This research suggests that relationships between museums and audiences in the engagement of controversial topics require a new account of self as a symbolic project that is self-acting, more open-ended and reflexive. According to 80% of audiences surveyed, institutions are seen as having the power to challenge people’s ways of thinking and shift an individuals’ point of view.

Introduction
Controversial topics, their relevance and place in the museum, go to the heart of the roles and purposes of the museum project in an increasingly complex and globalising world. Controversy is no longer something to be feared, but signals the contemporary relevance of the museum form in public political culture. In this paper I argue that engaging controversial topics and science controversy is a natural social form. I propose that museums have a critical role in activating controversy as a productive mode of engaging their audiences, in formulating new knowledge and in contributing to debates and decision-making within wider public political culture. I also illustrate how institutions might innovate to engage controversy in a world increasingly characterised by global risks and hazards.

The idea that museums should engage science controversy is strongly supported by the findings of the Australian Research Council funded international research project, Exhibitions as contested sites: The roles of museums in contemporary societies. Our research involved qualitative and quantitative research, phone and exit surveys, an online industry survey, and focus groups and interviews with staff, stakeholders and audiences involving 28 institutions in the US, Canada, UK, Australia and New Zealand. The findings from our phone interviews in Australia say that 60% of those surveyed and around 80% of museum visitors interviewed in five museums in Australia and Canada stated that engaging important challenging and controversial topics, and points of view in a democratic, free-thinking society for many was seen as a key role for museums– one of the few places where these debates can happen.

It’s the role of museums to be provocative, to bring certain things into question and under consideration (Sydney Pulse, female pensioner).

There are few places in our culture where people dare to take on such issues to force us into a new paradigm (Contested Sites, Museum of Anthropology survey).
These sentiments were supported by our online staff survey, (albeit a self-selected sample) with 89% of museum staff, agreed that museums should present exhibitions about topics that some people may see as taboo or controversial.

Museums can provide the perfect setting for discussions and debate around topics that directly influence and shape society (online survey, museum staff, USA).

‘Hot’ topics
Our research with museum staff, stakeholders and audiences suggested that the key factor in engaging controversy were the choice of the topics themselves. This related to their currency, their ability to polarise people, and engage political sensibilities. In focus groups, museum staff and stakeholders we identified a number of topics as being controversial or potentially controversial. These often differed from institution to institution, and from country to country, with some broad trends emerging.

The USA
In the USA for example, museum staff we interviewed identified six topics as being potentially (or actually) controversial. These included scientific topics that confront people’s ethics or beliefs (such as evolution, animal rights, and biotechnology); issues of national identity as it relates to ethnicity or race relations; the idea of an unpatriotic national identity – in other words, ‘any topic that presumes to criticise America for anything’ (Contested Sites Staff Focus Group Transcript USA); issues that are perceived to be about morality (such as abortion rights, sexual identity, and drugs); different perspectives of history (including indigenous histories and women’s histories); and finally, terrorism and the war against Iraq, together with related subjects such as Islam. These topics reflect an uneasy tension between the rights of the individual, allegiance to the authority of the state and the church, and America’s relationship with other nations or peoples in terms of current world events and politics.

The main concerns of staff and stakeholders about exhibiting these topics related to the fear of losing funding support; the need to be politically correct in order to receive and maintain public funding; the risk of alienating stakeholders or lobby groups; determining who’s voice and history is told; and the risk of having the museum hijacked as a platform for people who have opinions about that topic. These tensions were counterbalanced by the perceived need to remain relevant, to take an active and important role in contemporary societies,

If we are content to be pretty places that tell safe stories we will quickly become relevant and then really be at risk of losing our funding (online survey, museum staff, USA).

Audience’s concerns were mainly directed towards the potential politicisation of institutions. Undermining institutional legitimacy and trust, according to those we interviewed has the potential to occur when museums present unsubstantiated opinions and openly engage in a partisan debate.
It would turn [museums] into a different institution altogether if they were trying to lead public opinion...that would border on political (Contested Sites Visitor Focus Group Transcript).

