

The Organic Rationalist

Computer-generated images and objects

An exhibition by Kevin Todd (toddartist@hotmail.com)

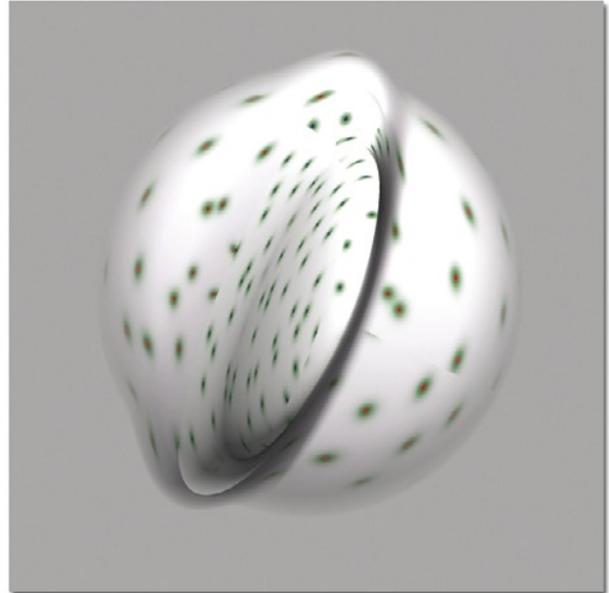
New Greenham Arts, Newbury, England.

October 18 - November 11, 2004

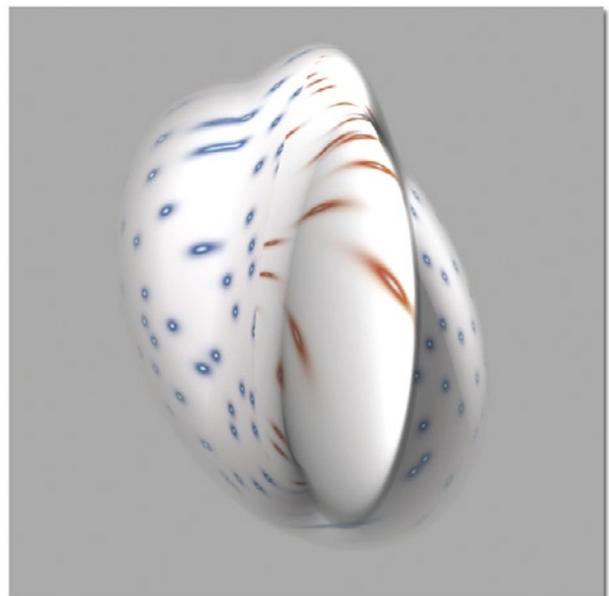
In a lecture at University College Cork in 2004, within the context of a symposium entitled 'Re-discovering Aesthetics', James Elkins announced that he was preparing material for a book on the relationship between Art and Science. His working title for it was 'The Drunken Conversation'. It is Elkins' contention that the dialogue between Art and Science could best be characterised this way primarily because all too often the 'conversation' proceeded from different viewpoints, different values, different conceptions and different methodologies. He further maintained that the systems and methodologies of each form of intellectual enquiry were so fundamentally distinct and distant from one another that any hope of a truly fruitful ground for collaboration between the two was scant indeed. All too often the engagement between art and science was a superficial one in which each protagonist was aware of only the surface aspects of the other discipline and responded to these without engaging at a more fundamental philosophical level. We would have to agree that in the context of 'collaboration' the outcomes of such engagements would generally support this contention. The deeper enquiry can only provide fruitful results where both are more fully conversant with the modes and traditions of each form, as well as having the capacity to engage at a critical level with the alternative discourse and 'language' of the other.

Technological developments, particularly since the invention of the scanning electron microscope, astronomical tools such as the Hubble space telescope, and more recently the proliferation of digital imaging technologies have provided artists with the larger raw image base and reproduction tools to gain access to tantalising visions of other worlds, (micro and macro), within the world, opening up a rich mine of new images for many artists to apply to their own art. Usually the artistic (or scientific), value of artwork derived this way is virtually nil. It provides merely a set of superficialities which articulate nothing beyond the mediocre artist's ability to transmute an 'abstract' image from its source in nature to another form and context in art. Such approaches (even with gratuitous additions or manipulations) are rarely little more than wallpaper and even more rarely seek to advance understanding, evolve new forms, or engage in the transaction of ideas, which is the fundamental value of contemporary visual art, and to science as well.

