

**PICTURE THIS: DRAWING CONCLUSIONS
ABOUT BUSINESS SCHOOLS
IN CANADA AND THE U.K.¹**

This study introduces pictorial representation as an innovative research technique, exploring both its epistemological basis and detailing how it has been used in a strategic study of organisational processes in Canadian and UK business schools.

1. Introduction: Pictures and Words

The power of image has long fuelled the stuff of artists, art-therapists and advertising agencies. Cave drawings of animal and human representations, sometimes rich in detail and imagination, precede by millennia even the most ancient of recorded texts. Today, from the moment we rise from our beds, we are bombarded with images through television, the press and advertising billboards. Commercial organisations spend billions of dollars claiming to be as majestic and dynamic as tigers, as adaptable as chameleons, or as high-flying as eagles. Even in the less ethereal world of learned management texts, illustrations, charts and diagrams serve to summarise, clarify and enrich verbal arguments. Computer graphics now allow anyone with access to a personal computer to produce technically sophisticated images. Even if our drawing or painting abilities do not quite equal those of the great masters of art, we are nevertheless becoming image literate.

Pictures have never simply been means of decoration. They have often been used to convey meaning. The function of even the earliest works was not simply to provide a value-free means of decoration. As the art historian Gombrich recognises, bison and reindeer representations found in caves in Altamira, Spain and Font de Gaume, France were believed to possess magical powers in subduing their mirrored prey. One story of a modern European artist making drawings of an African tribe's cattle relates how he was met with great distress on the part of the tribespeople: "If you take them away with you, what are we to live on?". (Gombrich, 1967, p20).

This paper aims to provide an initial exploration of the research possibilities of image in management theory. Starting with a brief review of the use of pictorial representation in the academic world, it continues with a short discussion of the epistemological roots of pictorial representation. It then provides a conceptual framework for holistic organisational analysis. The subsequent section gives an overview of a methodology currently in use in analysing internal organisational processes in Canadian and UK business schools. Data from the project are then presented to illustrate their practical use in strategy formulation and implementation; with the final part briefly examining generalisable conclusions concerning the methodology.

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2. The Use of Image in Academic Research

As their users quickly recognised, as well as a mystical quality, pictures often have the ability to communicate rapidly and universally, with or without verbal interaction; to record and summarise ideas; and, as marketing research shows, to influence the perceptions and even the behaviour of actors (Kotler, 1986, ch.12). Yet the use of image in management and social science research has been very limited. Subjectivity in interpretation is one explanation for this, as are extreme variations in drawing ability, and - before the advent of electronic scanning devices - technical publishing difficulties. However, perhaps a more fundamental reason in a largely positivistic academic domain is the unfashionability of using a medium which is not only non-numerical, but also non-verbal.

Yet, the use of image as an academic instrument is evident, to a greater or lesser extent, in three main branches of human knowledge: art and the aesthetic disciplines, the psychological sciences, and the social and management sciences.

A large part of art theory is, of course, based on pictorial representation and the interpretation of the function of image. As analysts show, merely achieving an aesthetic design is not the sole function of painters or drawers - and this has filtered through into the realms of architecture and design. Gombrich's classic history examines the development of art from prehistoric to modern times and concludes that it has been both a product of the specific culture of each time and place and an intrinsic part of that culture itself (Gombrich 1967). In contrast, the Renaissance art historian Vasari believed that painting's only function was the plausible rendition of nature (Gombrich, 1982); whilst the neo-Marxist Hadjinicolaou argues that art and art history reflect the ideology of the ruling class (Hadjinicolaou, 1978). Whether such ideas still hold in what is a currently highly fragmented art world is debatable, but as Gombrich expounds, "The real value of the image, however, is its capacity to convey information that cannot be coded in any other way" (Gombrich, 1982, p143). More succinctly, he contends that, far from serving to purely imitate nature, pictures have an unmatched capacity for arousal, and an important function as a vehicle for expression.