Although it is clear that both institutions and communities see museums as having a vital role in the engagement of controversy, and many institutions are indeed tackling ‘hot’ topics, there exists an uneasy tension between how to negotiate their institutional settings; a lack of clarity about their roles and responsibilities; how to position themselves around controversial topics; larger concerns around the potential incompatibility of existing institutional forms; the need to (re)invent new ones to remain relevant; and to maintain perceived legacies of impartiality and trustworthiness.

The second part of this paper interrogates these blockages and proposes with greater clarity drawing on contemporary cultural theory and empirical data, ways that institutions might (re) formulate their roles as actors and arenas to better embrace controversial topics and controversy in light of emergent social conditions.

**Global risk society – a new optic for (re) conceptualising controversy and museums**

Ulrick Beck’s Global Risk Society (Beck 1999), Manuel Castell’s (1996) network society, Zygmunt Bauman’s (2007) liquid modernity, and John Urry’s (2003) global complexity are all theoretical paradigms that interrogate contemporary social conditions operate as an optic to critique the museum project, consider current programs and (re) frame museums roles in a world characterised by global risks and hazards.

Central to Beck’s idea of global risk society is the concept of risk. Risk, its forms and means of control I argue, acts as a unique entrée into a critique of the modern museum, how controversy is viewed and managed as part of this project and offers a way of articulating new formations for controversial engagement in contemporary museums.

Risk is deemed the key motivator in the transformation from first modernity - national industrial society and its social forms based on territorially defined collective patterns of life, the family, the welfare state and the union, the exploitation of nature and the idea of technological and scientific progress to new articulations of society defined as second modernity - contemporary global society (Beck, 1999). According to Beck (ibid) risk is a modern approach to foresee and control the future consequences of human action and the various unintended consequences of modernisation. Risk predisposes decisions. It operates in an immaterial form as mediated and contested definitions of risk, both real and imagined in the private consciousness of individuals and public consciousness of society, and in a material form, as manufactured by experts and industry worldwide.

The articulation of new social forms is just one element, the other are the bases of contention and justice - the former being the distribution of scarce goods or wealth
through class and unionised struggles, to one based on the distribution of ‘bads’, risk and hazards such as climate change. The latter is important in articulating new interventions around risk human rights for museums in an increasingly politicised global risk society. Topics deemed controversial and those identified as part of the research such as genetically modified foods, biotechnology, war, terrorism and environmental degradation are necessarily part of the structure of risk conflicts articulated around competing definitions of risk and their various material forms.

The risk regime of modernity is conceived as an objective entity one to be controlled through calculation, assessment and probability (Powel, 2007, p.70). The sociology of risk promotes the establishment of control and preventative mechanisms such as expert knowledge systems, museums, the police, government and insurance. These institutional forms are inseparable from the politics of risk - real and perceived threats to our fundamental political ideals of liberty, justice, rights and democracy.

**Museums as institutions of first modernity – institutional forms and controversy**

Museums for example were established as institutions of first modernity. They were conceived as places to control risk by monitoring cultural conversations, to educate by setting moral standards, by reforming behaviour, and by producing responsible citizens (Bennett, 1995; Cameron, 2007). They were framed to celebrate science and technological development promoting a radical optimism and certainty about the future by producing knowable, certain expert knowledge. Expert systems of knowledge based on scientific objectivism promote the former, while social recognition of other forms of knowledge cast as lay, have been withheld. The individual is conceived as a unit within society, disciplined and shaped through an educational lens according to the mores of the governing classes (Bennett, 1995). It is therefore not surprising that controversy has no place and is indeed incompatible with this institutional formation, given the emphases on authority and discipline, the collective and audiences as objects of governance, and the exclusion of the non-expert voice. The legacy of this form was expressed by one staff member at the National Museum of the American Indian:

> we do very well at being intellectual bastions; we don't do very well at giving social experiences...if we become better social experiences we may be more able to deal with controversial topics (Contested Sites Staff Focus Group Transcript).

