

A sociology of creativity: the Deleuzian canvas

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Abstract

Creativity is a key element of cultural production but has been under-theorised in sociology. The paper first reviews explanations of creativity deriving from psychology, psychoanalysis, Marxism and social science. All suffer from the failure to fully specify the nature of creativity, or in the case of sociology, focuses more upon the epiphenomena of creativity, for instance, the organisational or social factors supporting or inhibiting its expression. Recently, however, an interest in embodiment, identity and reflexivity suggests a new sociology of creativity.

Drawing on Deleuzian scholarship, I will explore how we may conceptualise creativity in terms of the active, experimenting creative desire of the body, and the relations that a body has with its material, psychological and cultural relations. The latter coalesce to constitute a 'creativity assemblage' that establishes the limits of a body's creativity in artistic production, technological innovation and knowledge development.

I illustrate this model of creativity by looking at three works by the artist Cézanne.

Introduction

Creativity has been regarded in two ways. On one hand, it is something extraordinary, which marks out the creator as distinct from the mass of 'non-creative' people. Exemplary figures from art, science and literature (Leonardo, Einstein, Shakespeare) bolster this perspective (de Filippi et al 2007; 512). By contrast, disparate social science explorations of science, management and culture have discerned creativity in everyday activities, viewing it as far more common and run-of-the-mill (Gauntlett 2011: 15). Creativity, in this view, is a characteristic that should be encouraged, particularly within the workplace, as an engine of human progress and capitalist production (Thompson et al 2007: 625).

In this paper, I take the latter view of creativity, but without the narrow focus on the furtherance of industrial production and wealth-creation that has emerged in the recent management and organisation literature. I start from the perspective that creativity is an intrinsic aspect of pretty much everything that human beings do; that life, in a sense, is itself synonymous with creativity. In this understanding, creativity manifests in everything from writing a letter, plumbing and cookery, through to politics and policy-making, to technological advances and the 'creative arts'.

However, there is a fundamental dimension to creativity that is under-theorised in the literature, and which this paper aims to correct. Creativity, I will argue, is inextricably an embodied process, and the relationship between creativity and embodiment is critical to understanding how creativity is manifested, in fields of human endeavour as wide-ranging as science, sex and sculpture. This emphasis denies the notion that creativity is 'all in the mind' (the mind of the genius, or the mind of the innovative office-manager), and situates creativity as fully linked to embodied action. Of course, this emphasis assumes a particular conception of 'embodiment', and I will apply a Deleuzian perspective on the body in furtherance of this model of embodied creativity.

With these foci, the key question to ask about creativity now becomes less about who is creative and who is not, or what activities should be considered as 'creative', and more about the conditions of possibility for bodies to be creative. Or, to put it another way, the Deleuze-inspired question: what else can a creative body do?

Sociological Perspectives on Creativity

Creativity has been an elusive concept for the social sciences. As Ford (1996: 1112) points out, the *Academy of Management Review*'s subject index entry for 'creativity' reads 'see innovation'. Psychological approaches have evaluated creativity as a trait, present to a greater or lesser extent, and independent of other cognitive functions. Characteristics such as unconventionality, imagination, and motivation all play a part in determining individual's creative ability (Kaufman and Beghetto 2009), while the capacity for 'novel and personally meaningful interpretation of experiences, actions, and events' underpins creative potential (ibid). A desire to encompass both the creativity of 'the great' and the more mundane creativity of production and innovation within a single theory has led to the coining of 'Big C' (or 'eminent' creativity), 'little c' ('everyday creativity) and even 'mini c' (the genesis of creative expression) (ibid).

Psychologists and sociologists have often looked at the contexts within which creativity occurs, or has been judged to have occurred (Ford 1996, Simonton 1997). Individual proclivities to either adapt or to innovate in the face of external challenge may be influenced by context, so that in a generally adaptive environment (such as a government department), the innovative individual may stand out, while in an innovative setting (for example, an Internet start-up) adaptation can be an invaluable skill to possess (Kirton 1994). Position within an organisation, or organisational contexts and structures may also determine the level of creativity of individuals (De Fillippi et al. 2007: 512). Becker (1974) argues that most art is produced and consumed collaboratively within networks, undermining the myth of a single creator, a perspective also espoused by Bourdieu (1993).

Creativity, it may be argued, is in the eye of the beholder. Ford (1996) has pointed to the subjective judgements made about the novelty and value of a product, rather than any inherent attribute of a product. These judgements are also specific to a domain, and as a domain evolved over time, may no longer be considered creative. Judgements about the merit of an art work will differ dependent upon whether the artist is Van Gogh or a personal friend (Kaufman and Beghetto 2009). Anthropological perspectives on cultural production emphasise the meaningfulness of material culture: lurking behind an arrow head, a totemic

mask, or a pot shard is the ghostly hand that created the object to serve a material or symbolic purpose relating to the needs of the social group.

While understanding the social context of creativity is important, particularly where its application may affect organisation and production, these analyses limit the extent of a sociological appraisal of the nature of creativity. This narrow focus is surprising, as ‘agency’: one of the most fundamental and debated terms in sociology, describing an active, engaged, experimenting human actor, may also be seen as related to creativity, particularly where agency is seen as constitutive of the social world (Giddens 1984). Psychoanalysis also contributes an insight, though perhaps in a refracted formulation from its original: creativity here is the sublimation of a frustrated desire away from its original (sexual) object towards some other form of social production (Freud 1986). Importantly for the perspective to be developed in this paper, Freud conceived of an underlying drive or desire that motivated the body toward creative production.