Psychology and its related disciplines have also recognised the potential of image. Oscar Wilde's "The Picture of Dorian Gray" conjectured that "Every portrait that is painted with feeling is a portrait of the artist, not of the sitter" (Wilde, 1978). This is the essence of projective techniques in psychotherapy: that pictures drawn by the subject will reveal some previously-inarticulated personal anxiety. Clinical psychotherapy bases its use of drawing on Freudian theories of repression, which hold that human beings tend to suppress unpalatable thoughts and emotions in a way that internalises tension. Tests such as the Rorschach inkblot, Thematic Apperception Tests, Szondi, and 'World' Techniques are designed to these anxieties, ready for identification and treatment (Semeonoff, 1976). Some neurophysiologists believe that visual, spatial, arational thought processes are localised in specific areas of the brain - the right cerebral hemisphere - whereas verbal, logical, rational processes are localised in the left hemisphere. To ensure complementarity in thinking, it is conjectured that both parts of the brain need to be activated - which necessitates using images in addition to words when researching people's perceptions (Ornstein, 1976). Competing neurophysiological theories, such as Pribam's holographic model (Pribam, 1981), contest the degree of brain function localisation, but most recognise the importance of visual and verbal processing abilities in human beings.

In the social and management sciences, image has always been the poor relative of verbal expression. Examples do, however, exist of its use as a research medium. Spatial geographers have used cognitive mapping to explore people's perceptions of their

location relative to aspects of their environment (Downs & Stea, 1977). In marketing and strategic management, Mintzberg emphasises the importance of arational, visual processes in the creative side of strategy formulation (Mintzberg, 1988); and Maddox et al describe how 'guided imagery' can be used in practice (Maddox et al, 1987). This includes guidelines in conducting a visual internal marketing audit of an organisation's strengths and weaknesses; in creating scenarios for environmental forecasting; and in prompting senior managers to project key organisational goals into the future. In addition, Huff provides a collection of papers on the application of visual mapping techniques to strategy (Huff, 1990): and Majaro briefly relates a variant of metaphorical analysis, which he describes as 'visual metaphorical analogy' (Majaro, 1991). Qualitative consumer market research also provides a vehicle for using image. Such exercises tend to be conducted in the pre-testing stage of television advertisements, where the imaging of existing perceptions of companies and brands and the exploration of alternative visual treatments is important (Kotler, 1986). Lately, even organisational researchers have begun to explore image. Checkland, and Checkland and Scholes, look at developing 'rich pictures' in soft systems methodology to capture organisational problems in a logical and sequential manner (Checkland and Scholes, 1990). In his forthcoming text, Morgan is set to examine the use of visual metaphors in exploring organisational problems.

Lately, an embryonic and reasonably integrated management research area has begun to emerge in the use of image, synthesising elements of social and psychological sciences and recent developments in the management disciplines. Residing somewhat uncertainly as a subset of 'creative management', visual techniques are being developed to stimulate creative thinking and problem solving (Rickards, 1988; Russell and Evans, 1989; Henry, 1991). Such developments point towards a burgeoning interest in the use of image as a research instrument in the 1990s.

3. Pictorial Representation and Management Theory

Though largely inexplicit at present, an epistemological basis for pictorial representation can be found in the philosophical reaction against scientific positivism. Positivism is based on the Newtonian-Cartesian paradigm of mechanistic science, which in turn, as Grof states, depends upon the primacy of five principles: 1) that the universe is constructed of small, indestructible, passive particles called atoms, held together by gravity; 2) that, following Euclidian geometry, it is three-dimensional; 3) that it is divided unambiguously into matter and empty space; 4) that time is absolute, autonomous and independent of the material world; and flows in one direction from past to future; 5) because of an absolute dualism between mind and matter, the material world can be described objectively, without reference to the human observer (Grof, 1985).