The reworking of the museum idea in the 1980s, in philosophical terms as the new museology, and in practice as the forum for debate (Cameron, 1971) offered new hope in the representation of difference and contention. However, this model is posited on the idea of the ontology of difference and the representation of gender, ethnicity and so forth. Pluralism and diversity tends to act as separate non-interacting entities to describe the subject and represent the whole, for example a cultural group or a community. Within the forum, museums are still reluctant to admit non-expert knowledge and contention as a core theme except on the periphery.
The erosion of first modernity and the museum project

The erosion of first modernity, the museological project and the incumbent need for new institutional forms around controversy is driven by the unintended consequences of the success of industrialised society. That is, the emergence of hazards and those deemed as potentially threatening such as the degradation of the environment and climate change; terrorism; nuclear accidents; global financial meltdowns; threats to food supplies; genetically modified foods; BSE; cloning; infectious diseases such as HIV Aids along with the effects of globalisation, individualisation due to neo-liberal policies (placing a new emphasis on the individual as responsible for their own self-interest, self care and self-help) and reflexive modernisation (the self-critique of modern society).

As these manufactured risks become prominent and are made objects of expert, public and personal concern, the failure of expert systems to manage uncertainty and calculate risk precipitates a public breakdown of trust in science, corporations and government. This leads to doubt, uncertainty about the future, insecurity, instability and the emergence of new dialectics of conflict over the distribution of ‘bads’, risks or hazards. This is most evident with climate change. Unintentional and in the shadow of global dangers and uncertainties, society opens to the sub-political. That is, the rise of the concerned and responsible individual globally networked sub-political movements (outside representative government), trans-national institutions, the emergence of discourse coalitions and opening up to the possibility to alternative knowledge systems. Individualisation, scepticism and diversity become written into society. These social and institutional forms and methods of engagement according to Beck (1999, 20) signals the “emergence of a new kind of capitalism, a new kind of economy, a new kind of global order, society and personal life”.

The theoretical orientations of Castells (1996), Bauman (2001) and Urry (2003) more clearly articulate what these social and institutional forms look like particularly in terms of the use of digital technologies in shaping global society, one in which Beck fails to address. Castells (1996) describes contemporary society as an ontology of network cultures, as a new social morphology that substantially modifies the operations and outcomes of processes of production, experience, power and culture.

Bauman (2001) uses the analogy of a transformation from a solid structure to liquid forms. According to Bauman’s thesis, solid frames for structuring human actions give way to a networked society, a matrix of random connections and disconnections of an infinite nature on which endemic uncertainty prevails. These fluids according to cultural theorist John Urry (2003) are partially structured by the various scapes of the global order, the networks of machines, technology, organisations, texts and actors that constitute various interconnected nodes along which flows can be relayed. Here societies are lying truly wide open, materially and intellectually, impotent to decide its own course with any degree of certainty. The erosion of the museum project is clearly evident in these liquid network formations. In these new formulations of global risk society, boundaries between the museum and the social space of lived experience are erased. The
unmanageability of contemporary threats particularly in the world of Web 2.0, and the internet - a medium that promotes debate and citizens as producers - questions the validity of risk-regulating institutions such as museums, and their ability to limit and control danger, to regulate cultural conversations, to act as moral and reforming technologies around hot topics, and to act as authorities in promoting social mores. For example museum collections data is being appropriated in social networks for political purposes outside the ambit of the museum. Via Google, collections of Persian objects, used as signifiers of Iranian cultural identity were mobilised to counter negative representations of ancient Persia following the 300 movie controversy about the battle of Thermopylae between the Persians and Spartans in 480BC (Jones, 2007). Searches for the film 300 were diverted away from the film to a website Project 300 that displayed contemporary Iranian art, documentaries and links to the British Museum’s Forgotten Empire exhibition of Persian artifacts (ibid, 6). Art works were used as a tool to project positive representations of Persian civilisation and bolster contemporary national narratives.

The risk regime has changed. As industrial projects and their incumbent and perceived risks become political, institutions become part of this new structure of risk conflicts. Museums as contemporary places where science and society meet require a consideration of new social relations. Moreover, as people reflect on the bases of democratic, national, economic model of first modernity and examine their prevailing systems for example, museums as spaces for promoting scientific and technological development, they too become the subject of critique.

