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The Designer's Self Identity - Myths of creativity and the Management of Teams.[1]

Abstract

This paper describes recent research conducted at Sheffield Hallam University in which practicing designers reported on their experiences of working in a cross functional team. The survey related these experiences to the designers' attitudes to their creativity. Two models for creativity are proposed - one based on the romantic stereotype of the creative genius, the other taking creativity to be an attribute posessed by all human beings in some measure, which can be enhanced by personal effort or by training. Identifying features of cross functional teams which are likely to demand certain personal qualities in designers, the paper notes that these are at odds with the qualities of a 'romantic - type' creative person. The link between these qualities, and notions of personality as a set of fixed attributes is pointed out. Several theories of personality which describe mechanisms for change in self identity are described. It is noted that the results of the survey suggest that in many cases designers have a pragmatic attitude to their creativity, despite the prevalence of the romantic stereotype for creativity in the literature of both management and education. Principles are suggested for design education, to enable designers to reflexively re-evaluate creativity as a component of their self identity to enhance their performance as teamworkers.

Keywords: Creativity, Self-identity, Reflexivity, Teamworking

Introduction

'Team projects are essential, but many of the problems arise because of, in my own experience, lack of awareness of what a designer is - i.e. not just a drafting facility but a creative thinker, communications expert and effectively a manager'

So says a consultant industrial designer, a respondent in a recent survey of designers conducted at Sheffield Hallam University'.[2] The research reviewed the literature on the management of New Product Development; in particular, the effects of teamworking on industrial designers. Qualitative results, such as the quotation above provided insights into

designers' experiences. The project also produced quantitative results, some of will be referred to below.

It will be argued here that prevailing 'cultural narratives' about creative people are not appropriate to the conditions facing practicing designers - cross functional teamwork being important among these conditions. The quantitative results of the survey just mentioned allow us to gauge the effects of these cultural narratives on the performance of designers in cross functional teams. Ideas from philosophy, psychology and sociology will be deployed to suggest that design education could equip designers with more appropriate attitudes to their creativity[3] and their sense of self. These insights will be related to the current debate about design education.

This paper will show that the romantic genius is the prevailing stereotype for creative people and is evident in management literature, in design education and in the psychological study of creativity itself. It will note that there is a gulf between this stereotype for creative people, and the roles that real designers apparently take in cross functional new product development teams. It will question how it is that designers working in cross functional teams have apparently transcended the stereotype for creative people, despite the fact that management literature and design education perpetuate it.

Creative Stereotypes

In their article 'Is Designing Mysterious? Challenging the Dual Knowledge Thesis' Richard Coyne and Adrian Snodgrass suggest that it is commonly supposed that design relies on mental processes which are subjective, individualistic and non rational, and that this determines the character of the resulting knowledge - it defies rational explanation. They describe how this type of knowledge is often opposed to a scientistic approach to the world based on logic and rationality, suggesting that there is a complete split between the two sorts of knowledge. They point out that in this formulation, design '...inherits a style of thinking whose origins lie deep within the romantic movement in art.'[4]. It is possible to extend their comments about 'design knowledge' to our understanding of creativity and thus to the designation of designers as 'creative people'.

The prevailing romantic stereotype for the creative process, and hence creative people, is well known.[5] Curiously perhaps, considering that management is a supposedly rational

business, it is also strongly evident in the literature on the management of people with creative roles - designers among them. Winston Fletcher asserts without question that these 'creatives' tend to be '...insecure, egotistical, stubborn, rebellious, poor time-keeping perfectionists',[6].

Considering creative teams, John Whatmore states that: 'Creative people are different: they are sensitive, intuitive, experimentalist, non-conformist and concerned as much about the development of their skills and talents as about their organisation's objectives'[7].

Central to these ideas of what creative people are like is strong individualism. These are heroic figures whose personal qualities make them stand out from the crowd. They are accorded the right to be so individualistic within an organisation, by virtue of having been defined as creative.

