

Creative Practice as Research: ‘Testing Out’ the Systems Model of Creativity through Practitioner Based Enquiry.

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Abstract

The question: ‘how are messages created?’ is only one of a number that have motivated research into communication (see Fiske 1994, Schirato & Yell 1996, Carey 1989, Cobley 1996, McQuail 1994, Mattelart 1998, Griffin 2000). It is, nonetheless, a fundamental one (Berger 1995). Using this question as a general focus, this paper will attempt to argue that without an insider/practitioner perspective on creative activity being added to the stock of knowledge available to all then that accumulated knowledge cannot be considered to be complete. Furthermore, to begin putting a framework together to allow this task to occur one should firstly be aware that academic research needs to be undertaken systematically. If it truly seeks to remedy the ignorance that exists about something and wants to have this knowledge available in a form that allows it to be readily disseminated, it needs to be exposed and tested, (DEST, 2001 & 2005). It is only then, as the arguments are presented (Popper 1959, Kuhn 1970, Feyerabend 1975, Chalmers 1982 & 1999), that it can be tested and argued and valid attempts made at explaining the truth of the matter being researched.

Michael Crotty (1998) argues that in all academic research¹ there are layers of meaning that connect the basic assumptions with which a researcher underpins their work to the methodological techniques they use. These layers range from ontological and epistemological ones, through theoretical perspectives that spring from these ontologies, to methodologies used to investigate these theoretical perspectives, and then on to the techniques of action embedded in the research methodologies. These layers are all intimately connected, in as much as the ‘justification of our choice and particular use of methodology and methods is something that reaches into the assumptions about reality that we bring to our work’ (Crotty 1998, p. 2). As Ruddock argues:

ontology and epistemology are significant in that they illustrate how research begins by outlining theoretical suppositions that are taken as given

by the researcher. Ontology relates to how we understand the nature of reality...epistemology refers to a theory of knowledge. It is related to ontology in that the nature of the reality you set out to explore influences the sort of knowledge that you can have of it...methodological implications follow. Observation, measurement and interpretation depend on the understanding of the ontological and epistemological nature of the work at hand (2001, p.27).

Following on from these ideas one could argue that if there is little distinction to be made between science as a creative process and art as a creative process, as is assumed by many of those investigating creativity (Rothenberg & Hausmann 1976, Evans & Deehan 1988, Bailin 1988, Weisberg 1993, Gardner 1993, Csikszentmihalyi 1997 & 1999, Sternberg 1988 & 1999, Boden 1994 & 2004), then the possibility exists that a similar set of ontological and methodological layers may be built up from within art practice that should resemble, in principle, those that are at the heart of traditional scientific research. With this premise in place one can outline the steps of the argument in the following way.

An ontological and epistemological position embedded in rationalism, as opposed to an ontology based in mysticism (Boden 2004, Negus & Pickering 2004), informs a number of theoretical positions on creativity (Sternberg 1999, Runco & Pritzker 1999). Therefore a particular perspective of creativity arises from a rationalist epistemology and can be summarised using the research literature (e.g. Stein 1953, Aristotle 1960, Rothenberg & Hausmann 1976, Evans & Deehan 1988, Weisberg 1993, Gardner 1993, Csikszentmihalyi 1997, Sternberg 1999, Boden 1994 & 2004). From this rationalist perspective creativity is seen as an activity where some process or product, one that is considered to be unique and valuable, comes about from a set of antecedent conditions through the conditioned agency of someone. Notwithstanding the entrenched and often unquestioned Romantic assumptions implicit in most commonsense understandings of creativity (Petrie 1991, Sternberg 1999, Negus & Pickering 2004), it is argued that the most applicable way of viewing this phenomenon, according to Mihaly Csikszentmihalyi (1988, 1997, 1999), is to theorise it as coming about through the operation of a system at work. He contends, in an argument similar to Pierre Bourdieu's ideas on cultural production (1977, 1993, 1996), that 'creativity is not the product of single individuals' (1999, p.314). Csikszentmihalyi, instead, argues that:

for creativity to occur, a set of rules and practices must be transmitted from the domain to the individual. The individual must then produce a novel variation in the content of the domain. The variation then must be selected by the field for inclusion in the domain' (Csikszentmihalyi, 1999, p.315).