The museum form of second modernity and its role in risk management and agency in the engagement of controversial topics therefore necessarily takes a new turn. Embracing these new risk contexts can be viewed as a bold initiative. Beck suggests that in this age of uncertainty and ambivalence with constant threats, be it disasters, events or debates, we need to re-invent our political institutions and new ways of conducting politics at social sites previously considered un-political. Beck suggests that there are three responses to risk: denial, apathy or social transformation (Ekberg, 2007). Clearly to embrace risk in all its uncertainties, museums must think and be organised differently.

Museums, risk regimes, and as institutions of second modernity
So according to my own assessment of Beck, Castells, Bauman and Urry, and drawing on the research findings of the Contested Sites project, what might the institution of second modernity look like and how might this inform ways to more meaningfully engage controversial topics and science controversy given shifting social conditions and circumstances?

Life politics, global risk biographies and the self-interested visitor. One of the key social forms in second modernity is the notion of individualisation. Here and within the museum the individual is reshaped from solely an object of discipline to one that is also reflexive, political and driven by self interest. The use of museum information in the formation of biographical details is evident in this response by a visitor to the Canadian War Museum, and typical of many others,
Museums give a non-biased view of events and issues and allow people to form their own opinions (Contested Sites Canadian War Museum survey).

Focus group research clearly shows that the loci of responsibility for engaging with controversial topics and for reform, remains with the visitor through the development of their own biographical solutions. So how do these biographical processes operate around controversial topics, and where are museums positioned in this process? For around 25% of focus group participants, museums act as spaces for historical reflexivity. They are places to gain information on ‘hot’ topics and events in the historical record. Audiences use this symbolic content to look and learn about the past by engaging their own capacities for inner reflection and to evaluate their own values and beliefs.

Museums are reflective, there is ...an opportunity to reflect on the past (Contested Sites Visitor Focus Group Transcript).

This is likened to media theorist John Thompson’s (1995, p.42-3) analysis of media content. He argues that audiences appropriate messages and make them their own in a process of self formation and self understanding (ibid).

For the majority, 55%, contextualization acts as a reforming tool. Applied to current as well as historical topics and events, this approach enables audiences to understand their origin, complexities and likely ramifications,

with September 11 and the Bali bombing for example, a museum’s role is to build up a historical picture of where these events originate (Contested Sites Visitor Focus Group Transcript).

Symbolic content is deployed for locating, constructing and reforming self, understanding others, in reshaping stocks of knowledge, testing feelings, attitudes, re-evaluating moral positions and expanding horizons of experience,

It is important to get some reference to where you sit in the scheme of things--where is my place in all this (Contested Sites Visitor Focus Group Transcript).

It resonates with diagnostic reporting by deconstructing problems, analysing causes and in portraying the context in which the story is taking place (Alagiah, 1998, referenced in Tester 2001:39).

For around 20%, reform referred to activist agendas, and the involvement of an active re-shaping of an individuals’ behaviour to bring about change. That is, by opening people’s minds to alternative views on a given topic and offering suggestions on how audiences might become active to bring about change,

If museums are to continue to exist as people friendly institutions, they have to have programs to educate people about the history of terrorism, why it
happens and the role of civil society to combat terrorism (Contested Sites Visitor Focus Group Transcript).

Here symbolic content acts with self to interrogate choices, motivations and frame action,

_I like the idea of an exhibition being empowering – in presenting good ideas and how do you turn that into action_ (Contested Sites Visitor Focus Group Transcript).

This research suggests that relationships between museums and audiences in the engagement of controversial topics require a new account of self as a symbolic project that is self-acting, more open-ended and reflexive. According to 80% of audiences surveyed, institutions are seen as having the power to challenge people’s ways of thinking and shift an individuals’ point of view. The means of constituting and reforming self, however, refers to a greater ability to self regulate, evaluate and process a range of information on their own terms,

_museums should not express an opinion, they should provide good information and arguments….We have our own opinions_ (Contested Sites Visitor Focus Group Transcript).

