

Planning Mega-Event Legacies:

Uncomfortable Knowledge for Host Cities

Allison Stewart^{a,b} and Steve Rayner^a

^aInstitute for Science, Innovation and Society, University of Oxford

^bBT Centre for Major Programme Management, Saïd Business School, University of Oxford

Corresponding Author: allison.stewart@sbs.ox.ac.uk

DRAFT

Comments welcome. Please do not cite or quote without the author's permission.

Planning Mega-Event Legacies:

Uncomfortable Knowledge for Host Cities

Abstract

The rhetoric employed when cities bid for the right to host mega-events like the Olympic Games suggests that benefits will include improved infrastructure, investment in city infrastructure and regeneration of neglected urban areas. However, the legacy of mega-events has historically been mixed; while some cities have been recognised for their development efforts, many others have been vilified for their subsequent actions, or lack thereof. The term legacy itself is, however, problematic; it presents a one-sided view of positive effects, without adequate consideration of downside risk in bidding.

This research draws on interviews from people involved in six different mega-events, and illustrates the challenges of addressing legacy with a variety of examples, including a detailed look at the London 2012 Olympic Games' legacy negotiations regarding the use of the Olympic Stadium to gain insight into how legacy opportunities are developed. Using the concept of uncomfortable knowledge, the dispute over the legacy use of the Olympic Stadium is used to examine the mixed perspectives of the different parties involved in decisions over mega-event legacies. We conclude by suggesting that unacknowledged interests, which remain constructively ambiguous during the bidding phase, create the opportunity for uncomfortable knowledge to arise in the planning process. The use of uncomfortable knowledge as a theoretical lens provides a useful construct to focus on the boundaries and limitations of knowledge in planning mega-events.

Keywords: Urban development; economic and regional development; legacy; Olympic Games; Commonwealth Games

The Role of Mega-Events in Developing Urban Legacies

The hosting of mega-events as a strategy for urban development is a significant trendⁱ, and competition between cities bidding for the right to host mega-events, such as the Olympic Games, is increasingly intenseⁱⁱ. Mega-events, defined as “large-scale cultural (including commercial and sporting) events which have a dramatic character, mass popular appeal and international significance,”ⁱⁱⁱ provide a unique opportunity for cities to invest in long-term urban development, including improvements in infrastructure, new housing, and the establishment of sports facilities. Chalkley and Essex^{iv}, Andranovich, Burbank and Heying^v, and Essex and Chalkley^{vi} have all discussed how the pursuit of hosting sports mega-events has emerged as a strategy for cities to obtain access to limited funds in the competition against other urban centres. However, the delivery of the promised benefits for these events has been more elusive. Chalkley and Essex^{vii} suggest that, “The most ambitious Olympic hosts have seen the Games as an opportunity to bring forward long-term plans, to accelerate the pace of change and... to pioneer the implementation of new planning concepts.”

Bids for mega-events usually rely on promises that are made with respect to the legacies that they will provide. Horne and Manzenreiter^{viii} suggest, however, that while “the ‘legacies’ – whether social, cultural, environmental, political, economic or sporting – are the greatest attraction” of hosting mega-events, they “also form part of the ‘known unknowns’” of such events^{ix}. Horne^x suggests that this is because benefit projections are often aspirational in the bidding process, and the practical realisation of these benefits is prone to challenges. Therefore, while hosting mega-events has been an extremely successful urban development strategy for some cities, it has also been a risky strategy for others, like Montreal, which significantly overspent its budget when it hosted the 1976 Olympics^{xi}. While it has also been suggested that residents of mega-event host cities benefit indirectly from mega-event investment in a ‘trickle-down’ effect, research support for this argument is not consistent. Andranovich *et al*’s^{xii} study of American cities that have recently held the Games suggests that cities often cite a projected increase in tourism as the reason for bidding for a mega-event, although the London 2012 Olympics actually had a negative impact on tourism^{xiii}. While Preuss^{xiv} also agrees that the Games “can stimulate tourism and bring decisive arguments for a city to be chosen as a location for the settling of industry,” and Chalkley and

Essex^{xv} suggest tentative support for increased tourism in the short-term, other studies have suggested that this increase is negligible at best and that the legacies of the Games are "difficult to quantify, prone to political interpretation and multifaceted," ^{xvi}. Although increased tourism is only one of the more commonly cited benefits for host cities, the disputes in determining the benefits of this largely quantitative measure of 'success' are illustrative of the larger problem of assessing legacy benefits. The legacy benefits of infrastructure investment have also been heavily questioned; as Vigor, Mean and Tims^{xvii} state, "infrastructure investments are often misplaced and the benefits fail to flow back to the people and places that need them most." Cull's^{xviii} description of the current state of the 2010 Shanghai Expo site as "acres and acres of roadway and bare concrete lots studded with one or two building projects and some active demolitions..." also emphasises the potential lack of long-term benefits from these events.