The *domain* in this model is a structured knowledge system the person must access. The *field* is constituted by all those who can affect the structure of the domain and the *person*, who makes decision about how to rearrange aspects of the domain into something unique, is encultured into the domain and socialised into the field. Instead of looking at the separate elements in the creative process Csikszentmihalyi expounds an idea of creativity that incorporates them within an interactive system with circular causality which can be studied by investigating moments within it.

In terms of the argument being presented here, a researcher could take the notion that creativity is a property of a system in operation, as a generalisation or a theoretical proposition about creativity, a proposition that is informed by a particular set of rationalist ontological and epistemological assumptions, and take the model that arises from the proposition, the systems model put forward by Csikszentmihalyi (1988, 1997 & 1999), and test it².

There are a number of aspects to this systems model of creativity a researcher could test. For example, they could test whether 'domains' exist and what relationship they have to creative output. They could also test, even at an empirical level, what influence the 'field' may have on creative activity. The researcher could investigate, or test out, how a person acquires knowledge of the domain and how this affects their ability to make decisions. This 'testing out' research may take the form of traditional quantitative or qualitative methodological approaches³. For example, a researcher could attempt to stand objectively outside the creative process and undertake experimental or survey approaches to investigating creativity. Indeed a significant amount of research into creativity has already occurred using these methods (for summaries see Sternberg 1999, Runco & Pritzker 1999). A researcher, in an attempt to be both observer and participator, could also, for example, undertake an ethnographic approach to establish what the phenomenon of systemic creativity looks like from this perspective (see, for example, McIntyre, 2004).

However, it is the argument of this paper that, in addition to these other forms of research, a researcher working from a constructionist epistemology⁴ (Blaikie, 1993) could undertake a self-reflective approach to researching creative activity by examining their own creative practice. The methodological approach known as Practitioner Based Enquiry (PBE), with the techniques of action that constitute this methodology including the process of making the object, the keeping of field notes in the form of a journal and an examination of the artefact itself, would add a much needed ‘insider’s’ perspective to the total available stock of knowledge on creativity.

PBE as a methodology encompasses a self-reflective examination of the practitioner’s own activity through a process of participation in that activity. By doing so, the researcher is, to use Murray and Lawrence’s understanding, directed ‘towards the acquisition of intellectual autonomy, improved judgement making and enhanced technical competence’ (2000, p.10) in the area of their practical concern. In practical terms PBE is a process in which practitioners ‘enquire into their own practices to produce assessable reports and artefacts’ (Murray & Lawrence 2000, p.10).

If this is the case, one of the fundamentals of this methodology will be the notion that the PBE researcher, through necessity, must be self-reflective or self-reflexive. Self-reflexivity, as Graeme Sullivan argues in his book *Art Practice as Research: An Inquiry in the Visual Arts*, is a form of investigative practice that:

describes an inquiry process that is directed by personal interest and creative insight, yet is informed by discipline knowledge and research expertise. This requires a transparent understanding of the field, which means that an individual can “see through” existing data, texts, and contexts so as to be open to alternative conceptions and imaginative options (Sullivan, 2004, p.64–65).

Gillie Bolton makes a distinction between being reflexive and being reflective. She argues that reflexive activity is focused on oneself and reflective activity looks further afield at other people, the situation one is in and the place one is involved with. She then goes on to state that ‘reflective practice is a process of learning and developing through examining our own practice, opening our practice to scrutiny by others, and studying texts from the wider sphere’ (Bolton, 2001, p.4).