However, what is missing from all these various social science accounts of creativity is the explicit recognition of the embodied character of creative production. Many acts of creativity are clearly the outputs of the physical body; from painting to making music to computer coding. But even creative ideas and theories are the product of an embodied consciousness. Similarly, the audience for creative products are embodied. Seeing creativity as embodied also means we can recognise extended networks of relations between creators, creations and their recipients or audiences. In the next section, I shall turn to the work of Gilles Deleuze, philosopher of the body, to explore this perspective further.

Deleuze, the Body and Creativity

The philosopher Gilles Deleuze, sometimes in collaboration with the psychotherapist Felix Guattari, offers a model of embodiment that focuses not on what a body is, but what it can do (Deleuze and Guattari 1988: 260). This work has attracted much critical attention over the past twenty years among social scientists as interest in the body has increased, and has been used to address many aspects of embodiment and identity (Duff 2010, Fox 2002, 2006, Potts 2004). For Deleuze and Guattari, the body does what it does because of the dynamic interaction between two elements. On one hand there are the myriad physical, psychological,

cultural, philosophical and social relations (to things, ideas, and other bodies) that affect a body and are affected by it. On the other, Deleuze and Guattari are keen to emphasise a body that is active, experimenting, engaged and engaging, always with the capacity to form new relations, and the desire to do so (Buchanan 1997: 83).

In Deleuze and Guattari's model, the body is creative and engaged both biologically and socially, not a passive vehicle for the environment or the social context to mould. A body can do this and it can do that, in relation to the situations and settings it inhabits, and to its aspirations within an unfolding, active experimentation. The creative force motivating the body (also called 'positive desire') is a feature of all living organisms, according to Deleuze and Guattari (1988: 315). A bacterium, an insect, a bird or a domestic cat are all motivated in ways to appropriate to their nature: to find food and an environment niche, to find a mate and reproduce, perhaps to care for their offspring. This motivation interacts with the relations to establish the limits of what the insect's or the cat's body can do. Non-human animals are guided by 'hard-wired' instincts or drives for food, shelter and reproduction, although they will also establish many other relations with other things or organism, appropriate to their species.

For human beings, things are more complicated. As far as we know, humans are the only bodies whose brains are sufficiently complex (in terms of potential connections) to make them capable of self-consciousness and the use of abstract concepts to think and reflect upon experiences and sensations. This has enabled human bodies to affect their environment through the creation of cultural products (tools and technologies, symbolic representations of themselves and the environment, artistic creativity, and social organisations and institutions). These in turn form a myriad of relations that affect other bodies, creating and sustaining societies and cultures, complex social organisation, economics, religion and politics. Generally speaking, *the more relations a body has, the more it is capable of doing.*

Deleuze and Guattari described the body that emerges from this confluence of relations and creative potential as the *body-without-organs* (Deleuze and Guattari 1988: 149ff), often shortened to *BwO*. For them, the important body is not the physical biological entity based on biomedical knowledge (they call this the *organism* or the *body-with-organs*). From the

moment of birth -- perhaps even before -- the BwO is constituted out of this confluence of relations and creative potential. The BwO of the newborn infant is defined largely by the drives for food, comfort and warmth. Maturation and experience bring a multiplication of the range of relations, until for an adult human, they are myriad: physical, psychological, emotional, and cultural. The discipline of the nursery and the schoolroom, the gendering and sexualisation of adolescence, the routines of work and the growth and disillusionment of ageing progressively establish the relations that determine the limits of the body's potential. Indeed, this is the easiest way to understand the BwO; as the limit of what a body can do. In the context of creativity, what (else) a body can do defines the limits of creative potential.

To fully grasp how the Deleuzian approach may supply a sociology of creativity, I will now set out the main elements in his work (and in his collaborations with Guattari): relations, assemblages, territorialisation and lines of flight.

Bodies and their Relations

If we accept that the human body is both biological (an organism that is constituted from the physical constituents of atoms, molecules and cells), *and* social (an agent that engages with human culture and shapes that culture); if we take this as given, then it follows that the body has relations (to other things) in both these realms. A body will have relations through its organs and its senses with the physical world: the biological body eats, sleeps, breathes, reproduces, gets sick, dies, as a consequence of its physical relations with food, air, other bodies, microbes and so forth. But a body will also have relationships that are non-physical, deriving from its psychology and its social and cultural context, and from the philosophical, religious and other systems of thought that shape a culture. A body may also have reflexive relationships with itself: with its physicality and with the sense-of-self that constructs the body as young, old, healthy, sick, disabled and so on.

These relations (physical, social, psychological, emotional, political and so forth) may both affect the body, and how the body can influence or affect other entities (Deleuze calls these two-way influences *affects*), to greater or lesser extents. A body has direct relations with its material environment: it breathes in air and uses oxygen, water and foodstuffs to generate energy. It passes the waste products of metabolism back into the environment. Through

these processes the body grows from a single fertilised cell to a fully grown organism. It has a relation to gravity, which both constrains it and permits it to function in specific ways. The body is subject to injury and to attacks from chemicals, sunlight and infectious agents; it is also prone to degeneration over time. Through its senses (vision, hearing, touch etc), the body can apprehend the physical environment around it, including other bodies. All these affects are strong; a body will not survive without these relations. The body can also affect the environment and other bodies physically, directly or through the use of tools, in creative or destructive actions; through sexual contact; or in the many other interactions a body can have with what is around it.

Cognitively and emotionally, humans and their interactions with the world are more complex than a 'black box' into which sensory stimuli (pleasurable or painful) are fed, and out of which predictable responses emerge. Humans have the capacity for conceptual thought and language, as well as self-awareness and ability for self-reflection. These capacities affect how the brain processes information, while memory and learning also influence how humans assess information and make complex decisions. Relations that humans have with the world are filtered through this psychological medium, and behaviour (the engaged relations that a body has with the world) reflects this cognitive activity. The body may also respond emotionally to incoming information, while emotional responses in turn affect others. Finally, the body's self-awareness can determine its psychological responses to pain, to threat and risk, to a harsh word, or to a sunset: these relations acquire meaning that is filtered through a sense of an on-going selfhood. The strength of each of these affects will vary, and may be either conscious or pre-conscious.

