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## Balancing Connections

The Fulcrum of Art and Aesthetics at Work

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# Balancing Connections: The Fulcrum of Art and Aesthetics at Work

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*Abstract: Whether appraising a sculpture, a painting or a performance, we intuitively seek out the fulcrum, the balancing centre of the work. In the case study of the Toppled Crane the "fulcrum" is a crane driver who underestimated the weight of his load; he now lies pinned awkwardly in his cab, requiring a complex rescue effort. I propose that emergency responders in command roles are basing their decisions on more than scientifically verifiable measurement and calculation. I maintain that they are aesthetically and somatically attuned to reading the incident scene, relying on their experienced aesthetic awareness in the same way as an artist involved in image construction or art criticism. The research utilised a multimodal visual methodology which examined decision making as an aesthetic judgement. Fourteen in depth, semi-structured interviews were conducted with Australian fire officers in command roles. This paper presents one case study, the Toppled Crane, in which I demonstrate the balance of various complex tensions rather than their resolution. The implications of drawing an aesthetic connection between emergency responders and art practitioners reduces the dangers of focusing solely on measurement, procedure and the constraints of applying rational logic, in complex situations demanding a holistically informed response.*

*Keywords: Decision Making, Aesthetic Perception, Balance*

## The Aesthetic Connection

Working as both a practising artist and a lecturer of Emergency Management, my experience has enabled me to connect these two previously disparate fields. Art, as a realm of experience, is valuable in pushing the limits of decision making theory, as new insights become possible and are more deeply embedded in experience. Understanding fireground Incident Controllers as nascent artists enables a respect and understanding of their work at a depth previously unexplored to this extent.

### *Vision Involves More than Seeing*

Seeing involves not only eyesight, but also being a part of a cultural context. Within this paper, 'visuality' and 'seeing' are understood as multi-sensory experiences, not confined to literal eyesight, "Visual perception does not operate within the mechanical faithfulness of a camera" (Arnheim 1974, 43).

During the act of simply living we filter and sort visual information, selecting what is relevant and useful to us. In a very stark kind of way, we see visual concepts only in a stereotypical sense. There is good reason for this – we would be completely inundated with visual information if we processed absolutely everything we saw. We register primarily only what we need in order to get on with the way we live our lives. Millions of colours are reduced to a palette of a dozen or so. Changes in tone and hue throughout the day, as the result of light falling on a settee or filtering in through a window, are barely noticed. Part of the reason for this filtering is that we simply do not have the time to watch and experience the subtle changes. We would be overwhelmed by the complexity of the environment and become slaves to the particular. McKim describes it this way:

Nature does not separate seeing from the other visual senses; only words do. Seeing is polysensory, combining the visual, tactile, and kinaesthetic senses. (1980, 71)

Gillian Rose (2007, 33) encourages researchers to regard the breadth of visual materials open to them, but there is no mention of a live practice of any sort. Her list of possible sites for research reads: “contemporary exhibitions, galleries, magazines, cinemas, TV shows, videos and web pages; historical archives and museums.” I suggest this kind of inventory needs to be expanded to include explorations into live practice, that is, into images which cannot be rewound, recorded or preserved in their original integrity. From the point of this research paper, Rose’s inventory should include images which are fast moving, life-changing, and fraught with serious implications for life and property.

Rather than employing the visual and somatic as a means of gathering and interpreting data only, I understand ‘the arts’ in a broader sense, more as a set of practices. That is, a shared experience of mutual understanding and being able to participate indicates inclusion within the community. Put another way, it means being so integrated within the environment of the fireground that being able to ‘see’ means more than a visual understanding; it carries the connotation of embodiment, a relationship with the characteristics of the fireground. It means an aesthetic experience. By aesthetic experience I mean the way an activity of perception is organised and informed to unspoken but shared principles for recognising fire features and characteristics. The ability to share these principles helps with the building of identity. I propose that Incident Controllers have been through a mostly unrecognised process of somatic and visual training in which they have been enculturated with a distinct way of seeing and that it is this way of seeing that marks their inclusion and participation in their community of practice.