But how can institutions innovate further to allow their audiences to be more politically reflexive around science controversy? This represents a shift from the moral individual, to rights to knowledge and to have a say in risk management. Given that reflexive notions of the future and hazards disrupt and critique science and technological notions of progress and forms of rationality, how can institutions facilitate involvement in decision-making and discussions about scientific research and technological development in an unknown and uncertain future? And how can institutions move beyond the individual as a locus of responsibility in terms of choice and burden, to one of collective individualism, and critique and challenge government, industry, business and science, the agencies from whom sources of risk tend to originate? The allocation of risk, in which science controversy is a central theme, suggests a new political project for museums in terms of risk conflicts and in building trans-national risk communities.

**Engaging risk conflicts.** Given that risk conflict and conflictual co-existence are central elements of global risk society how can institutions re-position these dynamics at the centre of the museum while maintaining institutional legitimacy and trust? The Contested Sites findings suggest that for 90%, this is tantamount to offering opportunities to express their opinion,

_everyone should have the opportunity to express their political view whether others agree with it or not_ (Contested Sites Visitor Focus Group Transcript).

For others it also involves engagement with other visitors, the institution and the ability to leave evidence of debates in exhibitions,
with more discussion, people would be better informed and therefore form their own opinions (Sydney Pulse Report, 20).

Clearly museums have a role in the staging of self culture – the cultural and political dynamic of one’s own life. So how can institutions move beyond the individuals own expression of opinion and as the moral activist, to facilitate opportunities for other forms of political reflexivity through engagement with sub-political movements, in building shared communities of risk in a trans-national contexts through direct action?

**Discourse coalitions and reflexivity.** In these new risk contexts museum expertise is reformulated. The findings from the Contested Sites project show that museum information is still highly respected and influential,

* museums have a reputation like university professors, and you expect to see things which have the backing of scientific method. It is not just some ratbag sprouting propaganda, it’s a well thought out established viewpoint.

While still seen as trusted, respected and more informed in a world of uncertainty, their struggle for primacy has been largely lost. Museum expertise becomes just one of the many narratives that operates with others as part of discourse coalitions in public debates, albeit a very important one in framing self culture,

*Museums could present lots of different views that call into question people’s views* (Contested Sites Visitor Focus Group Transcript).

To this end reflexive strategies become paramount both in terms of the institution as self critique and in the interpretive framing towards informing self. For 70%, this involves techniques that facilitate critical thinking. That is, through carefully selected and authoritative scholarly information, multiple perspectives and opinions on given subjects, source transparency, interpretive guidance and the framing of content to show how judgements are formed and decisions made. Clearly this represents a reformation of the notion of institutional trust to one of active trust firmly based in the concept of self culture. It is premised on the notion of dissent, rather than consensus, and rests firmly on the recognition to the rights to ‘one’s own life’.

**Nodes in global networks: trans-national institutions and risk human rights.** In second modernity the public fora is (re)written on the basis of a new ontology of institutions as nodes in fluid networks where the value of communication and interaction rather than the ontology of difference as explained in the earlier discussion. The ability to link, embed and connect museum information to public culture debates and harvest information from a range of sources is enhanced via Web 2.0 and with the emergence of social spaces such as MySpace, YouTube, Flickr, Facebook and Second Life. Museum information now operates in fluid, global networks connected to other social, political, cultural resources and agendas. These contexts in which people more easily become content producers, interact with, share information, engage in social action and
participate in social networks pose a series of new risks and opportunities for museums - the latter to reconnect with public culture debates and build communities around risk human rights. Clearly when considering museum-public culture interfaces there is a move from museum hierarchical organisational forms as separate, and standing above society, to ones that are more flexible, open, dynamic, relational and interactive that operate as nodes in networks able to connect with other resources. New roles emerge as museums operate as attractors in a network bringing various elements, ideas, people and different types of interactions together, and as a border zone where different systems of representation meet.

**Conclusion**

So using Beck’s thesis, what would museums as an institutional form look like, and how might institutions engage global risks such as climate change in new ways? Here an ethos of risk and uncertainty holds the potential for renewal and the development of new institutional forms, where museums are conceived of as complex, open systems, as part of networks in global flows, as platforms for interactions along with the idea of the politically reflexive, active, citizen.