Bodies have relations to the social world of systems of knowledge, sources of power and authority, shared norms, values and beliefs. They are affected by economic relations (for instance, capitalist relations of production), political systems, and religious or philosophical relations with ideas and ideals. Within these realms, notions of value: good and bad, emerge, establishing moralities and codes of ethics, rules of conduct and punishments for transgressions. Human culture shapes bodies, but is itself a production of the relations that bodies have with each other, with technological objects and with abstract ideas and concepts.

Again, the strengths of affect will vary, though cultural relations may be some of the most powerful and hard for a body to resist.

So a body may have all of these different, two-way relations with its physical and social context. Each individual body has different relations, contingent upon its particular circumstances. This way of thinking about the body has the immediate consequence of overcoming the dualism of biological/social that can be a problem for understanding embodiment (Fox, in press). In this approach, all of a body's relations are important and relevant: be they physical, psychological, social or philosophical: the method does not favour one category over another. Instead of focusing upon the body itself, in an attempt to understand what it 'is', we can consider the relations it has with the physical, social, cultural, political and ideological context, and try to describe what it 'does'.

Assemblages

Deleuze and Guattari reject the view that a body's relations and affects directly determine what it can do. Humans respond to stimuli in complex and sometimes unpredictable ways that suggest an active, motivated engagement with living; the capacity to make choices and act on the world around us. Rather the relations and affects combine within what Deleuze and Guattari (1988: 88) call *assemblages*. These are the outcomes of the interaction between a body's relations and develop in unpredictable ways 'in a kind of chaotic network of habitual and non-habitual connections, always in flux, always reassembling in different ways' (Potts 2004: 19). Critically, assemblages 'are the machines that operate without our noticing them, to produce the desire that we do' (Ballantyne 2007: 27).

Assemblages are always about process: 'doing' not 'being'. Deleuze and Guattari use the metaphor of a machine to describe how assemblages connect together elements of the body with its relations (Bogue 1989: 91): they argue that every aspect of living, and our experience of the world, is comprised of these assemblages: For instance, there is an 'eating assemblage', comprising (in no particular order), at least:

mouth – food – energy – appetite;

there is a working assemblage comprising, at least:

body – task – money – career;

a sexuality assemblage comprising, at least:

sex organ - arousal – object of desire,

and so forth. The relations can be drawn from any of the domains, material or non-material, but in each case, you will note, the assemblage is dynamic rather than static: it is about the embodied process of eating or working or sexual desiring, not about a state of being.

Furthermore, the assemblage will vary from person to person, contingent on the precise relations that exist as a consequence of experience, beliefs and attitudes, or from bodily predispositions.

The processing capacities of the human brain add immensely to the complexity of possible assemblages. From birth, humans are immersed in a world full of cultural relations: everything from clothes (girls in pink, boys in blue!), food recipes and technologies (tools and techniques to get things done), through to customs and norms of behaviour, cultural knowledge and systems of education. These are all transmitted by material objects in the environment, but also by abstract concepts, mediated by language. The brain is progressively shaped by these complex inputs, and consequently it is impossible for human assemblages to consist merely of biological components. While a new-born infant's eating assemblage may comprise:

hunger - mouth – food

It is quickly elaborated into

hunger - mouth – food – nipple - mother

As a child's brain matures and the immersion in human culture provides the structures that enable language (and consequently the capacity for thought using abstract concepts, and self-consciousness), the body gains new cultural and social relations. The eating assemblage is further elaborated into

hunger - mouth – food – appetite – tastes – mother - nipple

with the relations to nipple and mother gradually fading in importance once weaned. For the adult, however, an eating assemblage might comprise:

hunger - mouth – food – appetite – tastes – money – shopping – dietary choices – time

and many other relations particular to the context and experiences of the individual. A vegetarian's eating assemblage might include a commitment to ethics or ecology (Fox and Ward 2008a), while that of a food allergy sufferer will involve not only a negative relation to nuts, dairy products or whatever, but also the experience of an allergic reaction. Both have emerged from an infantile relation to food, but in very different directions. These differences explain why the embodiment of one person differs from another.

It is the totality of assemblages that creates the BwO and thereby the conditions of possibility for the body. Assemblages link the individual's body to the social and natural environments (Bogue 1989: 91), creating the substrate that both defines a person's capacities and her/his limits. As a consequence, bodies should be understood as

neither fixed nor given, but as particular historical configurations of the material and immaterial, captured and articulated through various assemblages which to some extent determine them as particular bodies, but never manage entirely to exclude the movement of differing and the possibility of becoming otherwise (Currier 2003: 332).

In a sense, the body is lived through the assemblages. As we will see, assemblages of relations shape creative production, what a creative body can do.

Territories, Territorialisation and Lines of Flight

Assemblages of relations determine the overall shape, intensity and direction of the force on a body. Combined with the body's active, experimenting drive, they shape the BwO. It follows that the BwO is a *territory* that is never static, but is sculpted by the capacity to affect and be affected by its relations. The territory that the BwO inhabits depends upon the body's relations and how it affects and is affected by them.

The BwO is constantly the target of *territorialisation* (Deleuze and Guattari 1998: 88-89), which may result in a change in character or a re-definition. The force of the gravity-assemblage territorialises the Earth as it travels through space, turning it into a 'satellite'. A biomedicine-assemblage territorialises an individual consulting a health professional,

transforming her/him into a patient, and her/his symptoms into a disease. It follows that many aspects of human interaction involved territorialisation, with one or both parties affected. Territories and territorialisations are often concerned with socially-created meanings: philosophy and ideology have historically territorialised land as ‘nations’, Homeland or Fatherland (Deleuze and Guattari 1994: 68).