The richest and most significant engagements between artists and science seem to derive not from the 'shotgun marriages' of the two, (often uncritically funded and poorly rationalised), but from artists of intelligence and



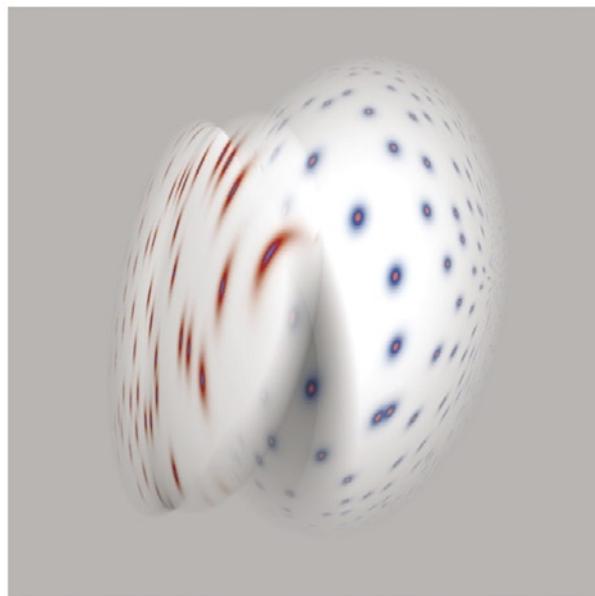
The Organic Rationalist
Form # 3, Digital print on film, laminated glass
100 x 100cm, 2004



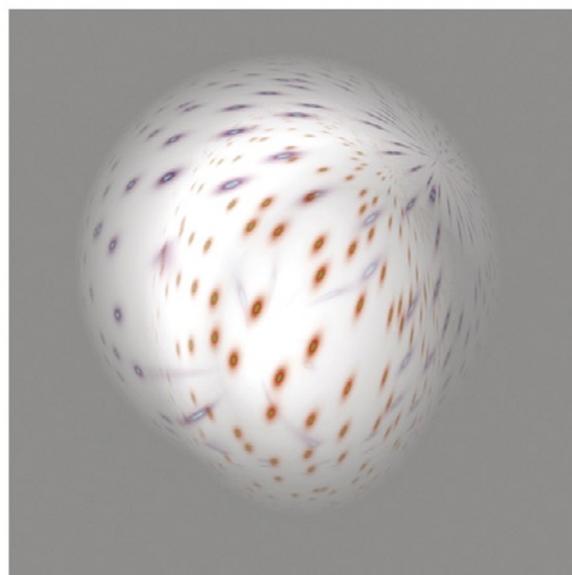
The Organic Rationalist
Form # 1, Digital print on film, laminated glass
100 x 100cm, 2004

perspicacity entering more deeply into that engagement of their own volition, unmediated by intrusion from scientists espousing artistic interest. Such artists engage with science and scientists at a level more akin to an equivalent relationship. Such artists, and Kevin Todd is one of these, are impelled in the first instance by an already broad vernacular of familiarity with not only the technocracy and its technologies but also the ideologies and languages of the sciences. Further, Todd is well versed in the philosophical discourses that link both art and science at the Meta level of pure intellectual speculation. This is the solid nexus and the knowledge base from which Todd's art springs. It provides him with the necessary tools not only to create powerful and engaging imagery but it also provides the key ingredient usually absent in such engagements; an ability to reflect on the methodologies and 'world views' of both art and science in a critically aware way - one which has the capacity to lead somewhere, one which can enable us to enter that dialogue at a higher level and to be left with a reflective point of real substance from which to proceed. It is a rare and happy experience to encounter such work. The engagement is most meaningful when artists do not eschew their critical role but apply to science a more investigative mindset that at least interrogates the values and systems of science, and does so in a manner that applies the methodologies of contemporary art to the manifestations of this enquiry. The two modes can never seek to effectively subsume one another at this critical point, to do so would result only in objects or installations appearing to 'resemble' one another, like two people who are unrelated but, through some quirk of nature could be taken for siblings while at the genetic level they are as distinct as any two humans on the planet. The outcomes of these art/science engagements have littered the world with too many of these decorative doppelgangers.

