11 MICHAEL BROWN & CHRIS WILSON

CREATIVE DYNAMICS: ARTISTIC PRODUCTION AS A MODEL OF CREATIVE INTERACTION

"O! For a muse of fire, that would ascend the brightest heaven of invention."
– William Shakespeare, *Henry V: Act 1, Prologue*

ABSTRACT Defining creativity in musical terms and the extent to which theories of creativity may reflect and inform creative practice within a UK university arts-based college is at the heart of this chapter. Creative thinking in music, particularly with reference to commercial application is where the investigation begins; models of collaborative interaction, which is a fundamental preoccupation for undergraduate popular music students, are reviewed and evaluated highlighting the boundaries within which composers are required to work to attain commercial authenticity. Beyond this, the development of an applicable creativity toolkit is discussed which has the potential to challenge aesthetic sensibilities allowing students to transcend the boundaries of the familiar and explore domains less familiar. The chapter concludes by validating the benefits of collaborative creative activities particularly with reference to multi-modal interaction and the role of technology.

Keywords: Creativity, Collaboration, Music, Higher Education

Forward

Much research into creativity is focussed upon the understanding of paradigm changing innovations, upon ideas and actions that propel a given *field* forward into new areas. Whereas this is significant and has the potential to offer insights into the very nature of the creative act as an individual level phenomenon, there is much to be learned from creative activity, particularly collaborative, that takes place within well established structures where development and refinement of form itself is normalised behaviour, and can equally yield insights into what can be very challenging areas of invention. The consideration of Art and Music as a collective creative process is what this chapter is fundamentally concerned, in which individual creativity is certainly not excluded but is considered a part of, as McIntyre (2001) expresses it, *"a more Copernican model in which the person is part of a system of mutual influences and information"*. The Arts may be considered a unique form of creative expression since they fundamentally depend upon innate talent, learned skills and a specific sense of the aesthetic within the *field* of expression, as Zaidel (2013, pp. 133 - 148) indicates: *"...it (artistic creativity) comes on top of mentally stored knowledge in the brain. Indeed, the backdrop for creative innovation is the societal culture of the creating individual. Creativity also implies cognitive flexibility and rich associations among units stored knowledge."*

149

College of Rock

This chapter is drawn out of educational practice within a UK undergraduate programme in popular music; a significant part of the curriculum is focused upon the composition and performance of music with much of the initial activity inevitably centred upon the commercial facing production of music; the students are naturally motivated and easily engaged, given their background, in the performance and composition of popular song, but they are also encouraged to explore more esoteric forms, no less commercial in many ways, but invariably less familiar to them in which exploration of a variety of creative devices are presented that potentially allow them to transcend their normal experiences. Conditions for musical creativity are discussed with a view to offering insights into prevalent compositional processes within the creative sectors of the music industry. Collaborative work is very much at the centre of the educational experience in programmes such as this. In many ways musicians are natural collaborators fulfilling their defined roles well, particularly in performance, drawing creatively from commercial role models outlined below. As a part of their compositional studies the students upon this programme of study are also introduced to ideas drawn out of a number of key texts on creativity such as by Wallas (1926), Koestler (1964), Guilford (1967), Baron (1969) and Sternberg (1999), to raise awareness of profitable creative conditions and to encourage the application of an array of tools and methods. The discussion will begin with a review of collaborative creation within the commercial music industry to draw out some of the inner, perhaps transferable, mechanisms of the creative interactions that may be applied in the educational environment. This area has been chosen for study because it exemplifies very clearly the notion that creativity prospers well within constraints. Imposed limitations, self or cultural, in the creative act are considered by many to be important characteristics as psychologist *Rollo May* observed: "*Creativity itself requires limits, for the creative act arises out of the struggle of human beings and against that which limits them.*" (May, 1975). Music itself has inherent limitations determined by culture, history, performance and instrumental capabilities; also expectations of style govern acceptable aesthetics. In many ways the composition of music may be considered as the novel selection from sets of related attributes or elements,
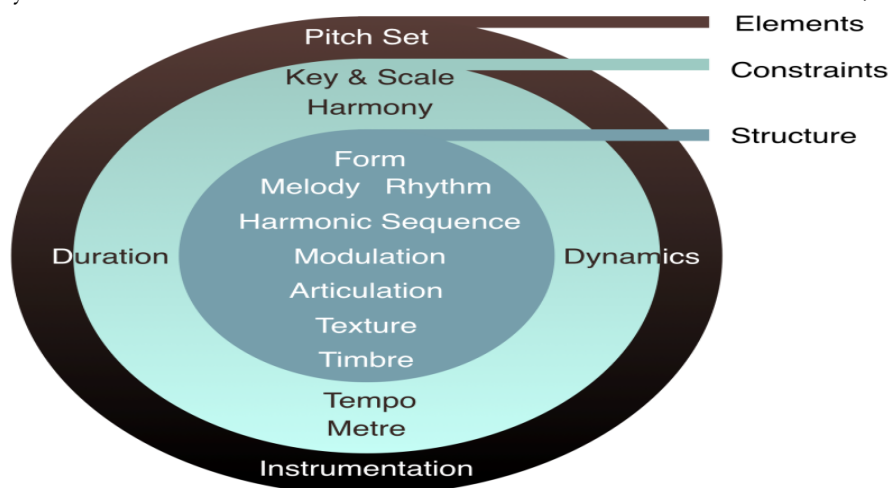