However, all forces can be resisted, partly or totally. The Earth does not succumb entirely to the Sun’s gravitational pull, because its velocity through space acts as a counter-force that always seeks to escape, and move away on its own trajectory. The resultant orbit is the vector of force and counter-force. Because forces add and subtract from each other, it is possible for one force to *de-territorialise* a territorialised BwO. It is also possible for another force to then *re-territorialise* the BwO again. As a model of embodiment, territorialisation provides an explanatory framework for how social relations impinge on individuals or cultures, from class, gender and ethnic stratification (see chapter 6) through to the creation of subjectivities in people as, for instance, ‘women’, ‘husbands’, ‘managers’ and ‘artists’. However, Deleuze and Guattari assert the capacity of the body to resist these forces, re-shaping how relations interact within the assemblages that constitute the BwO. Resistance, be it the refusal by a child to acquiesce to its parents’ wishes, or the rejection by a progressive social movement (for example, the anti-apartheid movement in South Africa) of ideas, power and control by a dominant group, reflects this capacity of the body to re-shape its assemblages, and ‘become–other’.

Part of Deleuze and Guattari’s project was to undermine any dominant territorialisations, including the body-*with*-organs. They wanted to show how it is possible to resist territorialisation, and to find what they called ‘a line of flight’ from that territorialisation to a new embodiment. This can happen by introducing a new force, or strengthening an already present weak force. In relation to mental health, Deleuze and Guattari (1984) called this process ‘schizoanalysis’; more generally as a strategy for living, they called it ‘nomadology’ (Deleuze and Guattari 1988). Inevitably, any new state of embodiment after a line of flight is also a re-territorialisation, but it may be one where a body can do more (or different things) than it could do in its previous territorialisation.

Deleuze and Guattari developed the concept of *nomadology* as an aspiration and an alternative philosophy to what they saw as the discursive straitjacket of western thought (1988: 23-25). In a narrower sense, nomadology is about replacing monolithic definitions of reality with a multiplicity of narratives. This enables an uninterrupted flow of deterritorialisation that establishes a *line of flight* away from territories, grand designs and monolithic institutions. Nomadology must be thought of not as an outcome but as a process, as a line of flight which continually resists the sedentary, the single fixed perspective. In this formulation, it sounds a lot like the creative process, both in terms of the creative act and the effect of a creative product upon its audience.

The Dynamics of Creativity

Having explored these Deleuzian concepts, we can begin to apply this model of embodiment, assemblages and territorialisation to develop an approach to creativity. From a Deleuzian perspective, creativity is not something restricted to the outputs of artists, engineers, philosophers or entrepreneurs. Rather, it is the moment-to-moment outcome of human action, the on-going 'becoming-other' (Ballantyne, 2007: 97) of the motivated body as it acts in and upon the world around it. Desire, the positive motivation that drives human action from moment to moment in endless choice-making and interaction with others, is the productive process that creates not only works of art and scientific inventions, but the day-to-day organisation of bodies and things in time and space (Deleuze and Guattari 1984: 5). Non-human animals act in very limited ways on objects in their environment: consuming them, marking them territorially, mating with them and reproducing, perhaps chasing and killing other animals. Humans, through their capacity to use concepts reflexively, and to use tools and develop technology, have far more potential for creative production, and of course (as social animals), many of their creative outputs are social or abstract in character, from establishing a familial household to generating ideas or models of the world.

This creative desire is shaped by the complex mix (assemblage) of a body's relations to other things, bodies and ideas, and how these relations affect (or are affected) by the body. Both because of the dynamic character of motivated desire, and the sheer number and diversity of bodies' relations, no single relation could ever be a simple determinant of creative

production: creativity emerges from a dynamic flux of relations constituted into a creative assemblage.

It follows that the products of creativity are not a characteristic of a body (or a 'mind'), but of a body's interactions with its physical and social context. It also follows that experience and repetition (in the sense of establishing relations that affect the body) may be part of the creative process: creativity can be 'learnt'. In the next section of this paper I will look in greater detail at the kinds of relations that may contribute to creativity; for now, it is sufficient to suggest that the creative assemblage of relations and affects *territorialise* the body, influencing what (else) it can do, what it can create. Relations to past experiences, to emotions, and also supportive and positive relationships with family, friends, colleagues and peers may shape the assemblage, in turn shaping the creative, experimenting power of the body.

This is not to say, of course, that all a body's products are creative. The body's relations mediate what a body can do, what it can produce. Some of these relations are inevitably with social forms including capitalism, established religion, tradition, nationalism, imperialism, institutional racism and other elements of repressive, oppressive and reactionary control of bodies by the State, or by organisations and institutions operating within these contexts. These forces manifest what Deleuze and Guattari call 'royal', 'state' or 'major' forms of science, art and philosophy, which specify what may be done, and what may be thought (Deleuze and Guattari 1988: 373, Massumi 1992: 4-50). Such forms territorialise the body, and may in fact reduce its capacity to act creatively (Jeanes 2006: 129-130). What bodies territorialised in this way produce may be derivative, trammelled by tradition or economic exigency, or subverted to the interests of power (for instance, socialist realism in the Soviet bloc or contemporary evangelical Christian worship songs).

Think too of the constraints that art traditions place on creativity: young people learning to paint or compose music may be constrained by their teachers' emphasis on the techniques of great artists, the traditions of the medium or the demands of assessment. This is a challenge for the professional artist or creator; the trappings of success or the demands of an audience may change the creative assemblage, territorialising the creative spark into something

hackneyed or self-repetitive. Deleuze (1993) dismissed these ‘major’ forms, and spoke of ‘nomad art’, as their opposition.

