The arts, innovation and commercial opportunities

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The arts, innovation and commercial opportunities?

The Australian Network for Art and Technology (ANAT) has been working with art, science and technology for 21 years. It has only been relatively recently that the innovation potential of the arts, particularly those working with technology, has been understood. Myths relating to artists not wishing to be commercial and the active marginalising of the arts in intellectual property (IP) development has meant that the arts are overlooked as a source for commercially viable IP. Through my work at ANAT I have experienced artists going through the patent process, rapid prototyping, engaging in scientific research and producing new applications in digital media. These old myths do not hold true. In this environment of innovation, models better suited to how artists work are needed. This paper argues that there is a much greater benefit to the arts, culture and artists through aligning the arts to research, innovation and entrepreneurial contexts, rather than in traditional cultural funding activities.

Scarcity and culture

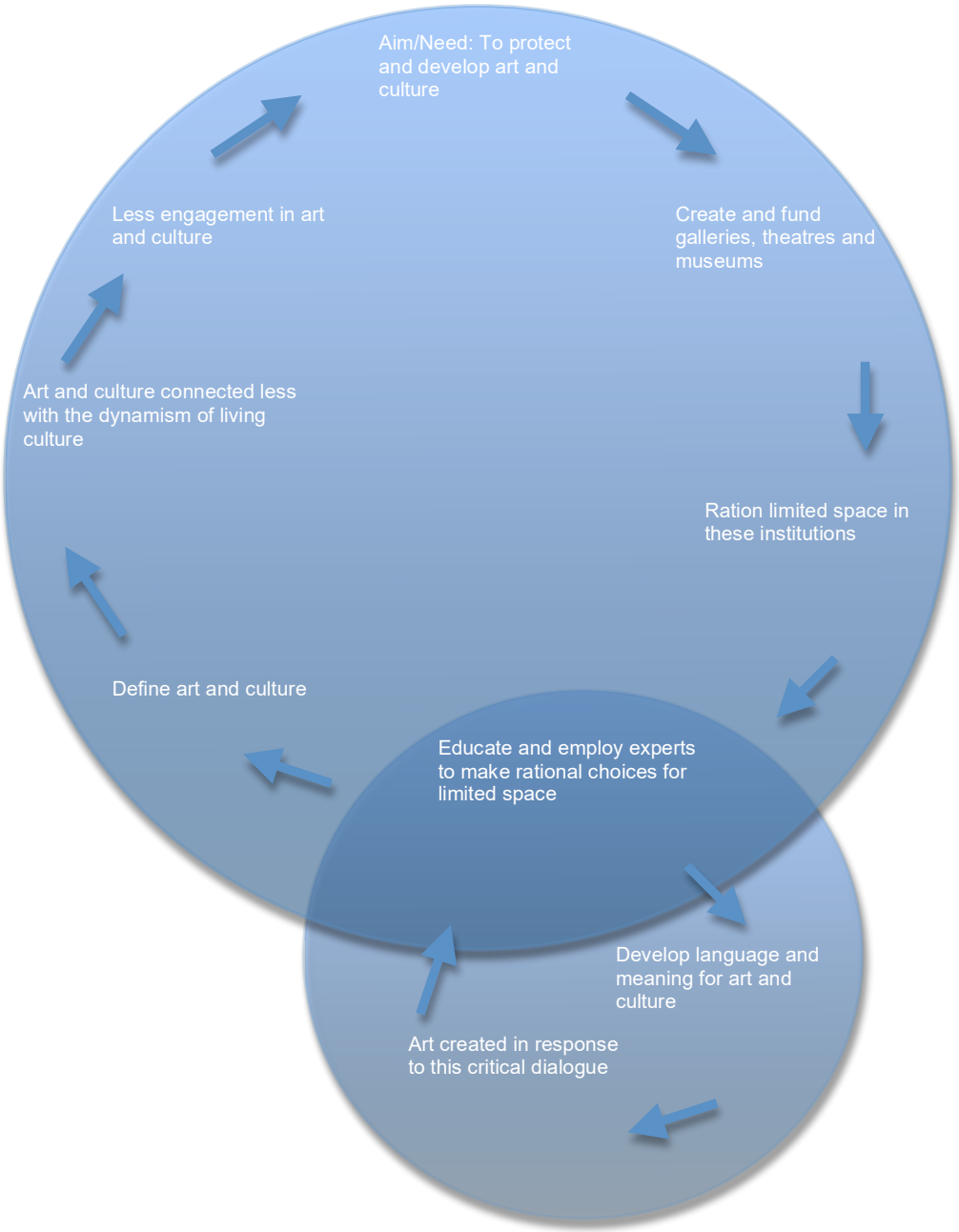
The arts have developed into a balancing loop system that can only exist through the marginalising of artists and through preventing the arts from being a part of our living culture. In the arts this marginalisation is very reverent, but marginalisation non-the less.