The same stereotype is also evident in some design education, where 'creative expression' is privileged at the expense of reflection or analysis of meaning. As Barry Jackson puts it, design education 'privileges a certain kind of creativity, the individual act of genius, the radical breakthrough, the moment of inspiration. It devalues collaborative, adaptive creativity...'[8] He also notes that design education 'privileges designers as a special breed, set apart from others by their creativity.....a tribe with a shared view of the nature and power of creativity.' Jackson relates these features of design education to others, such as its emphasis on craft and the manipulation of form; the judgement of performance by criteria which emanate from within design education, not from the world outside it; its belief in talent rather than learning; its celebration of heroes; its emphasis on subjectivity.

The title of his influential book, Creativity, Beyond the Myth of Genius[9] gives a clear indication that Robert Weisberg considers it important that the prevailing stereotype for creative people be transcended. His argument is convincing, and shows just how firmly embedded is this romantic mythology in the scientific study of creativity. In his discussion of the methodological weaknesses of studies which have apparently identified a definable 'creative personality' he refers to a review of such studies by Frank Barron and David M. Harrington[10], in which they note that: '...the research has brought no surprises, in that the findings correspond to the general beliefs our society has concerning the characteristics of

creative scientists and artists.' Even scientists are liable to have their perceptions coloured by the prevailing cultural narratives about that which they study.

Personality typing

Coyne and Snodgrass suggest that the characterisation of creative people by the lights of the genius myth implies their categorisation according to personality type.[11] Within the notion of a typology of personalities is the implication that personality is fixed - it is somehow the hand which each individual is dealt. This is so whatever cause might be ascribed to it - genes, infant experiences, upbringing, education. Some degree of fixity of personality type is taken for granted - indeed this is our common sense understanding of personality. This is confirmed perhaps by the uncomplicated way in which Whatmore and Fletcher talk of 'creative people'.

There is a long tradition of personality studies of this sort within modern psychology, which starts with Carl Jung[12] and was put to work in management by figures such as Meredith Belbin[13] in developing his scheme of team roles. To define the role which he calls the 'plant' Belbin drew on Raymond Cattell's 16 personality factor test.[14] Plants are the team members who most often come up with obtuse but frame breaking suggestions. While Belbin stresses that there is no necessary connection between team roles and functional roles - a plant might be a marketeer, or a company director - there is a clear overlap between the characteristics of Plants and the romantic creative stereotype identified just now. In a fictionalised case study in Belbin's own training material, the Plant character is indeed the designer.[15]

This suggests, in accord with Weisberg's observation above, that there is a complex relationship between psychometric tests which classify individuals as more or less 'inherently creative', and the prevailing cultural narratives about creativity. Perhaps therefore, it is the cultural narratives which affect creativity which are worthy of study, not qualities of inherent personality.

Another set of attitudes to creativity is also evident in the management literature which co-exists with the romantic personality stereotype is but at odds with it. Here, creativity is not associated with personality, but with results. Here, creative performance is apparently a human potential which can be set to work by using Creative Problem Solving techniques.[16] These techniques derive from models of cognition and the mind and are therefore democratic as the romantic stereotype is elitist. This set of ideas can perhaps be understood as the

scientistic equivalent to the romantic stereotype above, to refer back again to Coyne and Snodgrass' Dual Knowledge thesis. It is this democratic concept of creativity which is at work in Total Quality Management, where the quality circle is put in place at all levels of an organisation and in all functions, as a mechanism for tapping into the creativity which can be contributed by all employees.

The Unfixed Self

There has been much critical assessment within psychology of the theoretical basis for psychometric testing [17] and there is an extensive psychological literature which contends that personal identity changes through time, and in relation to circumstances. The idea of the 'self concept' is useful here as it allows for change through time and from situation to situation.

".....this definition of the self concept has very real implications for the way we behave. It suggests that we categorise ourselves into social groups. It also suggests that we *use different self - identifications in different circumstances*."[18] (italics added to original)

This suggests that some of the self concept of a person who takes a creative role in an organisation - a designer for instance - will derive from their having adapted to their situation, having 'categorised themselves' in relation to the social group they inhabit - 'creative people'. If 'creative people' are generally understood to have certain aptitudes and attributes, and we have seen that they are, then presumably those aptitudes and attributes will become part of that person's self concept.