Exploring the Creativity Assemblage

Based on this Deleuzian model, creative production may best be thought as the active, experimenting outpouring of desire, territorialised by complex assemblages of body relations and affects, but momentarily achieving a line of flight. It is a fundamentally social process (based in the body’s relations), but also ultimately an embodied process too. The body’s assemblages thus determine what (else) a creative body can do, or the ‘limits’ of a body’s creativity. I suggested earlier that, generally speaking, the greater the number of relations a body has, the more it can do; in the case of creativity, this means that the richness of relations within an assemblage will influence the body’s capacities for creative production. This makes sense intuitively, suggesting that experience, skill or craftsmanship and engagement with creative contexts will increase creativity. Artists often speak of the hard and intensive work that goes into creation, even where the products themselves are associated with pleasure and leisure. Critics speak of the ‘mature’ work of artists, which is often considered the most innovative and creative of their lifetime’s productivity. Mathematics is one of the few areas in which youth appears to enhance creative productivity.

The uniqueness of a created product thus derives from the uniqueness of the assemblage, which in turn establishes the limits on what a creative body can do. This means that, in theory, we can de-construct a creative output to discern the assemblage that led to its production. Deleuze and Guattari (1984; 3) ask

Given a certain effect, what machine [assemblage] is capable of producing it? And given a certain machine, what can it be used for?

Deleuze calls the study of affects and relations ‘ethology’. Osborne, following this approach suggests that

(a)n ethologist of creative powers ... would be interested in documenting and defining in a more or less empiricist way the affects which are made available by creative powers, for instance in the arts themselves, whether this be a case of literature, painting, cinema or whatever. (Osborne 2003: 515)

We can apply this approach to any aspect of creativity, from innovation in industry, through cookery and interior design, to the arts of painting, music and so forth. To the extent that psychological, emotional, social and cultural relations will shape the assemblages of the body more significantly than physical relations, the ethological task falls firmly within the purview of the jobbing social scientist (Fox and Ward 2008b: 1013). (It would also potentially be the basis for a particularly crass form of artistic criticism that argues *ad personam* concerning the influences that shaped the form of a creative product!)

The simplest creativity assemblage that could give rise to a painting would be

canvas — paint — implement — model.

However, for an artist other than a pre-school child or a chimp, we would expect an assemblage such as

canvas - paint – implement – subject – ideas – experience - technique,

in which relations and affects deriving from personal experiences and emotions, skills, and creative ideas will shape what the artist's creative body can do. It is possible to document these relations and gain some understanding of how the creative force of the artist has been shaped.

To illustrate this ethological approach, consider two representations of a female nude, by Botticelli (*The Birth of Venus*, 1486) and Picasso (*Crouching Nude*, 1954) (see Figures 1 and 2). We may guess that both artists used female models as they painted, and that the light from their models cast similar images on these artists' retinas, yet their subsequent creative productions have little in common. Both artists had that spark of creative desire that led them to present their subject in a painting. But for each, the form of their creative representation of their subject was refracted by the unique assemblage of body relations that derived from their

very different psychological, social and cultural contexts. We could suggest that for each, their creative assemblage might incorporate:

canvas – paint – model – sexual desire – belief about women – ideas of beauty – artistic traditions and contexts

but these relations would be augmented by many other personal and social relations. Botticelli's Renaissance sensibility harked back to classical times, but with a new focus on beauty influenced by humanism, while for Picasso, the Renaissance (and Botticelli) were also part of his body baggage along with the subsequent movements of Impressionism, post-Impressionism and modernism, and the disillusionment of two World Wars. But these artistic traditions were only part of what made these products: all the experiences of life and of previous creative action, their own sexual desires, contemporary social attitudes to women, and perhaps their relations to their models contributed to the creative assemblages that allowed them to produce these nudes.

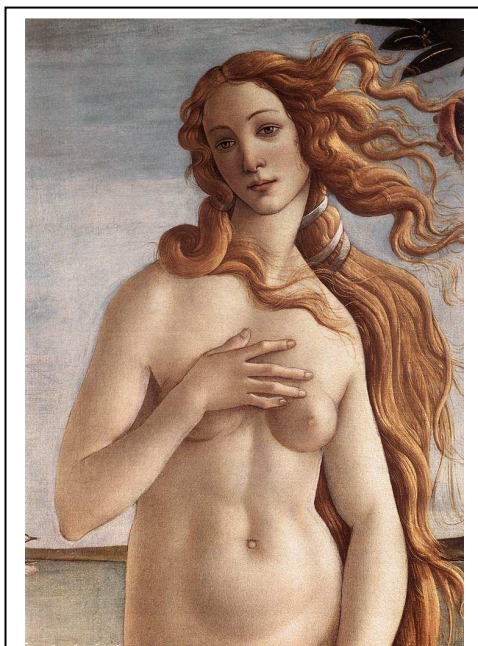


Figure 1. Sandro Botticelli: The Birth of Venus, 1486.



Figure 2. Pablo Picasso: Crouching Nude, 1954.

Within the Deleuzian reading, we may conclude that the differing Botticelli and Picasso creativity assemblages that resulted in their very different works defined 'what else their creative bodies could do'. It would not be possible for Botticelli to produce a cubist nude, any more than it would be possible for Picasso to produce anything other than a self-

conscious copy of a Renaissance painting. For both artists, their creativity was shaped by their assemblages, placing limits on how the creativity was manifested.