This process of self-reflective research is being used more and more in a number of fields. Apart from action research, it is increasingly being used in cultural geography, nursing and education research (Seng 1998, Cheek 2000, Masters 2000, McNiff 2002, White 2003, Marshall 2004); autoethnography (Bochner & Ellis , 2003); reflexive ethnography (Davies 2004); in the use of the experience sampling method (ESM) (Kubey et. al. 1996); as well as in numerous successful individual cases of the conflation of self within both subject and object of research⁵. Anthropology has for some time also been able to justify the knowledge it obtains from its employment of ethnography as a research methodology. Ethnography has, as one of its methodological techniques, traditionally used participant observation (Hammersley & Atkinson 1983).

Participant observation, as James Spradley explains, has ‘two purposes: (1) to engage in activities appropriate to the situation and (2) to observe the activities, people, and physical aspects of the situation’ (1980, p.54). To act as an ordinary participant in a cultural activity the participant observer, rather than simply observing, has an extra purpose: ‘to watch her own actions, the behaviour of others and everything she could see in this social situation’ (Spradley, 1980, p.54). As Spradley argues,

the ordinary participant in a social situation usually experiences it in an immediate, subjective manner...the participant observer, on the other hand, will experience being both insider and outsider simultaneously. [However, this experience is not a constant] as you probably won’t have this simultaneous insider/outsider experience all the time. On some occasions you may suddenly realize you have been acting as a full participant, without observing as an outsider. At other times you will probably be able to find an observation post and become a more detached observer. Doing ethnographic fieldwork involves alternating between the insider and outsider experience, and having both simultaneously (Spradley, 1980, p.57).

This description of participant observation can be seen as a close approximation of the description of the activity a reflective practitioner undertakes in accumulating usable knowledge in their own production of culture.

As Donald Schon suggests in his book *The Reflective Practitioner: How Professionals Think in Action* (1983), ‘knowing’, for a reflective practitioner, can have a number of properties. He argues that, apart from their tacit understanding⁶ of their own activity, practitioners also think about what they are doing. He suggests that

in the process of learning to adjust their action, while in the process of acting, practitioners are absorbed into 'a kind of reflection on their patterns of action, on the situations in which they are performing and on the know-how implicit in their performance. They are reflecting *on* action and in some cases, reflecting *in* action' (1983, p.55). It is the utilisation of the above processes that Schon describes as practitioners 'finding the groove' or having a 'feel' for their material. These ideas have some correspondence with those suggested by Christensen and Hooker on self-directed anticipative learning (SDAL)⁷. They also correspond quite well to Bourdieu's concept of the habitus, which has been described as:

a 'feel for the game', a 'practical sense' (*sens pratique*) that inclines agents to act and react in specific situations in a manner that is not always calculated and that is not simply a question of conscious obedience to rules. Rather it is a set of dispositions which generates practices and perceptions. The habitus is the result of a long process of inculcation, beginning in early childhood, which becomes a 'second sense' or a second nature (Johnson in Bourdieu, 1993, p.5).

This type of activity, peculiar to practitioners and arguably universal to the human species, can lead to real knowledge—knowledge that is verifiably true. It is in revealing the understandings that lie behind a practitioner's 'feel' for their work that the possibility of practitioner-based research enquiry becomes a useful source of 'truth' about the creative process, especially if that process is theorised as being systemic by using the practitioner as an 'agent-experient'. 'Agents-experient' locate themselves within a problematic situation as concerned actors 'whose actions and appreciations may be partly guided and changed by better understanding of the situation which prove to be relevant to [their] concerns' (Vickers quoted in Argyris & Schon, 1996, p.36). In order to systematically expose the actions, the second sense, the feel, the tacit knowing that a creative practitioner utilises in practice, one must record this data regularly, in a similar manner to an anthropologist in the ethnographic process, in a set of field notes (Burgess, 1984). In PBE these field notes are accumulated in what is known as a creative journal.