For practicing designers, the company culture they encounter will also be likely to affect their 'self concept'. If the company culture adopts the prevailing romantic stereotype for 'creative people', then this will be reinforced in the self concept of the designer. This is not inevitable however. If the company culture values communication, interaction and teamwork, then these qualities may override the romantic stereotype and be integrated in the designer's self concept to the extent that the designer defines themselves according to that set of ideas.

The self concept of an individual is therefore not an entity made once and for all, but has a permeable boundary with the outside world. Components of the world which are likely to bear on this self concept are the prevailing ideas about creativity and creative people which the individual encounters. These sets of ideas will permeate the individual's self concept and

they will engage with them in the process of building an identity for themselves as a creative person.

The psychology literature which deals specifically with creativity itself has also moved on from the notion that it is a fixed and measurable component of the personality of certain people. Albert Runco [19] for instance advocates considering the *values* that guide people given especially creative roles, and the elements of culture and education from which those values derive. Reviewing a long term project studying creativity and art students, Mihalyi Csikszentmihalyi [20] suggests a view of creativity which recognises the cultural, social and temporal context that defines the creative activity. Talking of an apparent 'epistemological weakness' of his own empirical studies into the creativity of art students he notes that:

'...it is possible that the relationships we found depend on time-bound conceptions of what is creative - a product of particular cultural and social conditions.'[21]

Csikszentmihalyi points out that criteria for the judgement of whether someone 'is creative' compared to the general population change as culture changes. As we have seen, in this era these criteria often approximate to the romantic stereotype. He is even more emphatic than this in the same article where he very succinctly argues that attributions of creativity do not depend on inherent personality traits:

"Creativity is not a 'natural kind', a trait that can be measured objectively such as height, strength, perfect pitch, reaction time, or knowledge of language or mathematics. Rather it is an attribution based on the current conditions of the social system - more like judgements of taste, beauty or goodness."[22]

We can go along with Csikszentmihalyi here, as we are not concerned with what causes creativity - i.e. what makes one person more successful at having good ideas and making a success of them than another. Rather, we are interested in narratives about creativity, in as much as they affect the professional self concept of designers as they engage with the team based management of design and new product development. The self concept of designers may change as we have seen, as they change their allegiances to the groups they encounter in their professional lives.

The Reflexive Self

A dynamic model for selfhood has been developed in sociology by Anthony Giddens, which suggests a mechanism for this change. Giddens' stress is on the relation between social processes and a sense of self. He suggests that because the modern period is predicated on change, then a 'modern' selfhood is also bound up with change. His description of the process which takes place in individuals to deal with change hinges on his concept of 'reflexivity'. As he puts it: '...a reflexive mobilising of self-identity [is] a general feature of modern social activity in relation to psychic organisation.'[23]

Giddens wonders how this feature of modern society relates to the changes in self identity which took place in traditional societies. He suggests that in such societies it was the formalised 'rites of passage', marking an individual's progress through life, which enabled changes to self-identity to take place securely. He suggests that these rites of passage have been replaced in modern societies by what he calls 'abstract systems' among which he counts the efforts of educators. This puts a particular responsibility on design educators as it suggests that they are implicated in the aspects of their students' self identity which relate to their understanding of themselves as 'creative people'. It falls to design educators to equip their students with appropriately sanguine, flexible and realistic attitudes to themselves in this respect. Designers will have to deal with events during their career which involve changes in their self-identity, albeit relatively superficial ones. They will face transitions from art school to professional life, from one form of professional life to another - consultant to in - house designer for instance - or from one firm's corporate culture and organisation to another.

Echoing Csikszentmihalyi, Giddens is explicit about the relationship between self-identity and the events which make up an individual's biography. 'Self identity is not a distinctive trait, or even a collection of traits, possessed by the individual. It is the self as reflexively understood by the person in terms of her or his biography'[24] He also asserts that this reflection is an active process, in which the efforts of the individual are subject to moderation by the 'abstract system' of education. Giddens suggests that individuals are involved in a continual process whereby they build a 'story' about themselves which forms their self-identity. It is true the self-identity he describes is more fundamental than a person's professional identity or, perhaps, their attitudes to creativity. However, the characteristics of the romantic stereotype of creativity just described, its links with notions of fixed personality

and its consequent elitism, may mean that it is strongly enough implicated in the self-identity of an individual to affect their professional performance.