Discrepancies between the commitments made in mega-event bids and the legacy benefits delivered after the events have been highlighted in a number of fields. The study of mega-event programmes has attracted attention from scholars in diverse areas such as urban development, project/programme management, and sports management, as mega-events have become increasingly significant as a subject of sociological study^{xix}. Examples such as Montreal and Shanghai provide little basis for optimism among future host cities, particularly when governments' plans for long-term redevelopment through mega-events are vague or absent^{xx}. Whitson and Horne^{xxi} suggest that "a major feature of analysis of sports mega-events has been the gap between optimistic forecasts and the actual impacts of Games on the local economy, society, and culture." While there may be good reasons for this gap, including external market or political forces, changing priorities, and resource challenges, this discrepancy between bid commitments and the delivery of outcomes is still a major risk for any city or country planning to invest in hosting a mega-event.

This conclusion will not come as a surprise to anyone familiar with the development of mega-events in recent years. Indeed, the discrepancy has been clearly highlighted by academia and by the media, with intense focus on the 'white elephants', or unusable stadiums that often remain as the legacy of mega-events. However, while it is tempting to

suggest that this is a normal and, by implication, acceptable course of events, it is important to explore the underlying reasons for the discrepancy and to consider how this situation might be addressed in the future.

The central theme examined herein is the question of how and why the disparity between bid commitments and their legacy realisation evolves during the delivery of mega-events. This question is explored by examining a variety of mega-events, while drawing particularly on the dispute over the legacy use of London 2012's Olympic Stadium to demonstrate the disparity and suggest some possible reasons for this situation. This article seeks to examine the evolving role of 'legacy' during mega-event development, from a vague concept used as a common goal to unite disparate parties to 'uncomfortable knowledge' that is avoided or suppressed.

Research Approach

To understand the phenomenon of the evolution of bid commitments into legacy delivery, a number of sources were examined. First, a review of existing literature on mega-events and on related topics was conducted, to understand the breadth of work already done in this area. Mega-event legacies have attracted attention in a number of fields, and drawing these areas together helps to form the context within which this research was conducted. In addition, a broad literature on applicable theoretical concepts was considered, including on the subject of uncomfortable knowledge, which is used as the core theoretical lens for this piece.

The second source of data was primary research, including interviews with individuals involved in six different mega-event Organising Committees (OCs) delivering events between 2010 and 2016, and those related to these organising committees, in addition to observation of interactions and presentations between members of these committees. Questions regarding legacy formed a portion of this broader study on the management of mega-events^{xxiii}, which was conducted over a period of 15 months and amounted to 139 different interactions that were documented and analysed. Due to the concerns of several interviewees about the possible personal implications involved in providing information about their experiences in working with mega-events, as well as the organisations' confidentiality

concerns, these interactions have been anonymised and are presented using a unique identifier beginning with 'I' for interviewees (e.g. I-95) and with 'S' and 'O' for sessions where information was presented and observations of the interviewer, respectively. The data obtained through primary sources were coded using NVivo and analysed using recommendations from Punch^{xxiii} and Miles and Huberman^{xxiv}.

The third source of information used in this study was archival records, including official reports, government documents, and commentary from the media. While mass media is sometimes not considered a credible source of information, Yin^{xxv} includes it in the category of archival records, and for the purposes of this study it serves as an important and relevant source of evidence of what is in the 'public sphere' of knowledge. It is used in this study as a proxy to support the evolution of information where this is not documented in formal sources.

As in any research where the subject of study can be interpreted as being critical of the organisations involved, this research inevitably shows a particular lens through which the data can be interpreted. The aim of this research is to present a perspective that is complementary to other corroborating and conflicting views, in order that the broader context of the situation can be better understood.

What is Legacy Anyway?