Einstein's notion of relativity, as Capra has noted, has undermined such absolutes in physical science (Capra, 1982). In fact, Kuhn argues that science is by no means simply a process of accumulating data and formulating ever more accurate theories. Instead, it is a cyclical process, with specific stages and dynamics (Kuhn, 1962). The positivistic outlook argues, according to the fifth principle above, that there are observable facts and scientific theories unambiguously determinable from observations of the phenomenal world. Yet, as Frank notes, all hypotheses are essentially speculative. The only difference between philosophical and scientific hypotheses is that it is possible to test a scientific one. Axioms are products of the imagination and aren't simply produced by logical reasoning. It is only the theories based on these that are logically derived (Frank, 1974). Feyerabend argues that science is not and cannot be governed by a system of static, absolute principles (Feyerabend, 1978).

This anti-positivist reaction has been mirrored in the world of social science. Wittgenstein also rejects the fifth principle, arguing that there is no unambiguous distinction between subjective and objective spheres. Human beings, to a large extent, through words, images and ideas create their own realities; so that such expressive vehicles cannot be value-free representations of reality (Wittgenstein, 1958). More recently, Bohm has argued that reality and consciousness is a coherent whole involved in an unending process of change (Bohm, 1980). Heidegger promotes the view that language, as one such means of expression, is not neutral (Heidegger, 1978); whilst the 'social constructionist' school, embodied in the work of Berger and Luckman and Weick argues that individuals and groups can experience the same reality in different ways, forming their own 'social constructions' or 'enactments' - shared perceptions that serve to reconstruct the reality they have experienced (Berger and Luckmann, 1965; Weick, 1979). In essence, as Clegg observes, "Voluntaristic social theories, such as ethnomethodology or phenomenology, concentrate upon human agency as knowledgeable, creative and constitutive". (Clegg, 1989, p138). If, then, reality is 'constructed', it seems a reasonable goal for social research to try to explore such constructs, in an attempt to understand what underlies human action (assuming, of course, that there is a link between perceptions and behaviour). As Wittgenstein's reasoning implies, this means studying not only human ideas and expressions as verbal constructs, but also as visual imagery.

Pictorial representation techniques examined here try to use metaphor to explore constructs. The Oxford Encyclopedic Dictionary defines a 'metaphor' as "The application of a name or descriptive term or phrase to an object or action to which it is imaginatively but not literally applicable" (Hawkins and Allen, 1991). The emphasis on imaginative knowledge rather than literality is important, since pictorial representation thereby avoids the temptation of seeking the kind of literal truth that positivism stresses. Morgan suggests that we all have images of organisations inside our heads which are not carbon copies of what we see, but are metaphors. Some of these are in widespread use - for example, we may view the firm as a machine, as a growing being, or even as a prison (Morgan, 1986). Similarly, managers often see themselves as a team - when often things couldn't be further from the truth! Metaphorical analysis is about trying to use metaphors to try and interpret familiar things like organisations in a new way. It is about imagining that the organisation is something else and using this new set of perceptions to look at problems from a different angle.

Metaphors abound in strategic management. We are by now familiar with thinking of organisations as 'cash cows', 'stars', 'dogs' and 'problem children'. Other metaphors, such as 'defenders' and 'prospectors', abound in the strategy literature. (Miles & Snow, 1978). Such techniques are well-used in strategy formulation, with prescribed strategies given for dealing with particular metaphors (eg. 'milk' a cash cow, invest in a star). However, these methods are now so over-used, that they create their own mind sets. It is difficult, for example, to look at alternative strategies once it is decided that a company, division or product is a cash cow. The tendency is to automatically think that 'milking' the 'cow' for cash (ie maximising revenue) is the only strategic option available.

Schein and Morgan both suggest viewing the organisation as a complex multi-layered phenomenon, rather than a simple unitary entity - and this can be used as a framework for exploring underlying organisational cultural and political phenomena. Schein argues that an holistic understanding of intra-organisational processes should involve the penetration of successive layers of organisational culture; whilst Morgan urges the analyst to penetrate beneath visible rituals, ceremonies and symbolic routines to discover "Innermost values and assumptions that lend meaning to the outward aspects of the culture"(Morgan, 1989). Meanwhile, Lukes proposes that power may also exist