Common to writers in visual methodologies, such as Sarah Pink (2001, 2004), Gilbert Rose (1980), Gillian Rose (2001, 2007), Sturken and Cartwright (2001), and van Leeuwen and Jewitt (2001), is a concentration on critiquing the image, rather than the actual creation of it.

By focusing on firefighting, and in particular decision making on the fireground, utilising the aesthetic approach of John Dewey (1934) for whom ‘Art is experience’ and the related pragmatic aesthetics of Richard Shusterman (1992), I explore the connections between aesthetic experience and decision making on the fireground. I draw on a number of art education theorists who have helped shape and influence the direction of this study: John Dewey (1934), Robert McKim (1980), Elliot Eisner (2002), Edmund Feldman (1992) and James Elkins (2008).

## Method

Ethical approval for the study was granted through the University of Western Sydney. Twelve Inspectors from a large Australian firefighting organisation were interviewed. In this paper one incident, *The Toppled Crane*, is analysed with a multimodal visual methodology in which aesthetic connections are made between the risk perception, decision making and somatic forms of awareness of emergency responders and artist practitioners.

The emergency responders participating in this research are understood as ‘experts’. Typically, they have twenty or more years of experience in firefighting and although they are newly promoted to their *rank*, they are not new to the *role* of Incident Controller. As Inspectors they generally attend larger or more demanding incidents. The participant Inspectors are also experts in the sense that they have been sifted and selected from their peers and intensively trained and tested within their fire service’s promotional program (Ingham 2008).

As portrayed in Figure 1, a multimodal approach is about relationship: structure, harmony, discord, context, and therefore well suited to the study of the complex, the multifaceted, the indivisible whole. I argue that despite the ways in which these relationships are logically and rationally articulated in the science of firefighting and consequently understood as ‘facts’, that without aesthetic judgement they cannot even begin to be comprehended.

	<b>Multimodal Visual Research</b>	<b>Phenomenology Leedy (1997)</b>	<b>Ethnography Leedy (1997)</b>	<b>Grounded Theory Leedy (1997)</b>
<b>What is the purpose of the research?</b>	To understand how images function in a broader cultural sphere and how looking practices inform our lives beyond our perception of images per se (Duncum 2002).	To describe an experience from the participant's points of view	To understand the relationship between behaviours and "culture"	To derive a theory that links participants' perspectives to general social science theories
<b>What is the nature of the research process?</b>	Studies images Focuses on how meaning is made out of the visual, aural and textual world (Sturken & Cartwright 2001, 3)	Studies individuals Focuses on lived experiences	Studies sites Focuses on naturally occurring processes/change	Studies "process" Focuses on interactions
<b>What are the methods of data collection?</b>	Draws from interviews, observations, historical records, news media and other images and artefacts Includes intuition and personal experience as data	In-depth unstructured interviews Purposeful sampling of 5–10 individuals	Participant observation Structured interviews with "informants" Artefact/document collections	Draws from historical records, interviews, observations Variable, multiple "units"
<b>What are the methods of data analysis?</b>	Multimodal and holistically oriented Open, tentative, intuitive Reflective–rich portrayal of participants' views, including the author Synergetic interactions Comparisons Social semiotics Personal, synthetic interpretation Follow the development and maturation of a problem or issue	Meaning oriented Search for themes and patterns across participants Open, tentative, intuitive	Event oriented Structured indexing, coding Constant comparative method	Concept oriented Open, axial, selective coding Constant comparative method
<b>How are the findings communicated?</b>	Image construction Holistic descriptions & explanations Reflective vignettes	Thematic narratives Use of literature, film, art, word origins	Holistic descriptions of everyday events Assertions Analytical vignettes	Analytical story

Figure 1: Multimodal visual research

Source: Ingham 2014

As mapped in *Figure 1: Multimodal Visual Research*, interdisciplinary strands are centred by the 'visual'. The 'visual' in the research was generated by images created by the Incident Controllers during the interview process, images from the journalistic media such as newspaper

and television reports and images from the fire service in the form of video footage (Ingham 2010).