One of the key themes is the intensified responsibility placed on the individual to define themselves, make choices and decisions about their lives in order to form their own biographies. In the past institutions were involved in shaping and reforming the individual by prescribing moral standards and forms of behaviour. Now institutions need to assist the ‘self interested’ visitor in forming, planning and designing themselves as individuals on their own terms. The moralising and reforming frame might be conceived of as more self-acting through the production of information in a way that facilitates critical thinking and self action.

The notion of expertise and risk definition needs to become broader, away from a solely scientific and economic perspective to one that engages culture and their competing definitions. Our research suggests that expert systems as knowledge resources such as museums are still important. There is however, a need to acknowledge that museum expertise operates as one group which interacts according to their own rules along with others, creating their own properties and knowledge in the cultural order. Museums in a complex system can be conceived as a thought collective – part of a group performance along with other agencies for mapping out the social world around a given issue or event.

New modes of trust now exist in a contemporary risk society. Because reflexive individuals form trust relationships based on mutual, reciprocal and active trust rather than trust that is passively accepted as in the past, institutions need to build on and reframe this trust relationship by adopt a more open, flexible and less hierarchical style of engagement and interaction, through reciprocity, exchange, dialogue and decision-making. Controversy is seen as productive, as a means to generate and gather together a range of views around a given subject, rather than something to be controlled and minimised, as an expression of an individual’s self politics.
The museum sector has the opportunity to take advantage of networks and capitalise on their variability, interconnectivity and intercommunication as a means to contribute to contemporary debates – as trusted and respected information sources. There is an opportunity to view museum information as cultural and economic capital that can be used to activate, and contribute to discussions, gain currency and strengthen public-museum culture links. This might involve actively embedding museum information in debates, i.e. blogs and social spaces, and also harvesting information from the outside i.e. news feeds etc into the museum space.

New political forms emerge according to Beck’s thesis. Here institutions might consider how they might become part of sub-political movements and define what their interventions might look like within new political formations.

Climate change risk for example has the potential to build trans-national communities and networks, and to activate a cosmopolitan imaginary. The seeds of these transformations can be seen with the Climate Change Youth Forum at the Natural History Museum in 2006 and the IGLO initiative. In a networked form, museums can operate as nodes in fluid networks and flows of information, people and resources and contribute to building communities by promoting public awareness of risk and by activating and connecting with others across borders over shared risk.

The advent of sub-political formations enables institutions to build new alliances with NGOs, experts and other grassroots movements as part of these new political constellations. The question is where might they fit in these formations for example, providing much needed information on climate change risk for example, connecting, networking, building alliances, developing forums for shared perceptions of risk, challenging the agendas and policies of government, corporations and so forth. Institutions must also become self reflexive, to critique themselves and make their positions transparent.

Museums may have new roles in risk human rights, that is, rights to information about risk and to participate in decisions with trans-national impacts. This could include the creation of trans-national connections to activate discussions about risk allocation and inequalities in people’s risk positions.

Perhaps institutions have a role with other agencies in public political culture to activate and broker cross-sectoral discussions and decisions with government, business, industry and communities around the larger systematic shifts about post-carbon futures for example. The focus politically is on the carbon economy and protectionism, rather than looking to the longer term about how we want to live. Sub-political movements of people developed out of climate change risk made public, can pressure these coalitions to bring about change and to collectively imagine an unknown future.

Institutions may have a role in networks for direct action and trans-national protest by activating discussions, mobilising people, providing links to a range of information, acting as mobilising points. They may have a role in contributing to
the socialisation of risk across generations helping people to define their own biographical positions about what an imagined future might look like.

Some of these ideas are utopic. Potential interventions will vary between institutions. The challenge is to reconcile institutional forms and museum-public culture interfaces with the political settings institutions operate within.

The institution of second modernity heralds a new era in museology. This process of transformation and research into interventions and institutional forms as part of global risk society is the focus of a newly funded ARC international grant “Hot Science Global Citizens: the agency of the museum sector in climate change interventions.” The findings to inform this transition will emerge over the next three years.
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