Acknowledging the diverse reasons for the founding of arts and cultural institutions, but focusing on the current use of these institutions, the starting point for a systems analysis (Kim, D. and Lannon-Kim 1994) of art and culture is society's efforts to protect, promote and profile art experiences. We have developed environments separate from our daily lives where these experiences are allowed to take place. If an art experience does not happen in these specialised environments, it becomes difficult to call it an art or cultural experience (Dickie 1974). These environments are

collections of our cultural history and as histories they are important, but they do not reflect on our living culture. The problem with living culture is that we do not notice it as something separate from us, yet art has become something separate from our daily life. Collections of our cultural history (i.e. museum pieces), continue to define for us what an art experience is and they have defined the art experience as one separate from our daily life.

This current revered marginalisation of artistic practice is reliant on economic principles of scarcity. There is a scarcity of gallery space and there is a scarcity of performance spaces because of an artificial rationing of the abundant resource of art and culture. In an attempt to promote and preserve arts and culture, society has forced itself into rationing arts and culture. To ration the scarce resource of venues in which to experience art and culture, experts need to be educated and employed to make justifiable choices in rationing. In the vein of Danto's (1964) analysis, experts need to develop a language and critical dialogue to have a rigorous process to justify rational choices for the use of scarce venues. The unintended consequence in this system is that if choices are based on this critical debate, then artists need to respond to this critical dialogue or they cannot be included in art and culture. Ultimately the venues created to promote, preserve and profile art and culture begin to define art and culture and a disconnect can arise between living culture and museum pieces; this is an effect of Beckers (1982) art worlds. Once this disconnect occurs art is less aligned to living culture and there is less engagement with art which reinforces the need to have institutions that preserve, promote and present art and culture and the system perpetuates itself (Figure 1). Any improvements or developments in this stable system have only come from non-systemic variation (Deming 1986). In the arts this is usually in the form of crisis heroism; the heroic artist, or art director. This though is a symptom of the problem and not the much needed solution.

Figure 1.



Abundance in a living culture

The balanced loop system of current arts and cultural funding perpetuates a system that will not improve. Putting more funding into the established system only removes the arts from living culture further and makes a citizen's daily life all the poorer. In the digital era there is an opportunity for the artificial scarcity to be disrupted. The media arts have an opportunity to utilise the abundance models (Anderson 2006) coming from the digital media industry to be a part of the living culture.

In the digital world there is a capacity to have a direct, unmediated, relationship with customers, culture and citizens. An individual does not have to choose how to ration the limited wall space in a gallery, or ration the compositions that will be played in a venue, or the ones that will make it to a CD/DVD. People can have a direct relationship with the work; it all can be made available.

The Long Tail (Anderson, 2006) economic theory is that the Internet has changed the 80/20 rule. The 80/20 rule is based on Perato's concepts, which in business tend to mean that 80% of your business comes from 20% of your customers. In a world of scarcity you focus on the 20% that gives you the 80% of your business. The Long Tail suggests that the Internet has given business the potential to economically access to the 80% of customers that have not been seen as cost effective in the past. This is because there are 197 million broadband connections worldwide, a figure that is growing rapidly (OECD, 2006) and which allows for niche markets to form around the ability to search for and acquire obscure products is therefore also growing. The cost of having these products available is negligible, so they can all be accessible.

Artists working in digital media can produce a game one day, artwork the next. In the digital world they all become interesting creative experiences that everyone can take part in. Some may not see them as art, but this is the key to a direct relationship with living culture. In this model there is the opportunity to use freemium, marketing or donation models to generate revenue that can support a creative freedom beyond art worlds. These works may never make it to a gallery, but because they do not fit the gallery mode and cannot be sold in the traditional art market then there was little chance that they were going to end up there anyway.