It may not be too far fetched to suggest that at the very least design educators must take pains to prepare students for the range of 'stories' about creativity and the professional environment they are likely to encounter. They may need to integrate various combinations of these stories into their self-identity and supersede the contradictions between them, as they face various situations in their careers.

Designers and Teamworking

It is appropriate now to relate the previous discussion to the Sheffield Hallam University survey of designers referred to above. This survey established that teamworking is now ubiquitous in new product development in the UK. Through the literature it was established that cross functional new product development teams operate with the following characteristics:

- Rigorous monitoring of new product development projects[25]
- Work done simultaneously by all the functions within the team[26]
- Common location for design teams - real[27] or virtual[28]
- Attention paid to communication between team members and documentation of process[29]
- Teams are goal orientated rather than rule orientated[30]
- Regular reviews of New Product Development process
- Acceptance of role - flexibility of team members[31]
- Communication with teams from above based on information not instruction

The set of characteristics above may mean that teamworking poses a serious challenge to designers if their self-identity has the romantic stereotype deeply embedded within it, and they have no alternative 'story' with which to interpret the demands likely to result from the experience. On the other hand, designers whose self-identity equips them with alternative 'stories' about their creativity may find these characteristics empowering.

The study got responses from a group of 40 practicing designers which was made up about evenly by freelance designers or consultants, and by designers employed by manufacturers. It

sought to establish in a limited way some of the effects teamworking may have had on designers in terms of their attitudes to their work and their creative identities. This problem was approached with the premise that the highly individualistic romantic stereotype of the creative personality was likely to have had the strongest influence on the self concept of designers. With this in mind, a pair of questions were devised which sought to test what relationship they had to the romantic stereotype. The two questions were:

1. Can Creativity be learned?
2. Do you use any techniques to enhance your creativity?

It was presumed that the response to question 1. would indicate to some extent whether or not the respondent subscribed to a notion of individual creativity derived from the romantic stereotype, embedded within a fixed personality type. Question 2. was introduced as a qualifier to Question 1., as the term 'creativity' was offered without any definition.

Figure one shows the responses to these questions.

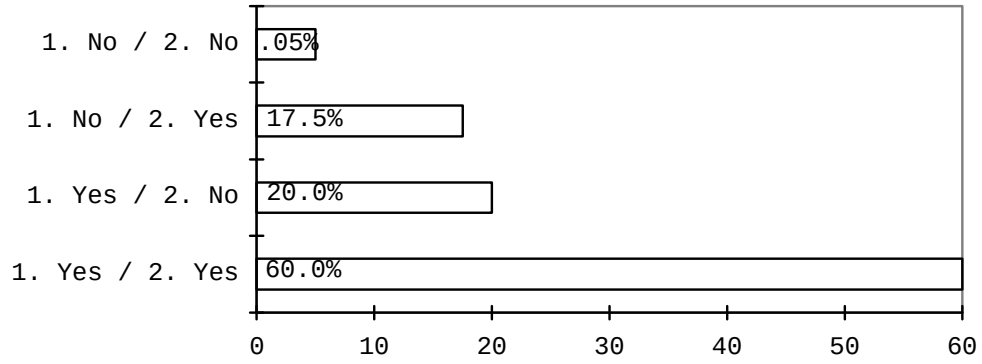

Figure 1.

The results suggest that a majority of the respondents have a significantly more pragmatic attitude to creativity and than that derived from the romantic stereotype. This 60 % of the sample have presumably been able to integrate into their professional self image the demands for flexibility, communication etc. which run counter to the romantic stereotype and are concomitant with teamworking. These results do not show whether or not this fraction of the sample has had to modify their attitude to creativity. It may be that education and corporate culture has helped them to develop this attitude without crisis. On the other hand, given the strength and prevalence of the romantic stereotype within management literature, design

education and psychology, it is reasonable to assume that some change has taken place in the self identity of at least a proportion of these respondents.