Figure 1: The Elements of Music

but this offers very little insight into the stylistic context within which choices are made, the elemental interdependency and the sociological conditions within which performance expression, gesture, articulation and interpretation are influential factors determining success. Musician *Frank Zappa* expressed a very pragmatic understanding of music composition: *"Composition is a process of organisation, very much like architecture. As long as you can conceptualise what that organisational process is, you can be a 'composer'—in any medium you want."* (Zappa, 1997, pp. 195-197).

Two Heads are Better than One

The traditional, and perhaps romanticised, view of the isolated and often troubled artist seeking divine inspiration expressed through an individual voice, does not take into account, the social and interactive role of the communities within which the artist operates.

"Some heades haue taken two headis better then one: But ten heads without wit, I wene as good none." (Heywood, 1546)

An old English proverb still in common usage, but expressed in the modern vernacular, extols the virtues of solving problems with a like-minded other, but warns of increasing the ranks with unqualified members. There is of course precedence enough to justify the supposition that for some, creative partnerships are not only beneficial but a necessary condition without which, the solution or creative product would not be found or would not be deemed as effective. Shared leadership on some level is not a new concept; although seemingly counterintuitive, there are successful models in business (Kocolowski, 2010), education (Morrison, 2013), the arts (Hoyle, 2014) and music (Mauskapf, 2011) administration where the lead decisions are shared seemingly beneficially between individuals or a community of people; but to what extent can a creative product be a shared artefact and what are the ingredients of successful creative collaborations?

What's in it for Me?

Whereas it is not uncommon for individual songwriters to cite the creation of a song more or less fully realised, a song has a number of distinct features that can in principle be conceived independently. This presents a number of opportunities for collaborative creativity.
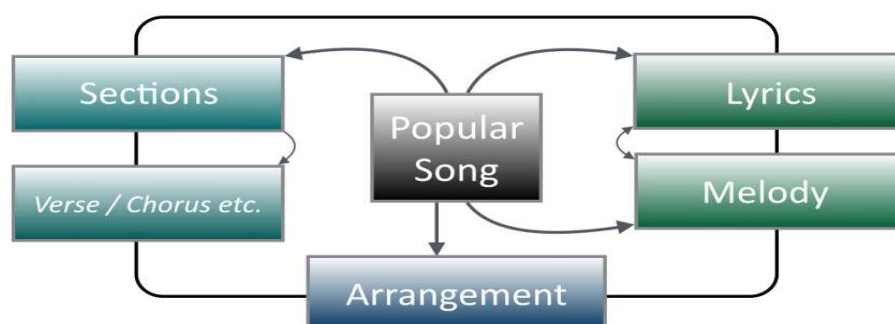

Figure 2: The Components of Popular Song

The world of music, particularly theatrical and popular, offers us a number of high-profile examples of successful, in terms of productivity and commerciality, creative partnerships.