Innovation

If the arts are allowed to be a part of our living culture and not merely confined to art worlds then the barriers to integrating it with all aspects of society are reduced. Look at the arts freed from the balanced loop system constraints and it appears to be something that is much more aligned with innovation and research than it has been allowed to be.

Innovation case study

Julian Stadon is a media artist working in augmented reality who uses Second Life as a research tool. He has created code for making his work possible in second life. Currently he has developed a way of placing scans of internal organs into avatars. This Ancillary IP can be easily adapted to aid health practitioners using Second Life as a simulation tool. (Stadon 2009)

The language of innovation is built around the continuum between invention and innovation. In the art and science fields there is a focus on invention, but progressively there is a mandate from universities and research institutions driven by government polices to innovate. Innovation is the practical application of this research and is inherently commercial as practical applications resolve problems unlike pure inventions.

The significant division of HASS (Humanities, Arts and Social Sciences) and STEM (Science, Technology, Engineering and Medical) sectors have made innovation harder; dividing the cultural and political from the technical and scientific. Demanding innovation from a focused specialist in science or creative industries is counter productive, blunting the creative drive that makes these people valuable in the first place. Interdisciplinary research is where innovation can occur. ANAT has developed a successful model for interdisciplinary research between the arts and sciences and has placed artists in research facilities for the past decade. Commercial contracting of a portal into a scientific research environment by creative practitioners as scientific amateur has been the key to this. Both parties bring IP to the relationship and the contract carves up any potential IP created. Each party can benefit financially as well as professionally from the arrangement. The capacity to draw innovation from these art science collaborations relies heavily on artist's inventions being aimed at impacting their audience; people in a culture.

Art Science case study

Leah Heiss participated in an ANAT Art Science residency with Nanotechnology Victoria (NanoVic). NanoVic had invented a way of delivering medication through the skin. This invention only became an innovation when the creative practitioner was able express it as a relationship with humanity and culture. This expression was in

the form of wearable technology that gives the wearer the potential to have a different relationship with their illness. (ANAT 2009)

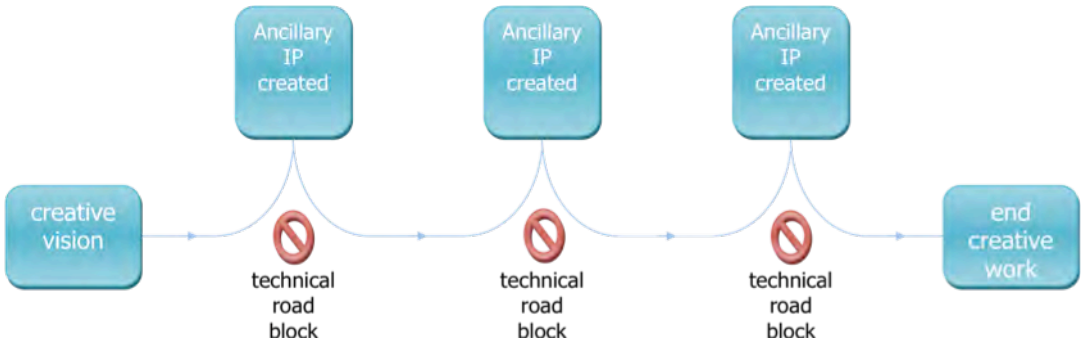
> I wanted to explore how you can augment personal artefacts like a ring or necklace with therapeutic qualities. Some people might want to keep their medical condition private. But on the other hand people might become proud to wear something that symbolizes the fact that they have this condition and that is not ugly. - Leah Heiss. (O'Dwyer 2008)

The technology inspired the artwork and the artwork created an innovation from the scientific invention.