### **Case Study: Toppled Crane**

A crane driver, underestimating the weight of a large steel table sitting on the back of a semitrailer parked on a wharf, does not put down his stabilisers. As the crane driver lifts the steel table his crane topples forwards onto the semitrailer, trapping him in his cabin and pinning his leg against the semi's tray. Various emergency services have been present for thirty minutes before the Inspector interviewed arrived onsite. During this time Paramedics have put a chest brace on the crane driver to stop him crushing his own windpipe through the crippling position of his contorted body, but there has been no progress towards righting the crane or extracting the driver.

The Toppled Crane Inspector, in his position as a relieving officer in the hazmat section of the fire service, listens to radio transmissions emitting from the Communications Centre, and attends any incident he ascertains requires his expertise. He arrives on the incident ground of the Toppled Crane at the thirty minute mark, realises that no one really knows what to do as it is such an unusual, large scale and complex incident, and assumes command. He conducts a size-up, appoints people to various roles and almost immediately forms two plans in his head. By the end of the incident he says he had three plans in his head. The incident is further complicated by a confidential meeting held between the Toppled Crane Inspector and the senior SCAT paramedic (Special Casualty Access Team) who informs him they will have to amputate the crane driver's leg if he is not released within the next hour because of the life-risk due to toxic shock. The Toppled Crane Inspector decides not to inform anyone, apart from a few key people, about this additional aspect to an already time-pressured situation. He makes a plan and issues orders for the assembly of a stabilising structure to be built for the crane. Adding to the complexity of the rescue is the receding tide and backwashes from passing ferries, as the crane boom is now leaning on a pontoon in the water. The subtle rise and fall of the crane boom causes pain for the trapped crane driver and danger for the firefighters working underneath. The Toppled Crane Inspector recounts the incident:

From past experience, I was aware that when cranes topple over, it's generally because of a dynamic failure in the loading system, and that failure makes the whole load of the crane unstable and requires expert stabilization skills...But I had actually, I'd actually read a couple of articles about crane incidents, because it's one of those, I suppose it's one of those larger career sort of things. You want to know all the things you might be faced with and I just thought it was interesting, because eventually you're going to come across something of everything in this job.

As I was driving there, I was thinking in my head, what was I going to find? What had I learned from the other incidents? What had I read about or seen and what was I expecting when I got there? And it was as I expected when I got there, but the only variable I hadn't allowed for was the head of the crane was actually laying on a pontoon in the water, so it was being affected by the tide, which was receding.

We responded in what's called USAR One [Urban Search and Rescue], which is a heavy rescue semitrailer, which has specialist stabilisation and rescue equipment on it...

On arrival, the fire crews, the crews that we found, were a little bit out of their depth because they knew it was dangerous because of the instability of the vehicle, but hadn't quite known what to do and also didn't really have sufficient equipment to do it.

This incident demonstrates the multimodality of the Topped Crane Inspector, in that he was able to form contingency plans when no one else seemed to have any plan at all, and he was able to visualise these plans in his head. The fourth option, that of amputation, he did not count on his list; he did not even entertain it as a possibility. Perhaps through refusing to accept amputation as the inevitable end to the incident he forced himself to come up with alternatives.

### ***Balancing Training and Real-life Experience***

There are immense differences between a real life incident and an incident played out within a training context. For example, the possibility of someone in their prime living out their life missing a leg creates a tension for emergency responders that would be hard to replicate within a training situation.