151

In a recent study by Pettijohn and Ahmed (2010) it was determined that collaborative partnerships were responsible for as many number one hit songs as individual composers in the examined time period of 1955-2010. There are a number of models of creative interaction that typify modern popular song writing collaborations, eloquently expressed by Bennett (2012), and here adapted to exemplify the main aspects of the relationships.

1. *Division of Labour*—the creative roles are here clearly defined such as composer or lyricist; the creative input could be achieved with minimal interaction by those involved and could begin from either starting point.
2. *Free for All*—this model accommodates a more fluid interaction, between potentially a number of involved collaborators, where the roles are not as tightly defined. This may involve extensive use of technology including online storage space but could just as easily be very low tech involving direct instrumental dialogue between two partners.
3. *Improvisation*—the song material is developed out of band rehearsal sessions within which performance roles are generally defined; the ideas may begin a with a seed or 'riff' introduced by one member or may evolve out of a collective improvisatory exploration.
4. *Producer*—the producer is a more experienced composer that has the capability of taking possibly more rudimentary ideas from a less experienced performer/composer and steering the creative product. This could involve developing or complementing idiosyncratic performance characteristics of the less experienced partner.
5. *Experimentation*—The creation of a song may be born out of the exploration of musical features, this could be the result of collaborative interplay with another, an excursion into another musical or extra-musical domain, or collaboration with a computer program.
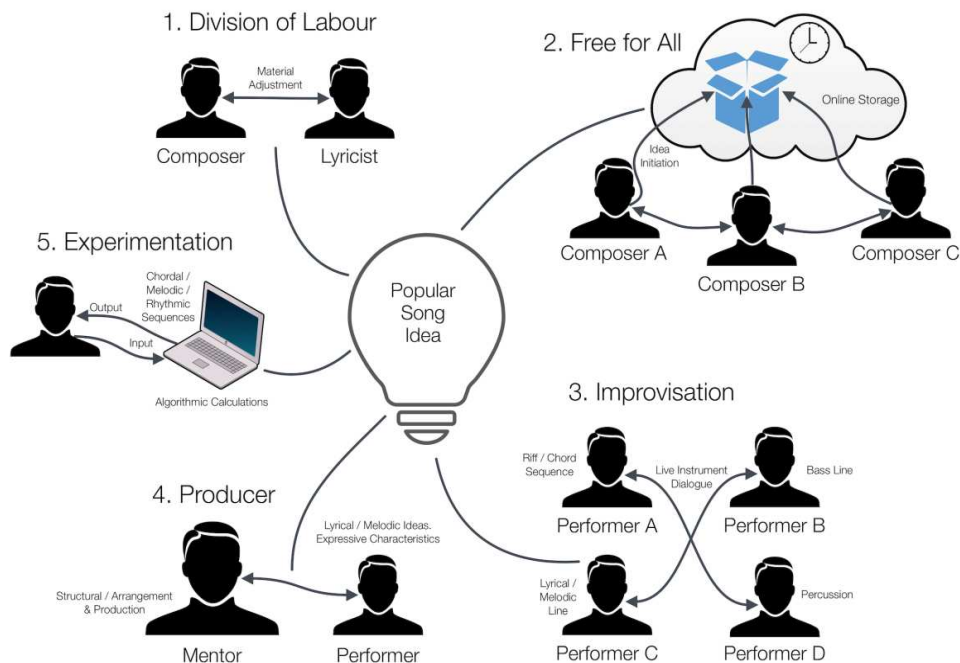

Figure 3: The Collaborative Models

In each case usually there is invariably a starting point or incept, which could be as simple as a song title, initiated by one of the collaborators: *"...the incept may be any sort of thing: the first sentence of a story or the last, a simple plot situation, a character, theme, scene, figure of speech, or tone or style..."* Beardsley (1976, pp. 305-301).