To fully examine the discrepancies between bid promises and legacy delivery, the term legacy must be adequately defined. According to Hiller^{xxvi}, the legacy of the Games amounts to the 'post-event consequences' of sports mega-events, and Leopkey and Parent^{xxvii} call it a proxy for 'return on investment'. This 'return on investment' is characterised differently by the two central organisations involved in planning any mega-event: the OC, which focuses on hosting the event itself, and therefore on the short-term offset of money spent, and the host country government, where the investment is larger and focussed on the long-term use of anything created for the event, or what the government 'gets' out of the effort^{xxviii}. However, as one interviewee noted, these two objectives cannot exist independently:

“...if you focus on legacy rather than delivery you are in danger of not delivering and if you [only] deliver there will never be a legacy... It will

be a self-fulfilling prophecy if it all goes well at Games-time, but if you completely screw it up at Games-time because you were thinking about what you were going to do [after the Games], there is no point.”^{xxix}

While the concept of legacy is thus acknowledged as a central requirement for Games bids, the question remains as to what is actually meant by legacy.

The concept of legacy has been popularised to the point that it retains little semantic significance, which is reflected in the preparation of bids. Bid documents often lack specificity about the details of the legacy benefits, framing them in ways that are vague and encompassing without clear strategies to achieve the proposed benefits. This may be because there is an enticing vagueness, or ambiguity, in the term legacy that lends itself to broader agreement; as Sunstein^{xxx} argues, when outcomes are agreed, the theoretical reasons for the agreement may not need to be aligned^{xxxi}. Andranovich *et al*^{xxxii} similarly suggest that there are differences in the way that different parties conceptualise a mega-event bid, which help it to gain wider support. As one interviewee described:

“Why is the [national] government prepared to fund 80% of the public funds coming in, what’s in it for them? It’s not necessarily because they love sport. It’s because they want a particular outcome from this... and quite clearly, it’s regeneration, it’s about putting the city on the map. The [national] government’s about putting [the country] on the map. It’s lots of things. So each partner has a different role or a different goal or different goals.”^{xxxiii}

Thus, it serves all parties to agree on a broad legacy even where ideas on what actually constitutes the legacy and how it can be established may differ. Another example of the benefit of ambiguity in mega-event planning comes from Burton^{xxxiv}, who suggests that there is not only ambiguity in benefits, but in costs as well. He asserts that this ambiguity of costs may be the sole way that some Olympic cities are able to host the Games at all. Burton claims that with greater transparency over actual costs and benefits, the Games would likely prove to be uneconomic, or at least unpalatable to taxpayers as a suitable return on investment.

Finally, there are issues with the use of the term legacy as a solely positive and all-encompassing phenomenon. While the literature has used the term legacy to address both positive and negative impacts of mega-events, mega-event bids often adopt a heavily eulogistic approach in the discussion of legacy, focussing on broad statements of positive

outcomes. While the IOC's Evaluation Commission is intended to provide an independent evaluation of the bid, their role is focussed on evaluating what is documented, while giving a brief summary of anything that is evidently missing, rather than highlighting potential negative outcomes of the events. The term legacy in mega-events has thus become synonymous with the term benefits, while negative 'legacies' are defined by a plethora of different terms, such as 'white elephants', or 'displacements' that are not easily recalled for comparison. Some might suggest that this is because the bid document is a sales document; however, given that it becomes a legally binding agreement when the Host City Contract is signed, it could equally be argued that the downside risk should be openly assessed in its contents.

Uncomfortable knowledge

Rittel and Webber^{xxxv} have noted that a multiplicity of perspectives characterises most urban policy challenges, which give rise to 'wicked problems', in which there is no clear preference among alternative solutions, or even agreement over the nature of the problem. Wicked problems have no clear or definitive definition or resolution due to the different opinions of policy makers and members of the public with regards to the fundamentally irreconcilable viewpoints that are held, which underlie their preferences between the options^{xxxvi}. An example of a wicked problem is the selection of new energy technology for a country; there are many different and conflicting solutions that have fundamentally different bases as starting points that are fundamentally irreconcilable, stemming from different beliefs about priorities of safety, cost and sustainability. In the case of mega-event legacies, it is likely that the different objectives of the parties involved in planning the events, the vague terms used in the bids, and the positive and all-encompassing views of benefits to the city are likely to create the conditions for a wicked problem.

This study examines how wicked problems also generate 'uncomfortable knowledge', which forms the basis of the discrepancy between bid commitments and legacy realisation. The idea of uncomfortable knowledge stems from the anthropological insights of Evans-Pritchard^{xxxvii} and Douglas^{xxxviii}, and Rayner explicitly relates the idea of uncomfortable knowledge to the work of Rittel and Webber on wicked problems^{xxxix}. Rayner^{xl} suggests that maintaining any single viewpoint on a wicked problem often requires the exclusion of

alternative viewpoints, particularly those that are in tension with or that contradict the preferred view. He calls the excluded information 'uncomfortable knowledge', which he defines as knowledge "lying on the boundaries of what is organizationally knowable and not knowable."^{xli} Uncomfortable knowledge calls the underlying belief system of the preferred view into question, and can therefore be both awkward and dangerous to those interested in preserving the central view. In the case of energy technologies, for example, this may be information showing that the politically preferred energy technologies are insufficient for the country's requirements, or that they have undesirable potential side effects.