From this perspective, we might simply conclude that art (or music, or science or cookery) simply reflects social norms and values, that it is determined and ultimately uncreative! But this is to ignore the inherent dynamics in Deleuze's model of the body, in which desire (the creative, experimenting principle that drives action) plays such a part. Creativity is inherent in every body's interactions with the world. But what separates Botticelli's or Picasso's creativity from my own efforts at painting, are the richness of their assemblages, which includes many relations that enhance the creative spark. These include relations that derive from training and technique, knowledge of, and critical responses to art traditions, the history of art and movements, style, practice and repetition, collaborations with other artists, and so forth.

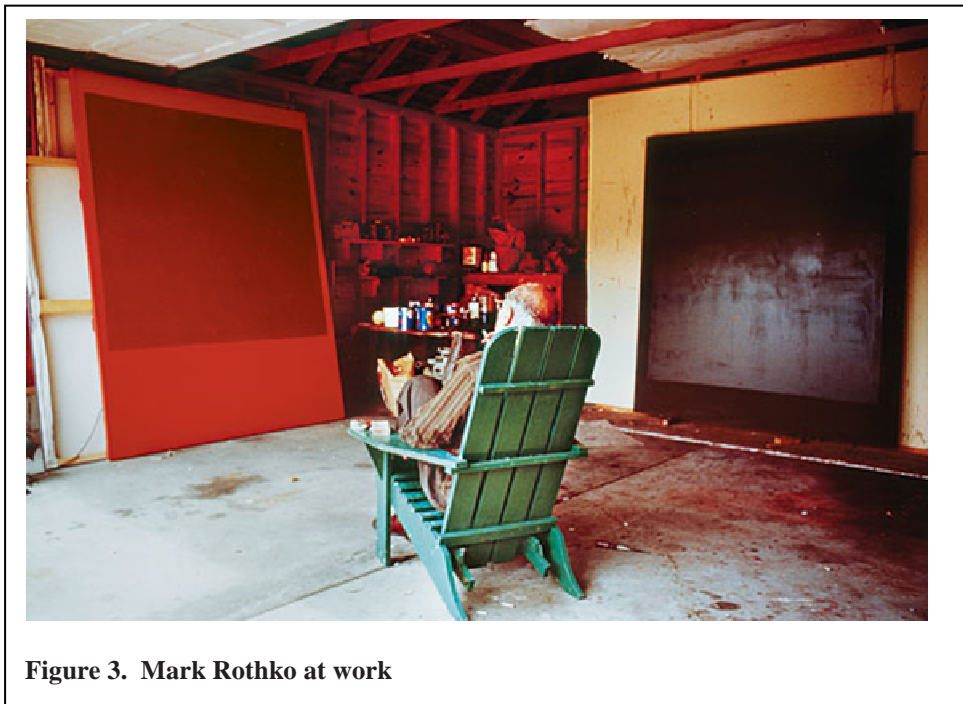


Figure 3. Mark Rothko at work

But they will also include emotional and cognitive relations individual to themselves and their personal histories. Nineteenth century romanticism in classical music, jazz, Impressionist painting and 20th century abstract expressionism were all shaped by these relations and affects; indeed, this capacity to draw on emotions or perceptions were intrinsic to the 'validity' of these creative forms. Consider, for example, Mark Rothko's abstract

works (Figure 3). For Rothko, creativity has become fully detached from representation: what is left is the pure play between the artist's creative desire and his personal relations to affectivity and his medium. Rothko's works are not exercises in colour, but an effort to express his relations and affects to the world and to himself in manifestations of a fully embodied creativity (Deleuze 1993: 196).

In all these works, body relations discipline but also enable the creativity to blossom; they allow a *line of flight* that produces work that reflects the richness of their assemblage. We may read the relations and affects that comprise the creative assemblage in the work itself, be it a Bach cantata, a Renaissance sculpture or a Shakespeare sonnet. In the next section, I will apply this methodology to explore work by a single visual artist: Paul Cézanne.

What can a Creative Body Do? Cézanne and Painting

Cézanne's work has been seen as pivotal in the move from Impressionism to the art of the 20th century (Copplestone 1998: 10). We can see the forerunners of cubism in his painting, but also – in the focus on the flatness of the canvas and illusions of painting – to expressionism, abstract painting, pop and op art. However, I am not interested here with this kind of genealogy (although the Deleuzian approach opens itself to this kind of analysis), but rather with exploring how the relations and affects that an artist may have influence the work they produce. I want to look at three paintings: one of Cézanne's earliest works *Still Life with Leg of Mutton and Bread*, painted in 1865; a painting from his middle years *The Lac D'Annecy* (1896), which reflects his mature technique; and one of his final works, *Mont Sainte Victoire from Les Lauves*, completed in 1906.

The first of these works (Figure 4), painted at the age of 26, is very much an apprentice piece. Clearly, Cézanne's dominant body relation here is to the piece of meat itself. He uses his relation to the paint, palette knife and the canvas almost to create a third-dimension: the paint is sculpted (*impasto*) to suggest the shape of the muscles in the meat. Painted in the period when the first Impressionist paintings were scandalising French society, the traditions of the neo-classicism are an evident stylistic relation for Cézanne (*ibid*: 12). The background is dark like a 17th century Dutch still life. Yet we may also see Cézanne the man in the work: this is a provincial country meal waiting for the oven, and we may imagine Cézanne's

household sitting down subsequently to enjoy this for their supper. The influences of nineteenth century representationalism and romanticism in artists like Courbet may also be discerned, while there is little hint of the awareness of the surface of the canvas so evident in Cézanne's later still lifes.