Trouble at the Mill

The UK music industry is estimated to be worth £3.8 billion annually to the British economy. With so much at stake it is understandable that the creative process might be formalised to some extent. There have been in the past a number of notable examples of a factory-line approach to creativity encouraging competitive interaction. According to Bennett (2012) the UK popular single market is currently dominated by music crafted by collaborative teams most commonly co-written. The archetypal model for the *manufacture* of popular song was implemented in *Tin Pan Alley* in the early 20th century, where New York City music publishers and songwriters would conglomerate which gave rise to some very successful, many collaborative, songwriters (Reich, 1994). There followed are other notable centres of industrial song writing in a similar vein such as *The Brill Building* (1940-60) and in major recording studio centres around the world, as the technology evolved, such as *Denmark Street* (Daley, 2004). *Carol King* succinctly expressed the experience of composing in *The Brill Building*: "*Every day we squeezed into our respective cubby holes with just enough room for a piano, a bench, and maybe a chair for the lyricist if you were lucky*." (Frith, 1978). These were not what might be regarded as *ideal* working conditions but the competition resulted in some of the most successful working relationships in the history of popular music. The more recent development and proliferation of online communication is presenting new models of remote creative conferencing. It is estimated (Salem, 2014) that by 2015 the world's mobile workforce will be in the region of 1.3 billion with the potential to raise industry productivity through *cloud* based sharing technologies, maximising waking hours across multiple timezones for collaborators to progress the project continually; the convenience of passing materials negates the issues of location and offers a convenience of interaction and new model for the recording industry.

The Formula

The constraints within the commercial world of popular song are so tightly defined that the challenges to find novelty whilst embracing a sufficient level of familiarity are often extreme, but to what extent are constraints in such creative process actually stimulating and ultimately beneficial? Igor Stravinsky was very clear on the matter: *"The more constraints one imposes, the more one frees one's self of the chains that shackle the spirit..."* (Stravinsky, 1942). The characteristics of a song bind the creator to a number of fairly rigid parameters that define for example: structure, length, tempo, metre, melodic range, acceptable harmony and lyrical content (Bennett, 2012). When these are framed within the stylistic constraints of particular musical genres, the creative expectations are more clearly understood, if we accept the definition of genre as *"a set of musical events (real or possible) whose course is governed by a definite set of socially accepted rules."* (Fabbri, 1982).
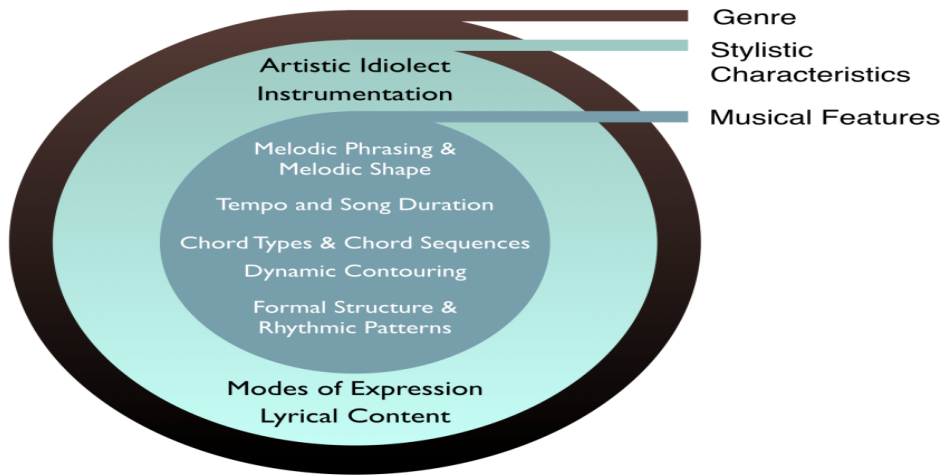
Figure 5: Musical Genre