in organisations in layers, or 'dimensions', described as overt, covert and latent (Lukes, 1974). Foucault, similarly argues that it is necessary to examine the political dimensions behind social constructions of reality (Foucault, 1972, 1979). The penetration of this deeper level seems significant to organisational theorists. If values, perceptions and other organisational processes can be examined in an integrated way, we might come significantly closer to understanding how particular organisations are culturally constructed; and thereby suggest which organisational change strategies are most likely to succeed. If a time-dynamic is also built-in to allow, following Pettigrew, a longitudinal interpretation of change (Pettigrew, 1990); the result is an holistic, four-dimensional framework. This is the conceptual basis of the methodology: an exploration of organisational processes descending through the overt dimension (attitudes, observable behaviour, readily quantifiable organisational characteristics), via the covert layer (hidden political and social interaction) to the latent dimension (unchallenged contextual and shared personal assumptions and perceptions) - over a time dimension.

Pictorial representation is an important part of the latent aspect of the methodology. By stimulating subjects to explore visual perceptions, this may lead to a more holistic interpretation of organisational processes. Pictures provide a vehicle to enable people to express in visual form what may be difficult to communicate in verbal form. In essence, pictorial representation provides an additional means of 'tapping' the latent organisational layer, by exploring the social constructs of organisational members.

4. An Outline Methodology

'Scaling the great divide' between theory and practice involves the use of a participatory action research ("P.A.R.") methodology. Lewin argues that causal inferences about the behaviour of human beings are more likely to be valid and enactable when the human beings in question participate in building and testing them (Lewin, 1948). Therefore, in keeping with Whyte et al's definition of P.A.R., the author concludes that only by immersing oneself in the social processes of an organisation as a participant - and also involving organisational members in developing one's research - can one possibly hope to obtain an adequate interpretation of that organisation. As well as aiming to achieve an increase in academic knowledge, and testing or replicating existing theory, it also serves a third aim of involving and promoting a decision on action by organisational members (Whyte et al, 1991)

Pictorial representation is not the only research technique used in the study. The project includes observing, participating in and recording processes of strategy formulation; and the analysis of existing strategic plans, memos, publicity material, and other secondary data. Primary data is also obtained from a more formal research instrument, which utilises extensive face-to-face interviews with business school participants. The instrument extracts simple descriptive data such as age and sex; which helps to draw an initial sketch of the overt human characteristics of an organisation. Likert scales are used to assess covert attitudes towards official, stated objectives and covert political processes are targeted with specific questions: and discourse analysis of qualitative comments (see below) helps identify particular areas where strategy implementation may be problematic because of disagreement over particular goals. Values ranking is the first of the techniques used for examining the more latent aspects of organisational processes. It involves applying a modified Rokeach value analysis methodology to help obtain a profile of the underlying value system of the respondents (Rokeach, 1968). Cluster analysis is also used to explore value and demographic data to determine whether homogeneous groups of people emerge. For a more detailed explanation of the entire methodology (Stiles, 1991).

Two pictorial techniques are included in the interview instrument: a free drawing exercise based on depicting the organisation as a personality metaphor; and card-selection, incorporating representations of animal characteristics. The latent *free drawing personality metaphor exercise* is the most unstructured of all. The procedure follows Betty Edwards' suggestions for drawing "warm-ups" (Edwards, 1981); but the final drawing is done in isolation by the respondent with no prompting beyond a request to represent the "Personality of the Business School".

Interpretation is based on the respondents' verbal explanations of their own drawings and again follows the Discourse Analysis method. In keeping with Potter & Wetherell's suggested approach, the following broad principles are followed, using the verbal transcripts and pictorial representations together: a) patterns are sought in the data relating to variability, and consistency between the answers given by respondents to the same question. Variability relates to differences in either the form or content of answers across respondents. Consistencies are similarities in either; b) hypotheses are also drawn concerning the functions and effects of verbal responses and perceptions. Discourse analysis pays as much attention to the language itself: how it is organised and what it is doing. This is why very detailed transcripts are made, including timing pauses, hesitations, word emphasis, overlap between speakers, mannerisms, and verbatim comment, and non-verbal interaction between interviewer and interviewee (Potter and Weatherell, 1987).