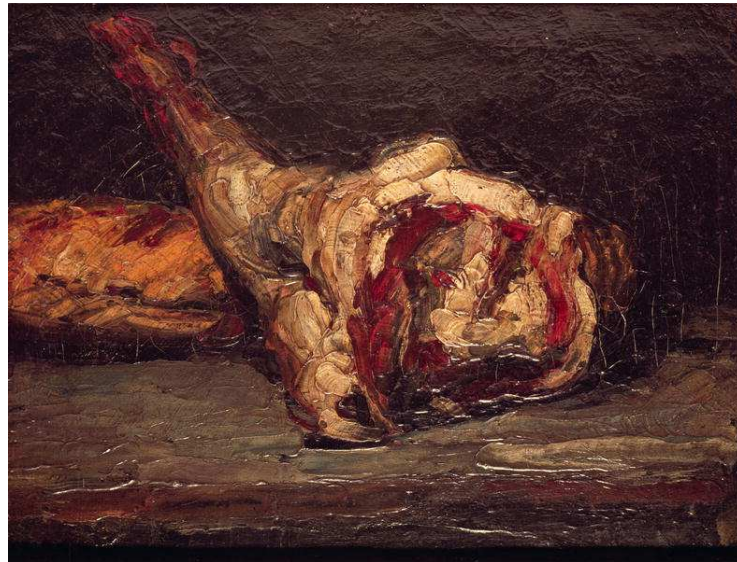


Figure 4. *Still Life with Leg of Mutton and Bread*, 1865

The second picture (Figure 5) is quintessentially Cézanne, to the extent that it demonstrates a style that is well-established across his mature work as a painter. From a Deleuzian perspective, this is to say that there is a creativity assemblage that incorporates relations which continue to shape the work that the artist produced. There are relations to the countryside that he painted, to a palette of colours that relate each to each other, rather than necessarily to the colours of his subject-matter, and to a cruciform design replicated in many works, in which a strong vertical and horizontal create structure. But, all importantly, Cézanne's work is by this time modern in its self-referentiality to the flatness of the canvas. He constructs an image that applies Impressionist methodologies concerning paint and light, but refracts these in his own philosophy of painting, so that each element of the painted canvas refers not only to the subject, but also to other elements of the painting.

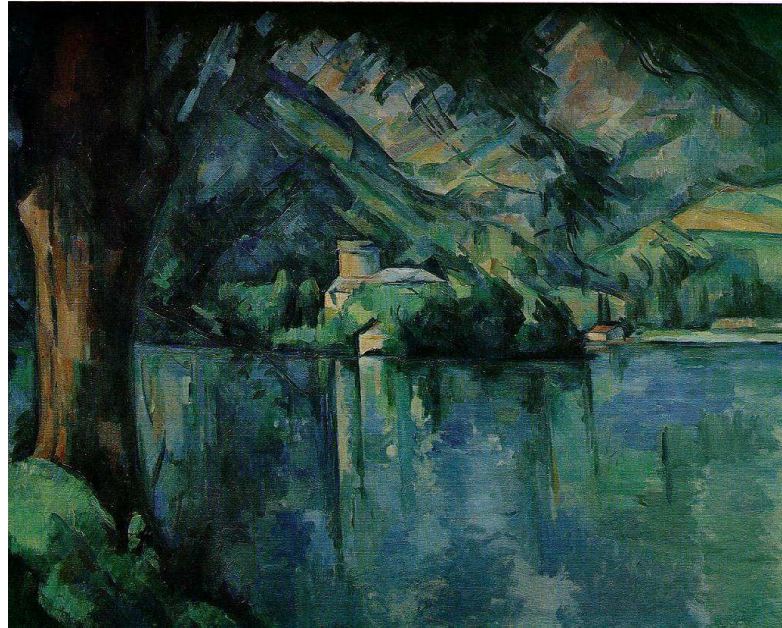


Figure 5 *The Lac D'Annecy* (1896)

For an artist such as Cézanne, his creativity was also shaped by what had gone before in his previous works, and perhaps to those still un-painted. Cézanne was a 'repeat painter', returning to the same subject time and time again: exploring how the subject may influence what is laid on to the canvas, without any determination of outcome by subject-matter. The third painting that I will look at (Figure 6) is a case in point. Mont Sainte Victoire near Aix-en-Provence, where Cézanne lived much of his adult life, was a subject to which the artist returned time and time again. Indeed, in 1901, he purchased land with a view of the mountain.

This is one of Cézanne's last works, and in it, the subtlety of some of his earlier paintings of the subject has been replaced with broad blocs of colour (in a colour palette not dissimilar from the previous work discussed), in which the mountain has been flattened and has become little more than a shape on the canvas. The fields and houses that cover the intervening countryside become part of a design, with little or no sense of depth. The paint, paintbrush and the canvas now are the most important embodied relations for the artist, while the power of the landscape and Cézanne's place within it provide a means to explore these relations to the medium itself. Perhaps too, Cézanne's eyesight was failing, and the details that shaped

his earlier pictures of the mountain were no longer distractions from the raw power of embodied creativity.