Ancillary IPs

To release innovation from creative practitioners, by making them innovate, or become entrepreneurs is naive and damaging. While I argue that the work of artists is more aligned with research and innovation models, there needs to be a greater sophistication in the approaches for people working from a centre of creative vision. The reason these creative practitioners are useful in an innovation process is because of their personal creative drive and to force that drive to ends other than a personal vision destroys the very incentive to be creative. Ancillary IPs is a concept that focuses on the ongoing harvesting of IP that arises from creative practise. Ancillary IPs occur when, in the course of a practitioner pursuing their vision of a final work, they encounter difficulties (technical road blocks) that require the development of a technology, a device, process or code (Figure 2) (Artz 2008). In these tools that are developed to ensure the end creative work comes to fruition is where commercial possibilities arise.

Figure 2



There is an in-built resolution of a real problem in the Ancillary IPs. This halfway line between innovation and invention means there is a higher chance of finding like applications beyond the creative work, making for a very efficient research and development model for innovation. One of the key difficulties with working in this context is that trusted commercial partnerships need to be developed. These are intended to be long-term relationships where commercialisation partners return again and again to review and commercialise Ancillary IPs.

The concept of Ancillary IP's has five key attributes for success (Artz, 2009):

1. *Invention and Innovation:* Because Ancillary IPs are created to resolve a real problem they are closer to innovation than pure invention. There is far greater potential to find like problems than from pure invention.

2. *Commercial Partnerships:* There are no expectations that creative practitioners involved in the Ancillary IPs model will have business skills. While it is ideal that a level of knowledge is developed to ensure appropriate choices are made, the Ancillary IP's model is more focused on commercial partnerships.

3. *Personal Benefit:* There is an expectation that the creator of the Ancillary IPs will derive an ongoing and direct benefit from commercial applications. This is a part of the commercial partnership that allows for ongoing IP to be created.

4. *Personal Vision:* Ancillary IPs relies on the personal vision of the creative practitioner. Their value is in this vision and everything is to be done to allow them to focus on the end vision.

5. *Process:* Because of its importance the personal vision cannot be curbed to commercial ends. Commercial opportunities come from overcoming roadblocks, not the end result of creative work.

Vision

The vision is a practical one; to place artists at the centre culture and the economy. There is a great deal of innovation that is ignored because it comes from the arts.

There is also a great deal of creative energy that is expended in hospitality and other industries, by artists trying to support art and culture. No economy can afford to let such sources of innovation go unnoticed and unutilised. No economy can afford to keep blunting their creative culture and economies need to work with and harness this creativity, invest in it and benefit from it. Investment needs to be real investment where the gain is financial returns not just a cultural benefit; an entrepreneurial mind is needed. New models can be applied to arts and culture where artists can have a direct finical benefit from the IP they create. A commercial approach to art can prevent the marginalisation of art and bring art into our living culture while at the same time bringing it into the centre of the economy.

References

Anderson C. *Long Tail, The, Revised and Updated Edition: Why the Future of Business is Selling Less of More*. New York: Hyperion 2006.

Artz, G.. "Artistic practice and unexpected intellectual property: Defining Ancillary IPs." 2008. *CHASS* http://www.chass.org.au/papers/PAP20080709GA.php . 20 April 2009.

Artz, G. Abstract "Achieving Innovation Through Ancillary IPs." *3rd Annual IP Management in Practice conference*. 2009.

ANAT. "Leah Heiss: Subtle Technologies: AIR Residency at Nanotechnology Victoria." *ANAT* http://heiss.anat.org.au/ . 18 June 2009.

Becker, H.S. *Art Worlds.* Los Angeles: University of California Press 1982.

Danto, A. "The Artworld." *The Journal of Philosophy*, American Philosophical Association Eastern Division Sixty-First Annual Meeting (Oct. 15, 1964): 571-584.

Deming, W. E. *Out of the Crisis*. Massachusetts: MIT Press, 1986.

Dickie, G. *Art and the aesthetic : an institutional analysis*. Ithaca, N.Y. : Cornell University Press, 1974.

Kim, D. and Lannon-Kim, C. “A Pocket Guide to using Archetypes.” *The Systems Thinker*, May, 1994.

O'Dwyer, E. “Ring of Life.” *Sydney Morning Herald* 25 Aug. 2008.

OECD Directorate for Science, Technology and Industry. “OECD Broadband Statistics to December 2006” *OECD.* http://www.oecd.org/document/7/0,3343,en_2649_34225_38446855_1_1_1_1,00.html. 3 April 2009.

Stadon, J. Personal interview, 31 March 2009.