In principle, the concept of uncomfortable knowledge challenges the idea that knowledge is a one-dimensional source of positive information, which is accumulated and used to enhance understanding; rather, it supports the view that knowledge also plays a significant role in the creation and deployment of both strategic and passive ignorance^{xlii}. In doing so, it casts knowledge into the role of an active construct, which can drive behaviour, rather than a passive source of 'true' information. A number of authors have built on similar concepts including necessary forgetting^{xliii}, denial^{xliiv} and strategic ignorance^{xliv} that have demonstrated elements of the concept of uncomfortable knowledge.

While the idea of uncomfortable knowledge cannot predict the outcomes of wicked problems, it does offer explanatory power in describing actions of individuals in organisations that may otherwise appear irrational, or counter to the stated objectives. For example, as Rayner, Lach and Ingram^{xlvi} demonstrate in their study on water resource managers' use of short-term climate forecasts, the potential benefits of improved information are often cast against institutional arrangements and political disincentives to knowledge, which can be stronger than the seemingly obvious benefits of more accurate data. When uncomfortable knowledge is considered as a driving mechanism in these examples, it provides a lens through which this behaviour can be interpreted.

Conceptualising bid promises as uncomfortable knowledge presents a new frame with which to examine the challenges in achieving mega-event legacies. Mega-events are characterised by their large and unwieldy group of stakeholders, from the government, to the national sports bodies of countries around the world, to the public watching through the lens

of the media. Before the event is awarded to a host city, legacies are easily promised, and there is little incentive for disagreement between stakeholders and planners focussed on the objective of winning the bid. After the bid is won, however, the constructive ambiguity of the bid gives way to functional planning, and the uncomfortable knowledge of the discrepancies between the initial bid promises and the ability to deliver legacies to meet these promises begins to drive behaviour.

It is important to note that not all discrepancies between bid promises and legacy delivery will generate uncomfortable knowledge; rather, there are many reasons for which a change in the legacy will represent a logical and reasoned decision by the organisers, or by politicians responsible for the event. Organisers have to make trade-offs due to limited time and resources, and plans may need to change over the course of the seven years between the bid and the event. Similarly, members of some new Organising Committees, particularly in countries that have not previously hosted similar mega-events, may simply be unaware of the challenges or opportunities at the beginning of planning for the event, which may affect their ability to deliver on legacy, as highlighted by one interviewee:

“...more and more events obviously have that legacy emphasis and as a result of that, major events are going to developing countries and countries that haven't staged major international events before and I think there are huge challenges in doing that.”^{xlvii}

However, a number of examples of recent mega-events have demonstrated that all discrepancies cannot be effectively explained in these terms. The intent is thus to show a different perspective, and to shed light on why this discrepancy is so persistent.

The evolution of the discrepancy

The discrepancy between bid promises and legacy delivery begins with the bid for a mega-event, when promises and commitments are first established. The Candidature File, or 'bid book', is a legal document that describes the Bid Committee's plans to deliver the proposed mega-event. It establishes the basis for future expectations of the governing body, the citizens of the host city and country, and of the athletes hoping to participate in the event.

However, there is equally an understanding in the Games community that bid books are extremely inaccurate^{xlviii}. While there may be some degree of 'optimism bias' in the

bidding process^{xlix}, there is also a high degree of strategic misrepresentation^l that helps to cultivate a 'win-at-all-costs' sales culture in the bidding phase. For example, at a presentation for future Games organisers, one of the presenters remarked, "there are lies, damn lies, and bid books,"^{li} and another senior interviewee stated that since the bid is a competition, the Bid Committee does what is necessary to secure a favourable outcome rather than what is necessarily best for the host city^{lii}. This culture is at odds with the professed goals of most candidate host cities to generate urban development benefits, and makes it tempting to exaggerate or inflate the potential legacy.

Strategic denial of the likely issues to be faced in realising legacy goals thus becomes an accepted practice during bidding, and sets the foundation for uncomfortable knowledge later in the planning and realisation of the projected benefits. Since this denial is culturally acceptable but politically not acknowledgeable, bid teams become complicit in what Zerubavel describes as a 'public secret' in which there is a "fundamental tension between knowledge and acknowledgement, personal awareness and public discourse"^{liii}. This tension created by the incentive for ignorance may be part of the reason for the discrepancy between bid commitments and legacy outcomes.