In relation to film and training, Grasseni (2004) videoed breeders of cows, trailed around after vets and apprenticed herself in an effort to be able to ‘see’ what breeders were seeing in a cow. To begin with her untrained eye did not even know where to point the camera and relied upon instructions from participants. “I did not know what to point the camera at, because I could not *see* what was going on” (20, original italics). The distinguishing feature of the Topped Crane Inspector was that he could ‘see’ everything he needed to see in order to ‘point the camera’ and begin operations. Like Grasseni’s expert cow breeders, he knew what he was looking for, and had begun his size-up even before he had arrived on scene.

### ***Balancing Tension and Relaxation***

One of the tensions faced by Incident Controllers is finding a balance between their rushing adrenaline and the complacency that comes from familiarity. The film clip of the Topped Crane Inspector’s calmness and direction has become a part of his fire service’s training regime. The expert is able to relax in a familiar situation, not a sleepy kind of relaxation, but a calmness that defies the urgency of the moment. Someone experienced or skilled in a particular situation can ‘make it look easy’ because in their relaxed state they have all their energy and attention to give to the matter at hand. McKim’s comments on the aesthetic experience of drawing can also be applied to the incident ground:

Relaxation is important to thinking generally, because we think with our whole being, our body as well as our brain. (McKim 1980, 34)

Finding the balance between tension and relaxation is a sign of mastery, which is evidenced by an economic dynamic state of balance between complacency and adrenalin. Fear of failure is obviously an impinging factor for an Incident Controller and fear is also the cause of muscle tension. Along with tension created by fear is “an inability to relax” (McKim 1980, 35). In this state, distractions form a relief, making it important to avoid this condition on the fireground. Incident Controllers who are pulled in different directions by competing demands are perhaps fearful and in need of diversion and distraction to relieve their tension and mask their indecisiveness. At the other end of the scale of progressive disengagement, Lloyd-Zantiotis (2004) writes about firefighters “switching off” which “results in a loss of credibility” amongst their peers (115).

Life is awash with competing demands and distractions. It is possible to casually walk through an art gallery or live in a house hung with art work without actually stopping to take the time to look intently at anything in particular. Even when the intention is there, all sorts of things can get in the way of actively seeing, such as bad lighting, distracting noise, or poor choice of background wall colour. These competing demands may flow from the viewer’s lack of concentration and emotional state, or they may flow from the external environment. Such ‘distractions’ may create a separating divide between the viewer and the painting. As opposed to

distractions, there may be a complacency that comes from familiarity – we've seen it before and have become comfortably familiar with our surroundings.

Incident Controllers encounter the same problems in their aesthetic appreciation of a fireground. There are competing demands begging for their attention to particular details, and it takes deliberate effort and experience to speedily sift and decipher the incoming information and prioritise and attend to the most expedient. Too much information is like white noise; it is confusing and debilitating. In addition, there is a tension to be maintained between complacency due to familiarity, and the rush of adrenaline which comes with commanding a large incident.

Knobler (1980) encounters the same experience of competing demands and distractions in relation to artistic perception:

To perceive something we must separate a limited number of sensations from a greater kaleidoscope array all being received at one time. We must attend to those sensations which may join to form a particular experience; the others we must disregard. (Knobler, 1980, 13)

Incident Controllers are required to be at their optimal level of performance when the atmosphere crackles with tension. They are in a familiar environment when there is time-pressure and escalating threats if they do not manage to bring the situation under control as quickly as possible. Not all people are able to balance their tensions in this kind of situation. It is the consequence of experience, exposure and practice.

### ***Balance and Estimation***

The Toppled Crane incident highlights the importance of balance and estimation in sizing-up an incident. There is the estimation of the crane driver, or rather the underestimation by the crane driver, as to the weight of the steel table; the SCAT paramedic's estimation of time before certain amputation; and the Inspector's estimation of what is needed to stabilise the toppled crane in the face of a receding tide and waves created by passing water traffic.