I first became really aware of the significance of Todd's enterprise when viewing his *Anatomies* series in 1993. Using anatomical images of a 'micro' nature one might first assume that the work is simply revelling in the new image source available to the artist but this impression quickly passes in a consideration of the whole project to reveal a deeper reflection on the concept of life/self as the artist defines it. Todd focuses in this work on areas of enquiry not easily accommodated or dealt with by science, thereby elucidating new levels of interpretation about the nature of life and giving something to science by reifying certain elusive and often ineffable aspects such as the nature of the 'life force'. This is a valuable and tantalising contribution to the discourse. In this case the impetus to the production of this work was, at its base, philosophical and this core sustained and directed all aspects of the development of the project, particularly image selection and manipulation. The cart was firmly behind the horse and not out in front as it was with most artists using such images. Such an understanding gives the work a 'true' course and an intellectual framework in which appropriate critical decisions can be made. In this work there was not some 'post rationalisation' borrowing the languages of



The Organic Rationalist
Form # 2, Digital print on film, laminated glass
100 x 100cm , 2004



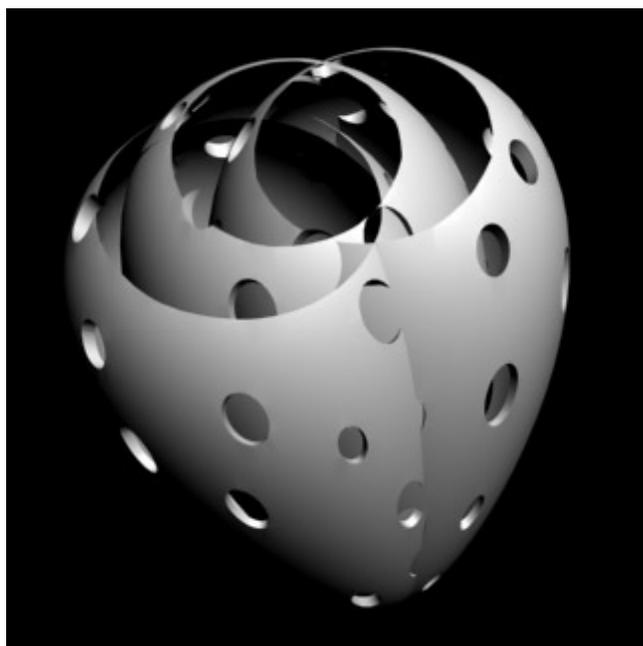
The Organic Rationalist
Form # 4, Digital print on film, laminated glass
100 x 100cm , 2004

science, mathematics and philosophy in an attempt to validate the work by dressing it up in the shabby costume of rhetoric. It was returned to art, having sprung initially from a more rarefied discourse and its realisation was a synthesis of both. In other words, the whole did become a balance of its sometimes-disparate bases, unified by an artist with the knowledge and intelligence necessary to create such a successful resolution.

If a common language is to be discovered at which level an unmediated and fruitful discourse between art and science is in fact possible, it is perhaps through the agency of mathematics as it often refers to a micro world of atomic and sub-atomic scale. Within this frame, the language of mathematics is the medium of transaction and speculation. Maths is the language, more importantly of philosophy; in fact the pure intellectual lingua franca through which all phenomena can be addressed and all speculative theory of the 'nature' of nature, espoused. Todd is a rationalist, his apparently objective position tempered by a desire to employ rationality in the service of exploring general questions about issues such as the nature of self and definitions of identity. It follows that this enquiry leads to an exploration of the concept 'nature', in itself an ambitious philosophical enterprise. Initially exploring Cartesian principles, which posit the organic and the technical as opposites, Todd digs deeper to see beyond the limits of the dualism of this position and, aided by access to the micro realm, finds there a unity, a point at which all material has equivalence and an organic connection. This is a realm which is explored and often articulated through the language of mathematics and digitisation and where the messages are transmitted in a binary form. Upon acceptance of this unity we arrive at a point expressed by Heidegger when he suggested that calculative thinking might someday come to be accepted and practiced as the only way of thinking. Todd, of course is uncomfortable with this.