Musical styles evolve over time reflecting cultural conditions as can be seen from a recent study of lyrical content (Lamm, 2014), but most operate within the constraints of predefined styles with acceptable localised outcomes. The constants are such that to a significant degree the success of a song can be calculated. *Music Xray*, which defines itself as a digital A&R system, is able to extract musical features such as: melody, chord progression and rhythm, from submitted songs and report on five common characteristics (composition, production, arrangement, performance and hit potential) that it can compare with a database of previous hit records. The company claims that the software is able to determine if a submitted song is likely to become a hit record with up to 80% accuracy (Gladwell, 2006). Identifying the potential for success was certainly one of the roles of the A&R division but another was the seeking out of new talent and innovation in which the company would invest; the market has evolved to such an extent that a record company may not invest until a level of success is first established independently (Lindvall, 2011).

Opposites Attract

What characteristics govern the successful creative alliance? Successful creative partners have a balance of commonality that sustains the motivations and differences, in terms of experience or skill-sets, that keeps the relationship productive. There is often continual tension and the potential that the differences may evolve and ultimately steer each member in completely different directions creatively.
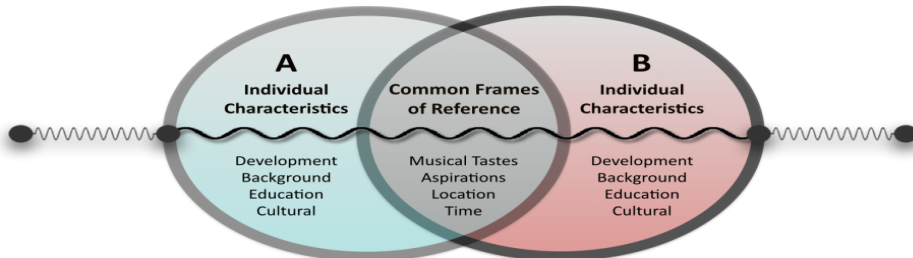

Figure 6: Collaborative Tensions

154

Mike Stoller expressed this well: "*We started fighting the moment we met,……We fought about words, we fought about music. We fought about everything."* (Fricke, 2011). The individual differences that may be social, instrumental or educational are what give insight into the success of the collaboration but for sustenance, must incur some mutual favourable outcome however that is measured. *John Lennon* in an interview with *Playboy* magazine said of *Paul McCartney*: "*He provided a lightness, and optimism, while I would always go for the sadness, the discords, the bluesy notes….*" (Sheff, 1980). One of the reasons why *Tin Pan Alley* was so successful was perhaps because it offered opportunities to embrace cultural diversity; over twelve million immigrants arrived in the United States through the *Ellis Island* portal alone between 1892 to 1954 (Turner, 2013). As Laermans (2013) expresses it: *"Collective labour cannot take off without a collection of diverse competencies, ideas, interests and attitudes that must be presupposed as being collective."* In recent years sampling technology has offered a new model of remote collaboration by allowing the direct reuse of older musical recordings. There are also many computer programs that present themselves effectively as algorithmic digital partners in musical creation offering musical novelty through *calculation*. There are benefits of nurturing idiosyncratic differences within collaborative partnerships and in being receptive to surrounding influences, as the playwright Tony Kushner (1997, pp. 145 - 149) expresses it: "*The fiction that artistic labour happens in isolation, and that artistic accomplishment is exclusively the provenance of individual talents, is politically charged, and, in my case at least, repudiated by the facts.*"