Perception and meaning when looking at a work of art or when sizing up an incident such as the Toppled Crane requires time, even if it is only split seconds. To deeply grasp the interaction and the integration of the image requires a build-up of 'looks' or experiences at the scene, each feeding into the other in order to establish a picture which, as information is added later, will be readjusted and reinterpreted. This accumulation or build-up of experience at the scene of the image or incident is continually modified. When, through lack of experience, the elements are not entirely understood, the image may appear confusing, baffling or perhaps incomprehensible, and attention may wane.

When art critics appraise an image they are looking for patterns of pleasure – by this I do not mean a pleasant image, but rather patterns that please the eye – balance, colour, a 'working' of the image, a unity that conveys some kind of effect, even if the message is disharmony and disunity.

The term 'situational awareness' is utilised in the emergency services to denote:

The perception of the elements in the environment within a volume of time and space, the comprehension of their meaning and the projection of their status in the near future. (Endsley 1988, 97)

When Incident Controllers survey an emergency event to gain situational awareness, they are taking account of the disharmonious, the out of place. They are purposefully detecting the imbalance, the pieces of building not behaving as expected, the unexpected, out of the ordinary reactions of people and the environment.

Situational awareness and aesthetic appreciation, I propose, are the same, although the purpose of appraisal is necessarily different. In both art and firefighting we could say that enculturated members are seeing effectively. Each culture has its own principles for effectively understanding an image. Colour meanings, the shape and patterns of various materials, are all a shared understanding of the formal organisation of the work. Firefighters have a shared understanding of the organisation of the work in that they all read certain signs to mean something similar, even if their interpretation differs slightly. For instance, concrete cracking in a fire means that structural collapse is a possibility. Just when the collapse will occur depends on the fine reading of the cracks and knowledge of the concrete components, but the understanding that *cracks = potential collapse* is the cultural meaning of concrete cracks for a firefighter.

When a large mass is presented in a painting the artist often provides a counter weight to lever it. Sometimes it is something small that balances out the larger weight or object in the image. This kind of ‘highlighting’, where an artist directs our vision, is achieved through colour, usually bright; or size, often large; and also through perspective, where the lines lead our eyes to one spot of convergence, or conversely, to the edges of the canvas. These components are all designed by the artist to help our looking. What we make of what we see is another matter, but the attempt by the artist to direct our gaze in a certain direction is there in one form or another.

When we appraise an image, whether sculpture or painting or performance, we intuitively seek out the fulcrum, or the centre of the work from which the lever is balanced. In a live incident, such as the Toppled Crane, the ‘new’ fulcrum is the crane driver, pinned in his cab to the semitrailer by the weight of the crane boom. Here the Toppled Crane Inspector has to solve a real-life dilemma where the physics of the situation are impacted by the forces of gravity; in a painting, gravity is an implied influence.

Incident Controllers, in “solving both aesthetic and technical problems” (Gilbert Rose 1980,3), hold in balance a number of complex, competing sensations and perceptions generated by their own somatic awareness, and that this activity is central to their decision making on the incident or fireground.

## Discussion

The fulcrum of aesthetics at work is discussed within the context of balance: balancing sensory connections with measurement and procedure, cohesive connections, and contradictory connections.

### *Sensory Connections versus Measurement and Procedure*

Despite the explosion of sensory media, teachers of the visual are paradoxically faced with a shrinking arena of influence (Elkins 1999, 197).

We live in a Western society where quantification is habitual, where measurement and procedure are understood and expected, as are rational responses in work and home-life spheres. The essence of modernisation remains with us despite the postmodern era, evidenced in a desire for control. Individually this is worked out as control over one’s emotions, life’s events, and freedom from danger and insecurity. On a contemporary societal scale, the desires are the same. We live in an age of surveillance and we dread risk taking; many communities live in fear of the possibility of what *might* happen. Fay (1996), the author of *Contemporary philosophy of social science*, writes:

Perspectivism has taught us that any theory of how the cosmos works necessarily occurs from within one conceptual scheme or another, and consequently the deep patterns science seeks to ascertain are as much imaginative constructions as they are discoveries. (Fay 1996, 204)