A *card-selection exercise* also aims to explore the use of visual metaphor, by asking respondents to select one or more animal cards placed before them at random in a 4 X 4 square. The cards chosen are those deemed by the respondent to "Come closest to representing the Business School". Again to avoid criticisms of imposing the interviewer's own subjective interpretation of choices upon the situation; the respondent is asked to explain his/her choice. It is this explanation which is then subject to the discourse analysis methodology above. Each animal is included on the cards because it represents a unique set of characteristics originally generated by five independent subjects not included in the main study. However, the interviewees' interpretations are taken as overriding any of the hypothesised characteristics.

Initial analysis of all data results in a draft report examining organisational processes at each Business School in four-Dimensions (the descriptive element); the strategic implications of the project findings for each Business School; and wider implications for strategic planning. Before a final report is prepared, in keeping with Schall's suggestions, initial data are presented to focus groups consisting of members of the business school for their evaluation and suggestions (Schall, 1983). Three representative groups are selected for each institution to a) review and validate initial data b) to determine, again using pictures, an 'ideal' view of the organisation and c) to generate and filter suggestions on possible strategies to achieve this. This also serves to ensure members continue to be involved in the process of strategy formulation.

5. Picturing Business Schools in Canada and the U.K.

This section illustrates the use of pictorial representation by presenting interview data relating to two case study business schools, one in Canada (37 interviews) and the other UK-based (39 interviews).

The *free-drawing personality metaphor exercise* reveals some fascinating perceptions. Several consistent themes emerged in the verbal explanations of drawings; which equate to perceived organisational strengths and problems. Amongst positive

consistencies, the U.K. business school personality was often drawn with baseball shoes, representing a feeling that it is a young, dynamic institution. Associated with this was a purposive expression around the eyes of the character, indicating that research was felt to be a clear, major goal of the institution. On several occasions, the figure was drawn holding a coffee cup, symbolising a relaxing environment. Generally, however, the UK school character was depicted as male, reflecting a male-dominated faculty that many felt to be an imbalance. Most interviewees also drew a mouth that appeared either downturned or as a straight line. In fact in none of drawings was the personality smiling. This was explained to be due to a sense of disenfranchisement, in that the Director was felt to be omnipotent as far as resource and policy decisions were concerned. In one drawing this was emphasised by the distance between the Director of the School (depicted as a head on a long neck) and the remainder of the staff (the faraway body). In others, a character mean with money emerged. Respondents mostly clothed their figure in a business suit, which was verbalised as a form of conventionality or respectability. However, it was also suggested several times that there was a hidden, mismatched side to this apparel: that the suit was either ill-fitting or fairly scruffy, showing a general disbelief in the externally-projected professionalism of the School.

The free drawing exercise at the Canadian school showed a fairly young, medium-sized, reasonably intellectual, fairly conservative character. Although maleness was the most popular gender characteristic, it was not perceived to a significant imbalance. However, the figure was also felt to be unsmiling. Verbal explanations indicated that this was due to perceptions of relatively weak organisational performance, especially in research terms. In addition, there was a very strong perceived difference in the treatment of contractual and non-contractual faculty; with the former group seen as receiving unfavourable teaching and research terms and conditions. A tension also emerged over formality versus informality, with some faculty perceived as being unapproachable. Also arising as a perceived problem was a sense of organisational directionless. Many faculty felt there were no real strategic objectives for the business school. These data were supplemented and reinforced by the animal metaphor card selection exercise. In the table below, cards are ranked for each business school in terms of the frequency of selection:

Figure 1: Ranked Selection of Animal Cards, by School

UK business school		Canadian business school	
Rank	Card	Rank	Card
1	Chameleon	1	Dog
1	Fox	2	Cat
1	Owl	2	Dolphin
4	Dog	2	Donkey
4	Elephant	2	Elephant
4	Ostrich	2	Ostrich
7	Snail	2	Owl
8	Cat	8	Shark
8	Gazelle	8	Snail
8	Snake	8	Snake