One direction of argument regarding the definition of nature was posited to me by the past professor of Physics at the University of Tasmania, Bill Ellis, who suggested in a fundamentalist vein, that everything that comes into existence is in fact 'natural'. Ellis' position, perhaps somewhat deliberately provocative, was that everything which enters the world, including everything man-made was at that point inevitably 'natural' in that it becomes included in Nature. This argument implies that once nature has been modified through any agency it will be changed from that point on and those interventions will become embedded in the progress of Nature. Genetic manipulation is an excellent example of this and the inherent fear of it which characterises many people's response may at base be fuelled by a concern that in entering the 'natural', such modifications take on a life of their own.

In the case of Todd's art the computer is a kind of microcosm of nature itself. It obeys certain rules and is in that sense predictable but it also contains the potential to



The Organic Rationalist
Object #1, CAD image
2004

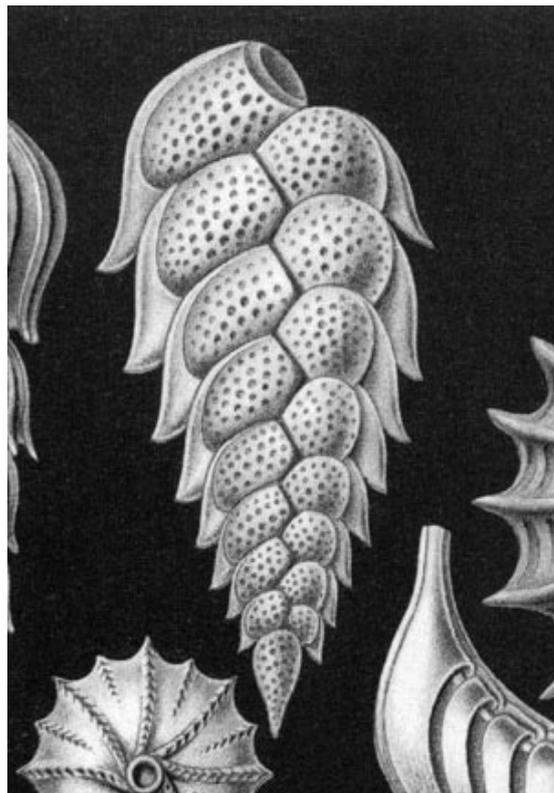


The Organic Rationalist
Object #1, SLS object, 15 x 15 x 17cm approx.
2004 (SLS - Selective Laser Sintering)

extrapolate and engage in evolutionary development from information provided to it. Even when set to develop a model in a 'random' way it nonetheless does so according to certain rules and within certain parameters, just as more broadly, nature does. Todd states that "...The scientific desire for a predictable and rational environment through bioengineering is challenged and the works suggest that in reality nature will not conform..." The term organic is synonymous with processes which when initiated, evolve according to certain principles and develop into other forms as these principles or rules take hold. This is the nature of evolution and it could be argued that it cannot be random. The development or evolution of an entity is always subject to shifting influences at every point and is therefore not predictable, but it is never random. 'Random' refers simply to the fact that we do not always know what sets of conditions are being brought to bear on the 'organic' process and that we cannot in fact exert complete control over them. The rationalist must acknowledge this fact. The organic rationalist does so. Random then comes to describe a state in which there is a loss of control, and a desire for control, which must be forever thwarted.

Forms in nature which have evolved over millennia have assumed a kind of completion or resolution, which a specific intervention at the genetic level can alter completely. The discovery of certain patterns recurring in natural forms (most popularly the Golden section as discovered in the internal harmonies of shell and plant forms) seemed to suggest a natural 'order' and that this may even imply the intervention of an overarching intelligence. As Todd points out: "...the focus on geometry, for example in the work of the German artist Haeckel in the 19th century, seems to suggest some agency (God?) in the creation of nature. In contemporary culture this agency has been replaced by the rationalism of science and nature is emptied of the mystical and has become mechanical. To see nature as such is dangerous..." All the apparent rationality of the development of a natural form really implies is that evolution will synthesise and refine a form through time until it best fits its environmental context. There is rationality at work but it derives from an organic process. Rationality is arrived at; it did not initiate the process. In this way Todd's work creates a context in which an organic process can emerge and determine the development of new forms.