The *Gravity* of the Situation

An area of commercial compositional experience that is invariably appreciated by students upon an undergraduate programme in popular music, is that of film music or more generally music for moving image, of which there are a growing number of successful of composer role models sourced from the area of popular music (Tiedemann, 2014) and movie soundtracks that draw very heavily upon popular music itself to serve narrative and expressive designs.
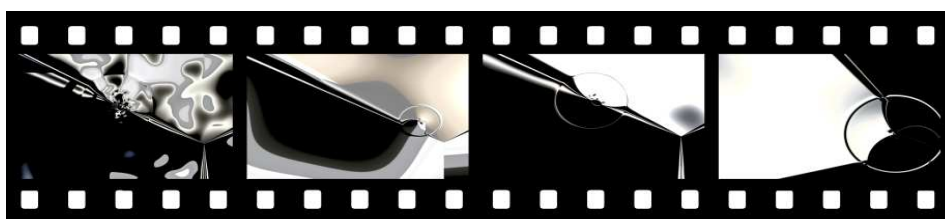

Figure 7: prism——Abstract Frames

There is a technical commonality between film and music producers in the form of production software; the technology allows a fluid interaction between time-based media; for musicians this often means surrendering control of the one characteristic that one would expect they would like to retain control of, that of *time,* since the timing of musical/sonic events must often be surrendered to the narrative structure which can be surprisingly liberating and encourages the development of an aesthetic sense not hindered by familiarity of known musical systems.

This observation prompted the development, by the current authors, of prISM to explore this phenomenon by encouraging more direct interaction between art forms and evolve a creativity toolkit principally for musicians. Artists generally develop creative toolkits to produce specific outcomes which consist of techniques and skills to *kick-start* the creative process; as part of the prISM research we have attempted to systematise the common musical procedures and integrate collaborative mechanisms to support the early phases, and progress iteratively, creative musical thought.
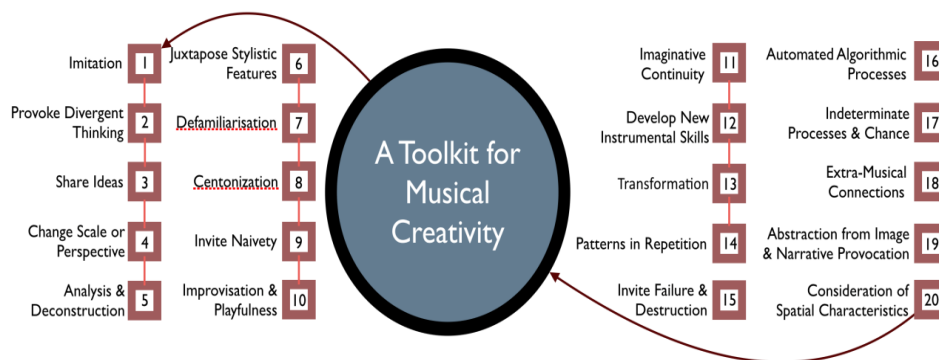

Figure 8. The Creative Toolkit

This study has offered some insight into ways in which a commercial facing educational system might prepare students creatively for the professional environment. It also opens up for consideration the notion of creativity within a very tightly bounded creative system and how creative individuals might profit from collaborative interaction. If all we do is express the *spirit of our times* then how does the product evolve given the rigid constraints limiting and potentially exhausting the resources for novelty? Artists are fundamentally *of* their time, and the they usually do not create in isolation; they are often influenced by history and their peers and generally do not *innovate* within their *field* of creativity continually since it is not always in their best interests; if they were to do so their work may not be recognised as having *style or* a consistent expressive voice. Innovations do of course occur and the shifts are often triggered by artists making diverse connections drawing very often upon cross-modal influences but sometimes our most revered artistic expressions are to be found at the *epoch* of the prevalent style. The final word here is left to Tony Kushner (1999) | *"Marx was right: the smallest divisible human unit is two people, not one; one is a fiction. From nets of souls societies, the social world, human life springs. And also plays."*

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