Whether understood as “creative constructions” or “discoveries”, the role of Incident Controllers demands the ability to hold in loose tension the various strands before them, and I argue they do this by keeping their aesthetic and somatic senses open to the larger pattern of the fire and focusing broadly. In this way they are more able to detect a change in the situation than if they were focused analytically on a single part. Jackson discusses Dewey’s emphasis on “The forces that give unity to a situation” (Jackson 1998, xiii). These “forces” are the focus of my paper. In a similar vein, two researchers investigating creativity in the emergency response to the World Trade Centre attack, write:

Even though creativity and flexibility are regarded as important qualities of emergency managers... having to exercise creativity during a response is, paradoxically, often regarded as dysfunctional for emergency personnel.

It appears as an indication of failure to plan properly ahead of time. (Kendra and Wachtendorf 2002, 6)

For emergency managers in general, and fire officers in particular, the philosophy of creativity is in conflict with previously determined boundaries and rules and thus precipitates a crisis.

### *Cohesive Connections*

Adult educators and linguists have long pointed to the exclusion which happens when a ‘private’ language, for example legal jargon, inhibits entry into the understanding of a discipline. The practice of putting things simply and plainly has been termed Plain English, and we are encouraged to rephrase our choice of words so as to allow entry into what we are saying by the ‘uninitiated’, i.e. those with no ‘expert’ knowledge of the field, but who nevertheless need to negotiate it. The defining of a discipline by its use of language has allowed academic disciplines to grow in isolation from one another, and I believe this has led to a sense of fragmentation, a breaking apart of a previously cohesive understanding which incorporated emotions, feelings, objective and subjective understandings. It has led to a sense of isolation and today there is a drive to reconnect the disparate circles of disciplines, spinning around in their own little universes, through the buzzword ‘networking’. The way these individual spheres can be united – the thread that can be used to draw them together into a productive union, the communicating mechanism, the glue, the undercurrent of collective understanding, the transportable credentials that we carry with us between spheres and universes – is our aesthetic awareness and somatic response.

Our gut instinct, our individual and collective emotional and intellectual perception, informs and influences our interpretation of all the scenes in our lives, regardless of where they unfold. These channels that circulate can be likened to the vascular system of a human body, refreshing the body with life-giving oxygen and removing the dross and waste. Feedback from our aesthetic perception and somatic awareness provides a bridge for these spheres, rendering them an interconnected whole. Without this cross-pollination we can lose our orientation; with it we can negotiate new and previously unexplored spheres, because we are equipped with something which transcends discipline and sphere, a transferable credential which enables new connections to be made.

We are all living in communities that have been organised in terms of physical and cultural structures and with expectations of how to negotiate them. Our recognition and response to these systems is a complex function of visual and perceptual training. We learn how to recognise and interpret our visual experiences from the moment our eyes open at birth, when we begin processing visual and sensory information into perceptions. In maturity, Incident Controllers and

those who appreciate art alike, learn to become aware of these interpretations, perceptions and relationships, things that the untrained eye would not recognise or interpret.

There is a general understanding that the world around us is perceived in much the same way by all of us, ‘us’ meaning our community. The training of vision and perception that an artist undergoes calls for the same amount of effort to be made by the viewers, otherwise viewers are left to comment only on their reactions and the image will remain largely a mystery to them:

The challenge facing us as art educators is both simple and complex: How does one devise a pedagogical strategy that makes “practical sense”, but does not merely fall back into a skills based pedagogy? This question has become particularly critical at a time when art education has become so driven by conceptual and thematic concerns that materials and processes are conceived instrumentally to be used in the service of an idea, rather than as productive in their own right. (Bolt 2006, webpage)

There is a deficit of educational attention concentrating on understanding the visual and sensory in science and technology, and reticence in the arts to examine and acknowledge ‘facts’. We are at a stage in our Western history where images and visual literacy are being enlarged upon through various modes of information technology, and there are important collaborations between art and science (Karlqvist 1997, Eisner 1981, Wechsler 1978), yet tertiary institutions within Australia are scaling back and actually closing down their fine arts programs. Fine arts programs, where they are still running, are not engaging in a practice of mutual exchange or cross-pollination with other programs in ways such as Elkins (2008) and Eisner (1981; 2002) advocate.