So, where in this rarefied zone of rationality is the subjective? Rejecting sensation and sentiment, as Todd does, is not to reduce his art to a soulless elucidation of principia mathematica in an alternate form. Neither does it cleave him from the business of being human and operating in a world where rationality appears to be idealism. The impetus to Todd's work, as I have stated, is all too human and concerns the core questions that have engaged us all for millennia, big questions like 'What is nature (natural)?' 'What is self (individuation)?', and 'What is the force which initiated and sustains life?', and finally, what are the inter-relationships between



Thalamophora - Detail
Art Froms in Nature, Ernst Haeckel, 1904



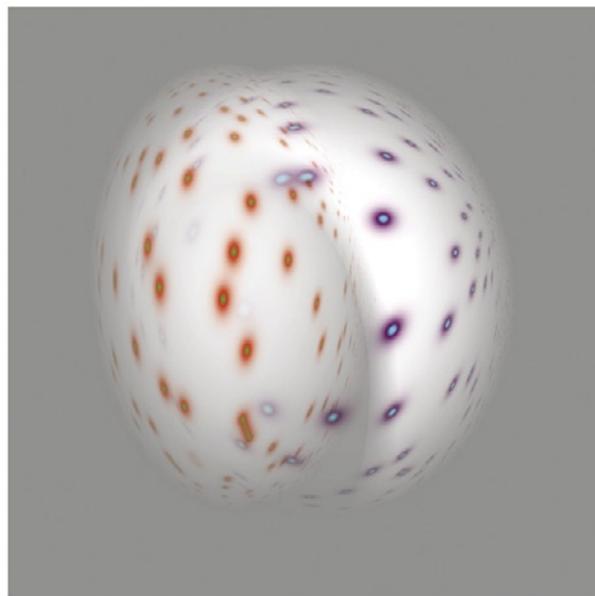
The Organic Rationalist
Object #2, SLS object, 20 x 20 x 17cm approx.
2004

SLS objects courtesy of the Centre for Rapid Design and Manufacture (CRDM),
Buckingham Chilterns University College.

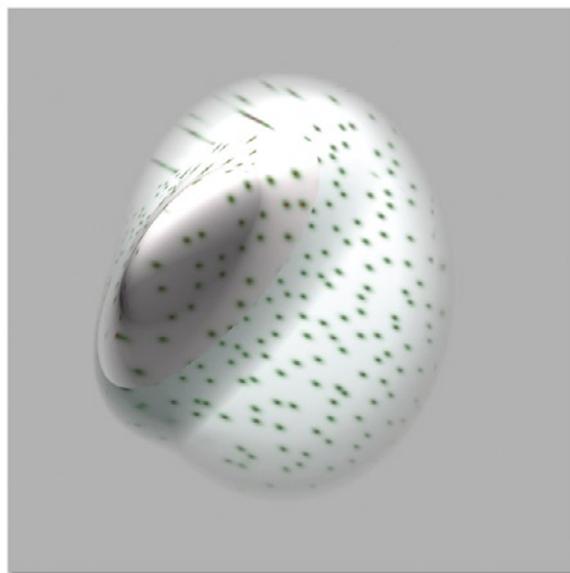
these? Can the clues to a fuller understanding be found at the point where unity exists? Perhaps never, but there is logic in a reduction to this essentialism. At least here the nature of things can be explored with some sense of coherence. The 'artwork' initially becomes the evidence of the point of subjective engagement. For Todd it is vital that the finished work utilises the unique properties of art to fashion an object or an experience that is sensorially engaging. Empathy with the object / event occurs through its full realisation as a phenomenon and out of a respect for the object to exist as an integral whole with the power to engage and address us as a significant presence. This experience might be construed as non-rational and, in a phenomenological sense it is, it approaches and engages another order of intellect, a sense-based intelligence not subject to (or at least as accessible to) rationality, or at least not guided by 'rational' principles at a conscious level.