From the perspective of PBE a journal of creative activity would, as Jane Davidson (2004) suggests, provide the data for analysis. She argues that a journal where 'working practice, thoughts and feelings and ensemble dynamics could be discussed

would be a powerful starting point. For [her], the process of documentation and then critical reflection re-enforces the research element of the rehearsal process' (Davidson, 2004, p.146). Gillie Bolton also suggests that the journal can record what is relative to the activity. Therefore a reflective practice journal is like a diary of practice but also includes, 'deliberative thought and analysis related to practice' (Holly quoted in Davidson, 2001, p.157). For Bolton, the journal provides the cornerstone of a reflective practice that charts 'the personal reflective critical background to experiences and understanding' (2001, p.160) and is a flexible tool 'which helps in the grasping or filling out of vital issues which might otherwise become lost' (2001:162). It 'enables a dialogue with the self which lasts over time' (2001, p.171). In essence, the journal allows a researcher to 'stand back from experiences, thoughts and feelings, take a long thoughtful look at them, and form fresh views upon them' (2001, p.172).

In addition, Murray and Lawrence (2000) argue that this type of journal is fundamentally formative; it provides evidence that not only research has taken place but that there is also an ordered source of systematic data for analysis in a written exegesis.

The journal records the details of the process of problem formulation, derivation of a research methodology or enquiry strategy, and orderly reflection on the practice(s) selected to be at the centre of PBE. It should be noted that the journal is not conceived as a descriptive, chronological diary of events. Rather, it is literary device through which the problematic nature of educational enquiry is rendered intelligible, first to self...the journal proposes to offer the practitioner's account as primary source material that may be later included in the data analysis section of more formal reports...such reports are regarded as summative, assessment artefacts. Worth is judged according to published assessment criteria, essentially an academic judgement, and by the rather more elusive indications of claims to knowledge that will be admissible, if open to further conjecture, in the public domain' (Murray & Lawrence, 2000, p.15).

These summative reports are designed, therefore, as an adjunct to the creative work, giving access at a public knowledge level and not as a substitute for that creative work. The reports, sometimes called a written exegesis, are intended not to replace creative practice but to be the arena where the data analysis occurs and is written up. As an example, the University of Newcastle describes a written exegesis as:

a work of critical analysis, undertaken during the period of candidature, which must provide a rationale for the techniques and strategies adopted and which must situate them in relation to a theoretical, and/or historical cultural context; and, where appropriate, a substantial account of production and/or performance process (UoN, 2005).

In an institutional setting that valorises peer reviewed and publicly verifiable research this report, or exegesis, provides ‘one part of a larger thesis which includes the practical body of work’ (Hocking, 2003, p.54). The written exegesis provides the space for the academic analysis of practical reflection. It is in writing up the exegesis that the knowledge obtained through reflective practice is revealed to the world and which allows the research activity to be appraised by peers leading to publicly verifiable outcomes.

Of course there are, as there are in all research methods, limits to the knowledge that can be obtained in following these self-directed, self-observational, self-reflective or self-analytic research methods. In line with Zuzanek’s discussion (2004) some of the difficulties and limitations for self-reflection in PBE may include: the under or over reporting of certain activities; the researcher’s ability to codify their own activities; the difficulty of recording simultaneous and concurrent daily activities (especially if the subject is inside the autotelic experience⁸ for a considerable part of their activity); the agent experient’s ability to discern relevant experiential attributes; the influence of the subject researcher’s own cognitive nets on pattern-seeing; and the study’s ability to definitively establish the grounds for causal links between daily activity and creative output (Zuzanek, 2004). As Sternberg also points out, many controversies remain regarding the use of what he calls introspection. He asserts that:

Some psychologists discount most self-observations as being fruitless for gathering empirical data because many of our thought processes are not available to our conscious minds (Nisbett & Wilson, 1977). Others consider self-observations valuable for generating hypothesis but useless in evaluating hypotheses. Still others view subjects’ introspective self-analysis while they perform a task to be an invaluable source of confirmatory power (Ericsson & Simon, 1980). Even those who value self-observations as a tool for empirical study disagree regarding when to obtain observational data. Some contend that if observations are obtained during the performance of a task, the very act of observing the task performance changes it. Others argue that inaccurate (or at least imperfect) recall interferes with self-observations obtained after the task performance has ended (Sternberg, 1994, p.50).