Part of our problem as decision makers is that we can easily end up taking our information literally and become lulled into a false sense of security as a result. A traffic light at green means that we have a right of way at a junction. It does **not** mean that the road is clear. Yet how often do we proceed unthinkingly simply because the light is ‘at green’? (Drummond 2001, 79, original bold)

For firefighters, Standard Operating Guidelines are memorised and revised constantly to the point where they are acted upon almost without thinking, like “lights at green”. Standard Operating Guidelines need to be so familiar that they readily come to mind because situations of high stress affect memory and movement. The participant Inspectors often talked about keeping their emotions under control as they were well aware that succumbing to stress severely inhibits the speed of their judgement and decision making.

### *Contradictory Connections*

‘Cumulative bias’ acknowledges that exposure to one incident affects a person in a different way to multiple exposures, by which time a recognisable pattern has been built. The problem here is that there may only be one chance. Presuming this is not the case, as a firefighter experiences more exposures their perception of risk changes. This change usually involves increasing levels of competence and confidence in being able to cope, and consequently risks may be minimised. In fact, research indicates that over-exposure may lead to complacency (Linley and Joseph 2006, Strauch 2004). This is, in part, due to the focus in training on following ‘the rules’, which in turn may reduce the sensitivities of individuals, as with the “lights at green”, to more complex situations. In terms of knowing what to expect, there are two sides of the situation which the Incident Controller must delicately balance: one is not overreacting and the other is not becoming blasé.

Arts-based research addresses the problem of visual stimulation and over-familiarity through presenting a familiar thing or event in a defamiliarised way. bell hooks calls this visual art

method “aesthetic intervention” (1995, 54-64). The advantage of art here is that it can demonstrate something familiar or stereotypical to one group of people, but to another group it may be new information, and completely unfamiliar. The context for hooks is social inequality, but the concept applies equally to identifying for Incident Controllers their subconscious aesthetic and somatic awareness in situational awareness on the fireground.

Power-point presentations, photographs, videos and the recount of live experience, differ in important ways from the experiences they describe. They are displayed independently of the background and the noise of the actual situation. They lack the complexity of an uncertain and unsure outcome. They are, in effect, shown against a blank background. The Incident Controller, once in the field, will be confronted with an uncertainty, excitement and fear that cannot be replicated apart from live experience.

According to Dewey (1934), genuine learning happens when people work on problems that are real and meaningful. Without a real life context, information is separated from reality, images become stylised, concepts are reduced to acronyms, and statistics have no correlation. On the other hand, simply exposing the Incident Controller to real-life experience is just as empty an experience. The key is to span formal and experiential learning with an aesthetic connection, involving an emphasis on codes of meaning outside verbal language:

Meaning resides so strongly and pervasively in other systems of meaning, in a multiplicity of visual, aural, behavioural and other codes, that a concentration on words alone is not enough...no single code can be successfully studied or fully understood in isolation. (Hodge & Kress 1988, vii)

## Conclusion

The goal for Incident Controllers is to manipulate the live fireground image before them towards a speedy resolution. Delicately slipping and shoring up the various threads means expertly predicting what will happen to the whole when one part is adjusted or moved. The effects of most decisions made by Incident Controllers are irreversible, yet they must be made under time-pressure, often on the basis of conflicting and incomplete information.

In this paper I have identified the aesthetic connection between the work of artists and Incident Controllers alike, connections which balance and mediate decision making processes in both arenas. I propose that Incident Controllers arriving on the fireground are basing their decisions on more than scientifically verifiable measurement and calculation. I maintain that they are aesthetically and somatically attuned to reading the fireground in the same way that an artist makes decisions about image construction or criticism.

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