

Bruce Mangan

*Representation, Rightness  
and The Fringe*

One of Awret's epigraphs is by the great Japanese poet Issa; it reminds me of another of Issa's haiku which I will use here as my own epigraph:

The children imitating the cormorants  
Are more wonderful  
Than the real cormorants.

Sometimes a representation has more aesthetic power than the thing it represents. Sleek, preening, snake-necked cormorants can elicit a feeling of delight all by themselves. But in this case, when the cormorants are imitated by a children's dance, the aesthetic zap is intensified. Flowers are intrinsically beautiful, and yet when transformed via oil paint and canvas by Monet or Van Gogh, many people get a more intense aesthetic feeling from the representation than they get from seeing real flowers at Giverny or Arles.

Of course a work of art doesn't have to represent anything to be successful: e.g., a Sung vase, a minaret, a classic Jackson Pollack. Nevertheless representation would appear to be the single most useful device ever employed by the people we now call artists. Certainly representation is a very ancient discovery: the Willendorf Venus is at least 20,000 years old. And representation has continued to dominate the visual arts to this day. (For better or worse, the chief exception, aside from calligraphy, is Abstract Expressionism, and its dominance lasted something like twenty years.) On the other hand, there is certainly no guarantee a representation will have aesthetic power. *Some* of the figures at Lascaux are masterpieces, but others are just as clearly perfunctory and dead. And if truth be told, the same thing can be said

Correspondence:

Email: [mangan@cogsci.berkeley.edu](mailto:mangan@cogsci.berkeley.edu)

about the paintings, representational or not, that hang today in many museums.

So the central question here is phenomenological: What is the nature of the aesthetic zap? For it is this experience, or its promise, which gives art such a deep hold on human life. But the issue of representation, while secondary, is still pregnant with cognitive implications: Why is representation, of all the devices available to an artist, more likely to shift the odds in favour of eliciting and/or intensifying aesthetic experience? Assuming a Darwinian view of our species, it is likely that the answer to both questions will come from understanding how our capacity to enjoy art grows out of normal cognition.

*Las Meninas* is universally recognized as a triumph of representational technique *and* as a work that rewards most viewers with a strong aesthetic zap. (Remember, the former would not necessarily evoke the latter.) Since I've been asked to reflect on this many-sided masterpiece as it relates to my own research, I'll focus on an analysis of what William James called the fringe of consciousness. On my account the fringe is as central to aesthetic experience as it is to ordinary conscious cognition. I could make this argument in purely phenomenological terms, but it is strengthened by a converging functional analysis of the fringe and its paradoxical relation to the parallel, non-conscious processes which support it. And understanding this relationship may help us see why representation is such a useful technique in art.

On the face of it, fringe phenomenology can seem quite odd. (One virtue of functional analysis is that it helps explain why these oddities make cognitive sense.) For example, in most cases we can't attend to fringe experiences directly — they resist the grasp of focal attention and are in this sense inherently elusive.

But this introspective problem can be circumvented in various ways. For example, when most of us were around nine or ten years old we carried out a *de facto* experiment that isolated fringe experience with some clarity. Remember repeating a word over and over? After 10 or 20 repetitions *something* in the overall experience of the word very definitely changed. That something was the word's fringe. The raw sound of the word, its sensory component, stayed more or less constant from repetition to repetition. What until then had been unobtrusive overtones of felt meaning began to disappear with repetition, and the fringe aspect of experience stood out by contrast. Without putting too fine a point on it, we can say that in general the fringe consists of non-sensory experiences that envelop and penetrate the

sensory contents of consciousness, filling them with meanings of innumerable kinds.

One fringe experience is as crucial for understanding aesthetic experience as it is for understanding normal conscious cognition. For want of a better term I'll call it rightness. Rightness and its evil twin wrongness are the evaluative foundation for all complex cognitive activity in consciousness — for these experiences constitute the most crucial of all cognitive conclusions: Yes/Accept or No/Reject. As with most fringe experiences, these are difficult to isolate. But in some cases we can use contrast effects to make them stand out vividly for a moment from their sensory matrix. Please read the following paragraph carefully through once:

A newspaper is better than a magazine. A seashore is a better place than the street. At first it is better to run than to walk. You may need to try several times. It takes some skill but it is easy to learn. Even young children can enjoy it. Once successful, complications are minimal. Birds seldom get too close. Rain, however, soaks in very fast. Too many people doing the same thing can also cause problems. One needs lots of room. If there are no complications it can be very peaceful. A rock will serve as an anchor. If it breaks loose, however, you will not get a second chance (Klein, 1981, p. 83).

At this point the reader will feel that something is deeply wrong with the paragraph. As a whole it is meaningless, disjoint, makes no sense — even though all the words make individual sense, every sentence is well formed, and except for its subject, everything is perfectly straightforward. This unpleasant, raw, clashing feeling of incomprehension (wrongness) is just that, a feeling, and it is without sensory content, as will be evident once I slip in the word kite. Behold! Befeel! Something in our experience has changed — instantly and radically. The paragraph no longer *feels* disjoint. But the sensory contents in the paragraph experience have not changed.