It can be argued, quite rightly, that this latter criticism applies to all recall. The corollary is that if the knowledge obtained this way was invalid then we would also need to invalidate the results of question-based surveys, questionnaires themselves and most significantly any research based on interview techniques, all of which rely on recall or memory, in some way, for their basic data. However, and finally, one must be aware that many of these criticisms are only problematic from a purely objectivist ontological and epistemological position. As post-positivism has demonstrated, the cognitive nets of objectivist researchers are also as equally critical for themselves as well. This begs the question of certitude or, indeed, the lack of certitude in most research methods (Crotty, 1998, p.13), be they quantitative or qualitative, subjectivist, constructionist or objectivist. However, unless researchers wish to return to mysticism, these rationalist approaches are all that are available to researchers seeking the truth about particular propositions (Fernandez-Armesto 1997, Chalmers 1999).

To reiterate PBEs advantages, these can be seen in its revelation of an ‘insider’ perspective and the notion that this perspective is as vital and necessary as all others if a ‘complete’ understanding of creative activity is to be achieved. Since it is argued that experience is partially constructed from the researcher’s own subjective position, an account of this experience is valuable as it gives insights not obtainable from other research conclusions. Importantly, this method of acquiring useful knowledge about the world is, arguably, the way the human species has acquired most of its pragmatic knowledge. Once it has been applied systematically and the analysis presented for peer review and public inspection it can then add its research information and analysis to other forms of research knowledge. By using PBE as a methodology to research the theoretical perspective of the systems model of creativity, a theoretical perspective with an ontological and epistemological base in rationalism, one should be able to: gain a holistic understanding of the enculturation process a creative individual goes through in the acquisition of domain knowledge; allow an exposé of an insider’s view of the socialisation process necessary to act within a creative field; and, finally, contribute information on an individual’s creative decision-making processes not readily accessible through other research means.

With these arguments in mind an academic researcher should be able to begin an attempt to research creative practice, as theorised in the rationally-based systems

model, using a self-reflective practitioner-based investigation. In precis, a researcher could conduct ‘testing out’ research to confirm the systems model of creativity as a ‘true’ representation of creative activity by undertaking the research methodology called practitioner based enquiry (PBE). The penultimate position being presented here is that without a practitioner perspective, such as that exposed through PBE, being added to the stock of knowledge available to all on creative activity, then that accumulated knowledge cannot be seen to be adequate or considered to be complete. Without this practitioner perspective being added to other research perspectives the research question: ‘how are messages created?’ cannot be fully answered.

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Biographical statement

Phillip McIntyre is an active songwriter, musical director and manager. He produces and engineers popular music recordings and videos. He writes for the popular press as a music journalist and is a respected industry figure in Newcastle. His academic interest is in communication, creativity and cultural production and he sits on the Editorial Board of *Perfect Beat: The Pacific Journal of Research into Contemporary Music and Popular Culture*. He is the Communication and Media Honours Program Convenor in the School of Design, Communication and Information Technology at the University of Newcastle.

ENDNOTES

¹ Philips and Pugh (1987) argue that intelligence gathering can be summarised as descriptive research. It answers the 'what' questions. Academic research, however, asks 'why', goes beyond description

and requires analysis. Certainly intelligence gathering supports it but academic research requires explanations, relationships, comparisons, predictions, generalisations and theories.