This impression is reinforced when the responses to some of the other survey questions are considered. A narrow majority of respondents (55 %) reported that their capacity to generate and develop design ideas had increased as a result of working in a team. Even more strikingly, when asked whether teamworking had made them 'more creative' or 'less creative', the respondents almost unanimously reported (90 %) that teamworking had not meant they had been less creative, and a majority (57 %) reported that it had made them more creative. On the other hand, a majority (72 %) reported that their 'perception of themselves as a creative individual' had not been changed by working in a team, which at least suggests that if there has been a change in their self-identity, it has taken place without crisis. It may of course be the case that this question did not enable a subtle enough response to distinguish between respondents who had a romantic attitude to creativity, and those with a more pragmatic attitude.

These results taken together suggest that if teamworking does imply any change in the professional identity of designers, then among the majority referred to above, this change takes place as part of the continual self reflexive monitoring which Giddens describes. On the other hand, the results also show that there are significant minorities who consider that creativity cannot be learned, (18 %), and that teamworking has not meant they have been more creative (43 %). A designer reporting these responses to teamworking may not perform well in a team, though another study will be necessary to be sure of the relationships between these responses.

It is instructive to note the degree to which the respondents reported interacting with, and learning from, the other disciplines within their cross functional teams. This came through most strongly in answer to the question which related to the generation of design ideas - the stage of new product development where creativity in the traditional designerly sense is more overt. Respondents reported that teamworking resulted in 'better understanding of other disciplines', 'using various members as spring boards to generate new ideas', 'more discussion of alternative ideas and mixing ideas' and 'ideas taken from other disciplines'. This gives a picture of a creative process which is collaborative and communicative, not individualised, subjective and 'mysterious'.

Overall, it appears that the designers in this sample know more about the realities of doing creative work through cross functional teams than might be expected from the management literature, or from reports such as Jackson's. They betray a more subtle, and in the context a much more useful attitude to what constitutes a 'creative person' than that suggested by Whatmore and Fletcher above. The results suggest that the experience of teamwork brings out the synthesising and communicative aspects of designing, far ahead of the individualistic stereotype, and that this is quite a comfortable fit with the self image of designers. As one of the respondents said of teamworking:

'Management, sales and production are very separate entities - the designer must synthesise and communicate'.

A pragmatic solution

Coyne and Snodgrass analyse the traditions of thought which have described design, and design thinking. They suggest that these traditions of thought, dating from Descartes' splitting of the subject from the object, are responsible for some of the negative manifestations of the romantic tradition in attitudes to design thinking - specifically, the supposedly 'mysterious' nature of design thinking. They offer a thesis which derives from the philosophy of Gadamer and Heidegger which does away with the rational / intuitive split and allows design knowledge to move beyond the subjective and enter effective communication. Their thesis relates to design as a whole, but implies a modification of the view of creativity given its closeness to romanticism.

The formulation they offer for design itself, they describe as 'hermeneutical', deriving from the hermeneutic philosophy of Gadamer and Heidegger. Gadamer considered action in a situation to be fundamentally interpretative - the actor brings their history to the situation and that history is modified in a dialogue with the situation:

'We are replete with expectations distilled from our background of experiences. When the situation does not match our expectations then there is some kind of breakdown. In such situations an activity best described in terms of play or dialogue occurs, between the situation and our expectations. As we engage in this play our expectations change. Our effective historical consciousness is always being renewed.'[32]

This may describe what takes place as designers enter a professional situation which demands more of them than they have been trained to expect. Their interpretation of the situation is likely to alter their understanding of themselves - their professional identity.

Coyne and Snodgrass argue that design is 'hermeneutical' - it is both rational and intuitive, and it is not only rational nor only intuitive. Creativity in the sense of 'actions which produce that which is new to the world' clearly derives both from rationality and intuition, and not only from rationality or only from intuition. This presupposes a shift in the conception of what a 'creative person' is. Such a person is both rational and intuitive - the particular combination in any situation deriving from the person's expectations interacting with their experience of the situation, in a hermeneutic dialogue.[33] Coyne and Snodgrass also note that the romantic tradition evident in contemporary attitudes to design and creative people, inhibits communication - one of the most vital abilities for an effective member of a cross functional team.