There are a great many ways to describe this new fringe feeling. We can say that the individual sentences suddenly feel like they all fit together; or that they have become a coherent whole; or that they make sense; or that they have suddenly acquired an overall meaning; or that we feel the YES! AH! RIGHT! of solving a taxing problem (taking the paragraph to be problematic on first reading). I submit that these and many other common terms and phrases (e.g., meaning, unification, coherence, integrated whole) all point to the *same* experience.

When we talk and write about art, we use remarkably similar language. When a work of art gives us a strong zap, we often say its

elements are remarkably well balanced, unified, coherent, integrated. Other recurrent terms have a more explicit cognitive connotation: a powerful work is said to be meaningful, significant, right, and it will often spontaneously elicit the most primary of all terms of positive evaluation — YES! I suspect this experience is overlooked in part because there are so many terms for it in English, but chiefly because of the non-sensory and elusive nature of its phenomenology.

On this account the aesthetic yes/right and the conceptually based, explicit criterion yes/right are the same experience; but in a more inclusive systemic sense they must be carefully distinguished. Missing this point has given rise to serious confusions about the nature of art and its evaluation. With the conceptual yes we can retrieve concepts into consciousness that serve as explicit criteria, and use these to justify or interrogate the conclusion the yes experience asserts. *But the aesthetic yes is ultimately, some might say notoriously, non-conceptual.*

When Georgia O'Keefe turned ninety, she gave an interview in which she discussed in passing her attempts to get the colours in various reproductions of her paintings to match the originals. 'It doesn't matter if the colours are absolutely right [i.e. match the original] just so they seem right when you're finished.' O'Keefe certainly recognized a clear-cut sense of 'right' — the conceptual criterion here was a precise match. But sometimes a mismatch at the conceptual level will still be accompanied by a robust feeling of rightness at the subjective aesthetic level. Colours that O'Keefe did not intend to combine turned out to *feel* right in combination, and so from an aesthetic standpoint, the imperfect copy was perfectly acceptable. The colours in the copy, while objectively wrong, felt subjectively right. *The only 'criterion' appealed to here was the feeling of rightness itself.* And in the final analysis this is the only criterion we have for aesthetic evaluation, as Kant, among many others, in effect maintained. This is one of the roots of aesthetic ineffability (the retrieval function of the fringe, not to be discussed, is another).

No work has been praised more lavishly for the complex unity of its impact, its sense of overall coherence or rightness, than *Las Meninas*. And except for the *Mona Lisa*, perhaps no work has suggested so many interpretations. *Las Meninas* is at the apex of representative art, but even if considered in purely formal terms, its component elements of line, mass, texture and colour are extremely complex, and yet most viewers feel they are in perfect balance. At the level of the representation of objects in space, the situation is at least as complicated: the light enters from three sources; the figures occupy at least five plains

of activity; the back wall is covered with what might be called second order representations (paintings of paintings, the reflection of Philip IV and his queen in a mirror); there are portraits of members of the Spanish court, ranging from a disgruntled dog and dwarfs to ladies in waiting to the Infanta they serve to the shadowy King. And then there is Velasquez's self portrait, a subtle world in itself, his face reserved, his hand and brush like a living flame.

Here we move to the realm where representations have the power to evoke a vast criss-crossing network of human-based meanings. This provides critics with a very broad playing field, but even for the casual observer it can create a further layer of depth and interest. This is similar to what actors call the 'back story', and in the visual arts, as well on the stage, evoking these associative networks tends to intensify the feeling of rightness. A few examples: In *Las Meninas* the king's image is central in terms of its location in the composition and even more central given his absolute political role. But Philip's representation is second order, the painting of a reflection, and even this image is said to be vaguer than the objective optical situation would warrant. Some see in Philip's attenuated portrait a representation of his gross failure as a ruler and lack of substance as a person. If so, the painting does accurately represent Spain at the time: the controlling centre was feeble and in decline, but able to support, for a moment, aspects of life as graceful as the Infanta's ladies in waiting and as brilliant as Velasquez himself.

In a more philosophical vein, *Las Meninas* is an essay in paint about the appearance/reality split as it relates to modes of representation: *Las Meninas* has been called 'a pictorial summary of the various levels of images in their different levels and degrees of "reality" ... as well as a commentary on the essential mystery of the visual world and on the ambiguity which results when we confuse its different states or levels' (Gardner, 1970, p. 576) The resonance here with Don Quixote's confusions, and with the general prevalence of the appearance/reality theme in 17th century Spain, has not gone unnoticed. And of course the painting, as with many great works of art, can support more or less contradictory meanings: Is it, as some say, a great advertisement by Velasquez for his profession, proudly showing himself doing manual work while simultaneously functioning as a respected member of the court and close friend of the King? Or are there misgivings in this genius who serves an incompetent master? The expression on Velasquez's face is as much inward as outward and touched with melancholy. Does he see himself as just one more of the king's minions, all of whom are akin in the last analysis to the longsuffering dog?