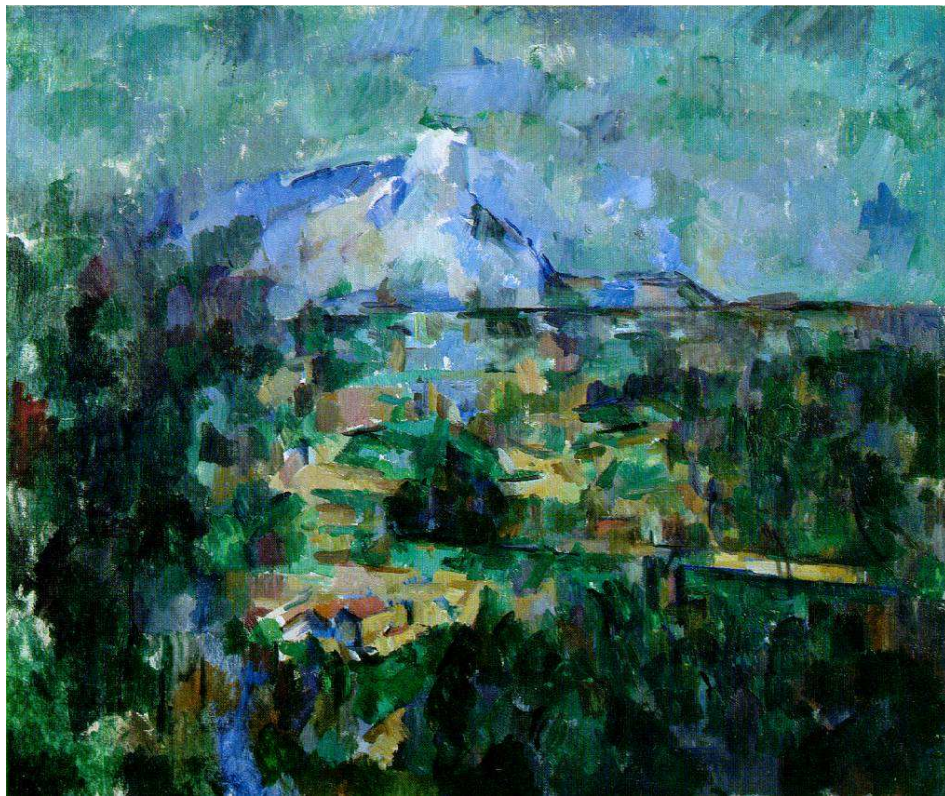


Figure 6: *Mont Sainte Victoire from Les Lauves, 1906*

Cézanne did not work in a vacuum but was fully aware of the changes in art during his lifetime. He was in regular correspondence with Impressionists and post-Impressionists, and discussed his work and what he was trying to achieve. Inevitably, relations to the art of the time will have affected how his creativity manifested, and we might even imagine a post-Impressionist assemblage that influenced all those working in that period, an assemblage incorporating Cézanne himself, along with his paintings, and the responses of his audience.

Discussion and Conclusions

With the help of Cézanne, I have tried to demonstrate here the methodology that a Deleuzian approach to creativity provides, focusing on the relations and the creativity-assemblage that shapes the production of an artist. I noted earlier that Deleuze and Guattari (1984: 3) suggested two questions that an ethologist of creativity might ask. The first was '(g)iven a

certain effect, what machine [assemblage] is capable of producing it?'. I have tried in this paper to offer some suggestions of the assemblage that may have enabled the production of three of Cézanne's paintings. Cézanne's work shows not only the significance of relations and affects that create creativity-assemblages, but also the importance of the physicality, the embodied character of creativity. It also indicates how creativity is shaped during a lifetime of production, and of the part that contexts, experience, technique and many other factors play in how creativity is manifested.

However, it is quite impossible to establish a one-to-one correspondence between the relations and affects that form an artist's creativity-assemblage and the creative output itself. Firstly, it is beyond the scope of any analyst to document all these relations; secondly, we have no way of knowing the strength of these relations within the assemblage at the precise moment at which the artwork was produced; thirdly, we cannot predict how the assemblage may have interacted with the desire of the artist. Creativity assemblages are inevitably complex, and one might conjecture that the 'greater' the creativity, the greater this complexity. This conjecture however is speculative, and could lead back into a trap of differentiating between 'Big C' eminent creativity and 'little c' everyday creativity (Kaufman and Beghetto 2009). Sociologically speaking, the Deleuzian approach rejects such value judgements about the 'greatness' of creativity, focusing instead on the dynamics of the creative process itself.

For all these reasons, I am not suggesting here a methodology for 'explaining' the detail of creative production, although more broadly, it is possible to begin to understand some features of art history and the development of artistic movements and approaches, albeit retrospectively. However, more modestly, it is possible to apply the approach to understand the dynamic character of creative production, and the part that material, psychological, cultural, political and social relations can have on the shape of creativity. This applies not only to artistic creativity, but to a much broader field of creativity and innovation in science, technology, social theory, political science, organisation and so on. We can document the relations and affects that shaped acts of creativity, to make sense of the dynamics of production. Thus, for instance, we might be able to make more sense of the part that

serendipity plays in creativity (Koenig 2000): for ‘serendipity’, read ‘social and psychological contexts’.

The second question that Deleuze and Guattari asked was ‘given a certain machine, what can it be used for?’ In many ways, this second question offers more promise, in that it suggests the possibility of understanding how creativity and innovation may be facilitated and what may constrain creative production. Applied to the creative process, we might suggest what kinds of material, psychological and social relations (confluent within an assemblage) might lead to what kinds of production: what is conducive to creativity and what limits its manifestation. In the context of scientific exploration, creative management or educational practice, we might foster creativity through specific interventions that shape the relations and affects that impinge on the bodies of potential creators.

By focusing on relations and assemblages, rather than the person of the creator or inventor herself, the approach espoused here recognises that creativity takes place in a social context (cf. Becker 1974). Creativity assemblages may well include networks that extend beyond the immediate site of creative production. Audience is an obvious example. For both Copernicus and Darwin, social, political and religious/philosophical relations to their audiences affected their creativity; for scientists, peer review, career advancement and the epistemology of science determine how creativity is manifested in the day-to-day business of scientific production. For an artist, audience expectations may become an insufferable force within the creativity assemblage, stifling creativity for fear of falling short of these expectations.

These final musings suggest some possibilities for the application of the Deleuzian approach to creativity in many areas of interest to sociology. Other areas include exploration of the concept of ‘artistic style’ as creativity-assemblage, the fostering of creativity through education and training, and the commercialisation of creativity. Creativity is both social and embodied, and in both aspects is fully amenable to, and ripe for, sociological exploration.

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