Education's Role

Coyne and Snodgrass propose that design education concentrate on the discursive, as well as the formal and visual, to counter this tendency. They urge design educators to emphasise what is different about design - that designers have expert knowledge and appropriate experiences, rather than being blessed with mysterious special powers: 'The question of aptitude in particular kinds of thought processes is replaced with questions of familiarity and experience in terms of domain, media, terminology, communication, coordination and even motor skills.' [34]They suggest that this insight has implications for the teaching and practice of design in that it allows a student to abandon the confines of the highly individualised romantic stereotype of the creative person. They describe educational good practice based on studio based discourse and dialogue. Their prescription will be familiar to many design educators. It is worthwhile however to consider what more design education can do to enable designers to move with ease between the 'situations', they will encounter in professional life, interpret them appropriately and integrate that dialogue into their professional persona.

Ray Holland [35] describes a project which did this. It was run to discover the reactions of students from a range of disciplines to working in a cross functional team. The responses were evaluated using Belbin's team roles, which, flawed though they may be, showed that the

experience of teamworking increased the proportion of the participants who could be categorised as 'teamworkers' from 10% to 15%. Interestingly, the engineering and design staff in charge of the project appear to have had more difficulty over communication and language than the participants themselves. Clearly, the earlier this type of project organisation is experienced, the easier it is for attitudes to be modified by the experience and for the insights gained to be integrated into the self identity of the participants.

After all, as Barry Jackson points out, echoing Giddens, design education can be 'an education of the whole self'.[36] Design education should therefore equip students to cope with potential challenges to their self-identity, such as the move from an attitude to creativity based on the individualistic romantic cultural narrative, to a professional life based on teamwork.

It has become common to appeal to a closer integration of theory and practice in design education as a countervailing force against the negative effects of the romantic stereotype of creativity[37]. This is clearly supported by the argument above, in that it will benefit designers to be able to adopt a genuinely critical attitude to their own professional identity. They will perform better as members of cross functional teams, if they can interact with their situation in a manner which derives from a flexible sense of themselves. The alternative is to slavishly adopt modes of behaviour and attitudes which are based on a demand for subjectivity and individual personal expression, which paradoxically is imposed by a tightly proscribed and inflexible romantic stereotype.

Practicing designers have to be able to be what they need to be, as appropriate. Design education should give proto designers permission to play with roles as appropriate - both consciously and semi consciously, in the same way that some design thinking is rational, and some is intuitive. The fact that a good proportion of practicing designers seem to rise to the challenge which teamworking may pose to their sense of self and perform well, does not suggest that education should do nothing.

Practicing designers benefit from the following:

- An introduction to ways of describing the qualities of contemporary existence, through work which draws on cultural studies, anthropology and political economy.
- A demand that students respond to this material within design projects.

- That design education be acknowledged as an equivalent of Giddens' 'rite of passage', and therefore should inculcates the appropriate diversity of potential approaches to design work and appropriate flexibility in attitudes to creativity.

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[1] A previous version of this paper was presented to the Design Management Institute's 8th International Forum on Design Management Research and Education, Barcelona, November 1996.

[2] Fisher, T, et al (1996).

[3]The various possible meanings for 'creativity' must be distinguished. The literal sense of 'creation' - to produce an artefact or idea new to the world - is only sometimes relevant here. The sense of the word as it applies to *either* a particular category of people - 'creative people' - *or* a potential within people - 'creativity' - is relevant more often.

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[6] Fletcher,W (1988) *Creative People and how to Manage their Creativity* London: Hutchinson, p33

[7] Whatmore, J (1996) p 42

[8] Jackson, B (1995)

[9] Weisberg, R (1993)

[10] Barron, F and Harrington, D. M. (1981) in Ibid

[11] Coyne and Snodgrass, op cit p125.

[12] Jung, C (1925)

[13] Belbin, R M (1986)

[14] Cattell R. (no date) cited in Belbin, R, M (1986) p 33

[15] Belbin R. M (1991) *Building the Perfect Team,* Video Arts.

[16] As Alex Osborn put it in the 1963 edition of his book *Applied Imagination* 'All human beings, to a greater or lesser degree, possess the imaginative faculty. Whether this talent *per se* can be enlarged by training is questionable. The point is that the student can be trained to use more productively the talent which he innately possesses.' p ix

[17] Gorham, J (1986)

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[21] Ibid p 195

[22] Ibid p 199 - 200

[23] Giddens, A (1991) p 33

[24] Ibid p 52. Italics in original.

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