The chameleon card was thought to represent the UK school because its external image of reasonable efficiency contradicted the internal reality of inefficiency in systems and procedures. The fox, like the snake, was deemed to portray some cunning or astute element in relation to its establishment. The owl was largely chosen for wisdom, although some felt that this was still embryonic. General friendliness, reliability and comfortableness, bordering on complacency, were perceived through the dog and cat cards. The elephant, was generally thought to encapsulate the school's physical size and cumbersomeness in terms of changing direction or getting things done. The ostrich conjured up images of insularity - and even aloofness and lack of direction. Although the school was perceived as being able to change quickly in response to the external environment (chameleon-like, or with the gazelle's speed), it was seen as less able to react to internal stimuli (snail-like). The snail was also used as a metaphor for the perceived lack of direction. Two respondents, without prompting, also verbalised their ideal images of the Business School, as opposed to current reality. One chose the dolphin, because of its grace, intelligence and also high quality. The other chose the lion, for its astuteness, ferociousness in the market and its internal strength in cohesiveness.

At the Canadian school, the dog was the most popular selection because of the qualities of obedience, faithfulness, honesty and reliability. However, the dog/school was also seen as being relatively ordinary compared to other organisations and subject to inaction - certainly less positive attributes. The cat, whilst exhibiting affectionate leanings, was likened to the school because of its unpredictable or opportunistic nature. This was considered to be representative of one or more individuals currently associated with or attempting to gain positions of formal power. The dolphin was picked because it was seen, like the school, to exhibit a degree of intelligence; but it was also felt to represent the insularity of the school - as was the ostrich. The elephant was a popular choice because the school was seen to be fairly strong and dependable, but it was also used as a metaphor for some degree of slowness, clumsiness and conservatism. The choice of owl continued the theme of intelligence or wisdom mentioned with the dolphin, although again the school did not appear exemplary in this characteristic; and the aloofness of some faculty was also verbalised. The snail was chosen for its slowness and insularity. Generally, the school was not seen as particularly aggressive or threatening - although the Dean was singled out as the snake or shark because of his perceived inconsistent managerial style. As with the U.K. case, some respondents felt the unprompted desire to articulate an ideal image. The owl, gazelle, lion and shark were chosen by individuals because of their perceived respective characteristics of wisdom, speed, dominance and external competitiveness. However, the eagle/hawk was easily the most popular ideal image, since it was seen as a bird of vision - a powerful and respected monarch of all that it surveys, scanning its environment and making rapid decisions. It was also felt to look after its young and build its own nest, representing an ideal caring side.

6. Conclusions: The Art of the Possible

Ambrose Bierce once wrote that painting is little more than "The art of protecting flat surfaces from the weather and exposing them to the critic" (Bierce, 1909-12). Certainly, as reaction to this paper may illustrate, the former kind of exposure is probably less erosive than the latter.

In fact, both pictorial techniques proved invaluable as a vehicle for exploring people's perceptions of their organisations' strengths and weaknesses. Facets emerged that had not been evident in the preceding verbal sessions. The images also served to

focus minds for subsequent group discussions, providing an understandable and ice-breaking means of representing latent constructions. The initial evidence presented here indicates that pictorial representation, when used in conjunction with verbal discourse analysis, may indeed be a useful aid in the strategic planning process.

It is worthwhile to note that consistent themes emerging across the selected cards and drawings are more important than the selected cards themselves, since these reveal the organisation's latent characteristics rather than concentrate on the visual metaphors stimulating these perceptions. However, data are considerably enriched for the reader when the images are viewed in conjunction with the verbal explanations.

Ultimately, although it is necessary to provide a theoretical basis for using images in management research, the emphasis is as much upon its practical application in organisational strategy. Following the Smith Report in Canada (Smith, 1991) and the recent UK Government White Paper on higher education (Cmnd 1541, 1991), university business schools are facing increasing requirements to plan strategically. This study aims at assisting this process. For, only by showing the use of image in real-life settings can the 'Great Divide' between organisational theory and practice be scaled.

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