Does he envy the surprisingly untroubled, outward gaze of the dwarf Mari-Barbola? The quick and qualified answer is yes to all of the above, for Velasquez's actual motives are not the point. People have read these and quite literally thousands of other potential meanings — biographical, historical, psychological, literary, philosophical, political — into *Las Meninas*, and these contribute to their sense of its overall coherence quite as much as does Velasquez's handling of light or his masterful composition. This 'Sister Wendy' aspect of representational art allows it to naturally activate a rich and diverse set of associations which abstract art, for obvious reasons, is far less able to support. *Probably it is this power to enrich and diversify associative networks, more than any the factor, which gives representational art its long term dominance.*

We can say with some confidence that the factors conditioning the aesthetic zap are variegated, extremely numerous, and can range from the idiosyncratic to universal preoccupations of our species. But the zap cannot be evoked simply by throwing together a mass of different elements. To put it in functional terms, the aesthetic zap signals consciousness that the component elements in a work of art fit together especially well. *The more complex and diverse the mass, if unified, the stronger the signal of rightness will be.* (This ignores habituation, a huge issue; see Berlyne, 1971.) And it must never be forgotten that the process which actually determines how well the parts do fit is almost completely non-conscious.

The most striking feature of the conscious/non-conscious cognitive system is its asymmetry. Consciousness is plodding and error prone; it has an extremely limited capacity, and can efficiently handle only a few pieces of information at a time. Non-conscious processes have all but unlimited capacity, operate with great rapidity, and can integrate many strands of interacting information simultaneously. For what it is worth, Freud's view of the unconscious turns out to be fairly accurate in these respects, though supporting experimental evidence did not begin to materialize until the cognitive revolution in the 1970s. And only with the later development of parallel and massively distributed neural network models have we begun to see how non-conscious processing is able to integrate so much information so quickly.

In the experimental literature the limited nature of conscious processing is usually dealt with quantitatively, but we can use any good reproduction of *Las Meninas* to illustrate some of these limitations phenomenologically. When you looking at the reproduction, notice how the focus of your attention is constantly shifting. Perhaps you first look at the overall image of the Infanta, then at a detail like the

bow in her hair or the expression on her face, then at the kneeling attendant to her right, then probe the recesses in the upper background and trace the outlines of the dark frames, then back again to the Infanta and the shadow her skirt casts, then to the pink ribbon on her wrist, jump to the reflection of the royal couple, to Mari-Barbola and so on. At no time are you conscious of more than a few of the details in this extraordinarily painting — they are never *simultaneously* present in consciousness. Nevertheless you feel at every moment that these individual bits and pieces, as well as larger passages, all fit together as a magnificently integrated whole. Rightness is the phenomenological glue that joins these individual experiences together, and so helps finesse the limited capacity of consciousness.

I suspect the most fundamental way to characterize the limited nature of consciousness is via the notion of articulation capacity. To illustrate: Move your reproduction of *Las Meninas* so you can just distinguish the individual fingers on the Infanta's left hand. Now focus your attention on her thumb. (If you have to move your eyes you are too close.) The fingers will get a bit more blurry, that is, a bit less articulated. Now focus your attention on her index finger. This time the thumb and other fingers blur.

To say that consciousness has limited articulation capacity means it can only resolve experience to a certain level of detail and no further. From the standpoint of our bio-engineering, this mandates various trade-off strategies the structure of consciousness. More resolution devoted to one region of our conscious field means that experience will become less well articulated somewhere else. This could have been observed in the previous example. If you focused attention, say, on the Infanta's head and then shifted attention to her eyes, her hair would lose articulation in the second case. This may seem to be a small effect, but I believe its consequences are not small, for it helps explain why some of the most important aspects of conscious experience are non-sensory: they place a minimum load on consciousness limited articulation capacity.

To minimize clutter I've avoided citing my own research until now. The most wide ranging treatment of the fringe is Mangan (1991), which extends James' work on the topic in various ways: e.g., it attempts to *explain* fringe phenomenology as the consequence of its cognitive functions (e.g., context representation and retrieval) and articulation limits; points out the central role of rightness (there called Meaningfulness) in normal cognition; considers neural net architectures that may 'compute' rightness at the non-conscious level; works out how rightness relates to traditional aesthetics, especially Kant's,

and the relation of aesthetic to mystic experience. Some of these findings are reported in Mangan (1993; 1994; 1999). Mangan (2001) summarizes and extends this research as it applies to normal cognition; if it can't be accessed on line, see Mangan (2003). Lavazza (2008) in part considers the development in my work of what she calls 'neo-Jamesian aesthetics' and its influence on research.

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