² Most universities in Australia utilise the Australian Bureau of Statistics definitions for the types of research it recognises (DEST, 2005). Research can also be listed as; exploratory, problem solving or 'testing out' research (Philips & Pugh 1987, p. 45). Exploratory research tackles new problems, issues or topics about which not much is known and works out theories and concepts. Problem-solving research starts from a particular problem in the real world and attempts to solve that problem. Testing-out research, however, finds the 'limits of previously proposed generalisations' (ibid). Testing out is continuous and it improves knowledge incrementally about all the generalisations various disciplines pose.

³ Roy Bhaskar argues that separating quantitative and qualitative methodologies ontologically would 'give us 'either a conceptually impoverished and deconceptualising empiricism, or a hermeneutics drained of causal import and impervious to empirical controls' (ibid:12)... In their place Bhaskar proposes a much more subtle and complex view...in which human agents are neither passive products of social structures nor entirely their creators but are placed in an iterative and naturally reflexive feedback relationship to them' (Davies 1999, pp.18–19).

⁴ Constructionism forms one of three basic rationalist epistemologies (Crotty, 1998, p.5), the others being objectivism and subjectivism. Objectivism of the positivist kind sees the material world as directly accessible. Subjectivism in its purest form sees the world from an idealist perspective. Fitting between these two positions, constructionism accepts the existence of a material world but argues that it can only ever be accessed through constructions of it. As such it can be argued that PBE sits inside the phenomenological tradition seen as an 'intentional analysis of everyday life from the standpoint of the person who is living it' (Griffin 2000, p.45).

⁵ Here one could note the groundbreaking work of Marie Curie, who used herself as experimental subject, and also that of Jean Piaget, whose primary data was obtained from observation of his own children. Ebbinghaus, an influential associationist experimenter in psychology 'used himself as his only experimental *subject* [italics in original] (person, other organism, or other object of experimental study). In particular, Ebbinghaus used his self-observations to study and quantify the relationship between rehearsal—conscious repetition—and recollection of material '...he worked alone, yet he made a ground-breaking experimental discovery – that frequent repetition fixes mental associations more firmly in memory; and, by extension, that repetition aids in learning. Ebbinghaus's contribution to the study of memory spawned a wealth of memorization tactics' (Sternberg 1994, pp.49–50).

⁶ Tacit understanding may manifest itself as intuition. Intuition, like the related concepts of 'the muse' and 'genius', has been previously thought of as a mystical metaphysical process or a telepathic process linked to parapsychological phenomena (Bastick 1982, p. 1–20). It has been contrasted to linear, analytical processes of logic. It has also been seen as dependent on prior experience as in the case of spontaneous intuition after a period of incubation. Bastick asserts that intuition is, instead, a form of non-linear parallel processing of global multi-categorised information (Bastick 1982, p. 215) that comes about through accessing learned experience no longer recognised as learned.

⁷ Christensen and Hooker argue that '(SDAL) uses interaction to acquire information about the nature of the task and thereby improves performance. The system learns from experience and modifies its behaviour, continually tracking the success of subsequent modifications. As the system interacts it generates information that allows it to construct anticipative models of the interaction process; in turn these anticipations modify interaction, which allows the system to perform more focussed activity and generates further feedback to the system. This feedback serves to evaluate the success of the anticipations, whilst the anticipations themselves help the system improve its recognition of relevant information and evaluate its performance more precisely' (2004 online)

⁸ Autotelic experience, or 'flow', occurs when a person's skill level is approximately equivalent to the level of the challenge they are presented with. If their skill level exceeds the challenge the work presents, boredom results and 'flow' will not occur. If the challenge of the task is too high anxiety results and they will also not enter 'flow'. As each task is accomplished the skill level increases

incrementally so that the next task must increase the level of challenge in order for autotelic experience to occur again. Autotelic motivation can be seen as the desire to enter and be absorbed by the 'flow' experience (Csikszentmihalyi & Csikszentmihalyi 1988).