In this context another simplistic duality, *objective/subjective* is overthrown as is the broad tendency for oppositional and essentially combative positing of points on a continuum as being essentially mutually exclusive or antagonistic. A journey to the sub-atomic realm, (or a journey into space), can dissolve apparent borders and dualities in an apprehension of the unified and coherent whole, at the micro or macro point where such unity is possible. Flexibility of travel between the objective and subjective is one of the key defining characteristics of art as a distinct mode of enquiry and discourse. Significantly art too becomes a meta-language, just as mathematics is another more particular one.

Artists are renowned for adopting and adapting new technologies and we are well aware that new technologies provide the means to extend the range of an artist's capacities to create new forms; be they the invention of the flat brush and paint in tubes (which accelerated and extended the possibilities of the plein - air painters of the late nineteenth century), the invention of the camera (which in turn re-invented painting), or the range of digital imaging possibilities open to the contemporary artist. These technologies not only increase the image base available but they also increase the potential for new modes of expression. As in the case of the camera, they too have the capacity to provide another critique on the nature and direction of art. With the rise of such technologies, many artists rushed to employ them in their practices, often with superficial and uncritically mediated results. Kevin Todd uses such technologies. He was an 'early adopter', coming out of a photographically - based practice his familiarity with such technologies was developed early and his understanding of them far from superficial. This is important for it means that Todd is unlikely to be attracted to a medium or a method in some awestruck, uncritical manner. He is familiar with the operation of complex medical imaging systems and equally computer-based digital imaging software to such an extent that he has considerable control and selectivity about what to apply and how and when to apply it. As the dust settles on the



The Organic Rationalist
Form # 7, Digital print on film, laminated glass
100 x 100cm, 2004



The Organic Rationalist
Form # 6, Digital print on film, laminated glass
100 x 100cm, 2004

arrival of these new technologies a more informed and critical audience has been growing, able to determine the relative value and rigour of work like Todd's as against the less profound outpourings of many of his contemporaries. It is worth stating that there is no 'Digital Art' as in a movement or style, there is a digital language and there are digital tools available to an artist. The critically aware and technologically proficient artist who uses digital tools must apply them with the same level of critical intelligence and appropriateness that we would expect from any artist of substance, working in any medium or combination of media. That being conversant in these forms can of itself open further possibilities is even more reason why artists using them should become adept in an understanding of the nature and character of their 'language' and systems, as Todd comprehensively does.

Artists should never enslave themselves to media in uncritical ways. Art proceeds from ideas and is a mode of intellectual transaction expressed through forms, envisioned and realised tangibly. Art is art and Science is science and they can never be made to resolve into two common or parallel discourses, (nor should they), but good art has the potential to provide an elucidating engagement which can recognise points of contact or resonance and raise new questions about both. Kevin Todd's is such an art but the issue here is really about how a deep connection with the bases of art, philosophy and science can allow the artist to find those resonances and points of connection, sometimes in an indirect way.

It is not Kevin Todd's aim to create a dialogue between art and science. Taken as *a priori* for his work, this would be a false starting point. The issue is about art and it is about nature, about the rational and the organic. To be a significant statement the work relies on the capacity of an artist to look across and into broad fields of discourse and phenomena to create a new statement, or posit a new direction through the agency of this more overarching view and the capacity to hold its many components within a dynamic relationship through a form and medium by which it can be transmitted. Todd takes on the issues and questions which are at the very core of human existence and which have always been the central well-springs of art, science and philosophy and he does so through an holistic appreciation and application of the principles and values of each to provide a new view, a new discourse, mediated and expressed through the mechanisms of art.

Seán Kelly
National Sculpture Factory
Cork, Ireland

September 2004



The Organic Rationalist
Form # 8, Digital print on film, laminated glass
100 x 100cm, 2004



The Organic Rationalist
Gallery view, New Greenham Arts, Newbury, England
October 2004

www.toddartist.com

