rahim, A. M. (2014). A Structural Equations Model of Leaders' Social Intelligence and Creative Performance. *Creativity and Innovation Management* (23.1), 44-56.

107. Rentschler, R. (2001). Is creativity a matter for cultural leaders? *International Journal of Arts Management* , *3* (3), 13-24.

108. Rentschler, R. (2002). *The entrepreneurial arts leader : cultural policy, change and reinvention.* St. Lucia, QLD: University of Queensland Press.

109. Rhodes, M. (1961). An analysis of creativity. *The Phi Delta Kappan* , *42* (7), 305-310.

110. Richards, G. (2010). Increasing the attractiveness of places through cultural resources. *Tourism Culture & Communication* , *10* (1), 47-58.

111. Richards, G., & Wilson, J. (2006). Developing creativity in tourist experiences: a solution to the serial reproduction of culture? *Tourism Management* , *27* (6), 1209-1223.

112. Roodhouse, S. (2001). Have the cultural industries a role to play in regional regeneration and a nation's wealth? In J. Radbourne (Ed.), *6th International Conference on Arts and Cultural Management.* Brisbane: AIMAC, Queensland University of Technology.

113. Runco, M. A. (2004). Creativity. *Annual Review of Psychology* , *55*, 658–687.

114. Runco, M. A. (1991). *Divergent thinking. Creativity research.* Westport, CT: Ablex Publishing.

115. Runco, M. A. (2003). Education for creative potential. *Scandinavian Journal of Educational Research* , *47*, 318–324.

116. Runco, M. A., & Sakamoto, S. O. (1999). Experimental studies of creativity. In R. J. Sternberg (Ed.), *Handbook of creativity* (pp. 62–93). Cambridge, MA: Cambridge University Press.

117. Rutherford-Silvers, J., Bowdin, G. A., O'Toole, W. J., & Nelson, K. (2006). Towards an international event management body of knowledge (EMBOK). *Event Management* , *9*, 185-198.

118. Schumpeter, J. A. (1934). *The theory of economic development: an inquiry into profits, capital, credit, interest, and the business cycle.* Chicago: Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.
119. Scott, A. (2000). *The cultural economy of cities.* London: Sage Publications.
120. Seidel, S., Muller-Wienbergen, F. M., & Rosemann, M. (2010). Pockets of creativity in business processes. *Communications of the Association for Information Systems , 27* (1), 415-436.
121. Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: a review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly , 15* (1), 33-53.
122. Shaw, S., Bagwell, S., & Karmowska, J. (2004). Ethnoscapes as spectacle: reimaging multicultural districts as new destinations for leisure and tourism consumption. *Urban Studies* , 1983-2000.
123. Simonton, D. K. (2003). Creative cultures, nations, and civilizations. In P. Paulus, & B. Nijstad (Eds.), *Group creativity: innovation through collaboration* (pp. 304–325). New York: Oxford University Press.
124. Simonton, D. K. (1988). *Scientific genius: a psychology of science.* Cambridge: Cambridge University Press.
125. Simonton, D. K., & Ting, S.-S. (2010). Creativity in eastern and western civilizations: the lessons of historiometry. *Management and Organization Review , 6* (3), 329–350.
126. Smith, A. (1776). *An inquiry into the nature and causes of the wealth of nations.* London: Strahan and Cadell.
127. Smith, E. A. (2001). The role of tacit and explicit knowledge in the workplace. *Journal of Knowledge Management , 5* (4), 311-321.
128. Stamm, B. V. (2008). *Managing innovation, design and creativity.* NYC: John Wiley and Sons.
129. Steiner, G. A. (1965). *The creative organization.* Chicago: University of Chicago Press.
130. Sternberg, R. J. (1999). *Handbook of creativity.* (R. J. Sternberg, Ed.) Cambridge, MA: Cambridge University Press.
131. Sternberg, R. J., & Lubart, T. I. (1995). An investment perspective on creative insight. In R. J. Sternberg, & J. E. Davidson (Eds.), *The nature of insight* (pp. 535–558). Cambridge, MA: MIT Press.
132. Sternberg, R. J., & Lubart, T. I. (1999). The concept of creativity: prospects and paradigms. In R. J. Sternberg (Ed.), *Handbook of creativity.* NY: Cambridge University Press.
133. Syrett, M., & Lammiman, J. (1997). The art of conjuring ideas. *Director , 50* (9), 48-54.
134. Thorndike, E. L. (1920). Intelligence and its use. *Harper's Magazine* (140), 227-235.
135. Throsby, D. (2001). *Economics and culture.* Melbourne: Cambridge University Press.
136. Toffler, A. (1990). *Future shock.* New York: Bantam Books.
137. Townley, B., Beech, N., & McKinlay, A. (2009). Managing in the creative industries: managing the motley crew. *Human Relations , 62,* 939-962.
138. Tushman, M. L., & O'Reilly, C. A. (1997). *Winning through innovation: a practical guide to leading organizational change and renewal.* Boston, MA: Harvard Business School Press.
139. Unsworth, K. (2001). Unpacking creativity. *Academy of Management Review* , 289–297.
140. Uzzi, B., & Spiro, J. (2005). Collaboration and creativity: the small world problem. *American Journal of Sociology* , 447-504.
141. Ville, S. (2011). Historical approaches to creativity and innovation. In L. Mann, & J. Chan (Eds.), *Creativity and innovation in business and beyond: social science perspectives and policy implications* (pp. 64-81). New York: Routledge.
142. Wall, J. (2003). Phronesis, poetics, and moral creativity. *Ethical Theory and Moral Practice , 6,* 317–341.
143. Welling, H. (2007). Four mental operations in creative cognition: the importance of abstraction. *Creativity Research Journal , 19* (2-3), 163–177.
144. Whitehead, A. N. (1933). *Adventures in ideas.* Cambridge: MacMillan.
145. Wierzbicki, A. P. (2007). Interfaces with other disciplines modelling as a way of organising knowledge. *European Journal of Operational Research* , 610-635.
146. Woodman, R. W., Sawyer, J. E., & Griffen, R. W. (1993). Toward a theory of organizational creativity. *Academy of Management Journal , 8,* 293– 321.
147. Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: encouraging the expression of voice. *Academy of Management Journal , 44,* 682–696.