Another issue is that bid promises are often publicised extensively in the early stages of a city's candidacy for a mega-event, however, the business of translating promises into plans often requires a substantial revision of the original assumptions of the bid. In some OCs, the legacy is not articulated at all after the bid stages:

"One of the biggest problems we have here in [this city] is they never generated the legacy purpose for these Games. Never a legacy brief. They never really decided after the Games what's going to happen with these venues. You have to start there: you have to start with what is the legacy: the existing venue, the temporary venue, all of those things, what is your legacy?"^{liv}

While this is not common, in many OCs it is clear that there is a 'revisioning' process that happens through increased learning and awareness of possibilities after the bid is awarded, to translate the theoretical concepts of the bid to practical actions. Sometimes the changes are positive, as cited by a senior member of one OC:

"I would say that the scope of the [legacy] programme is shall we say deeper and richer than perhaps we originally envisaged. And that is

really just a function of the way the whole subject has evolved in the last few years. So although it was a characteristic part of the bid – a distinctive part of our bid – I don't think back in [the bid] we fully appreciated how it was going to catch hold.”^{iv}

However, the same logic of this positive transformation applies to areas in which planned benefits are watered down or removed from plans. The revisioning process, which usually takes place in the first two years after the bid has been awarded to a city in the case of the Olympic Games, is typically subject to less public oversight than the initial bidding phases, and it is generally at the discretion of the host country as to whether these revisions are subject to public debate. Thus, while stakeholders may have generally accepted the original legacy concepts, the changes in these priorities are not always reviewed as thoroughly as the original idea. It should be noted that the process of revising benefits from tangible actions is common in developing mega-projects, for example those in transportation and infrastructure^{vi}, and the timeframe of most mega-events means that there is ample opportunity for priorities to change, therefore this is not necessarily a problem in and of itself. In London, for example, the political-economic conditions changed substantially between the bid and the time of delivery with the London bombings and subsequent impact of urban security considerations, as well as the 2008 economic downturn. However, the potential for discrepancies to arise is likely to be greater when there is less opportunity for oversight and challenge. As Minton^{vii} says in her account of the ‘social silence’ around the Olympics, a lack of challenge “raises serious questions not just about the economic rationale for the project, but about democratic accountability.”

Another element of the evolution of the discrepancy between bid promises and legacy delivery is that mega-events often enact legislative changes that alter the circumstances of these decisions and suggest a greater impetus for accountability in aligning short-term decisions with long-term benefits. One of these changes is the legislative authority enacted by those planning mega-events, such as the London Olympic Games and Paralympic Games Act 2006^{viii}, which provides organisers with powers over and above those attributed to most similar organisations. A primary example is the ability of organisers to appropriate land needed for mega-event development, or to circumvent other legislation that is deemed inconvenient. An example from the aforementioned Act is illustrative of this power:

“(1) The Authority may take any action that it thinks necessary or expedient for the purpose of—(a) preparing for the London Olympics, (b) making arrangements in preparation for or in connection with the use or management before, during or after the London Olympics of premises and other facilities acquired, constructed or adapted in preparation for the London Olympics.”^{lix}

These powers are often used by organisers for relocations of urban residents from sites identified for Games venues. Baptista^{lx} refers to the practice of suspending normal planning regulations and laws as operating by ‘regimes of exception’, in which policymakers “apply extraordinary measures that create alternative sets of procedural rules and structures for project delivery.”^{lxi} This practice therefore provides organisers with the ability to act outside of normal rules and to accelerate related projects, as is evident in the wording of London’s Olympic Act highlighted above. While the purpose of these regimes of exception is ostensibly to allow the city to deliver on the commitments promised for the Games, it can equally lead to abuses of due process that would usually be required for major decisions on urban governance. Through the mechanism of exceptions, Baptista^{lxii} found that policy-makers seek to protect initiatives from dissenting agendas. This silencing of political challenge makes it easier for mega-events to divorce bid commitments from the practicalities of delivering the mega-event through a lack of constructive debate. Thus, decisions such as the relocation of residents become a *fait accompli* to achieve the broader aim of the mega-event, rather than a subject of public debate. While this might ultimately be in the interests of the long-term development of the urban area, the lack of debate suggests the presence of uncomfortable knowledge about differences of opinion in legacy delivery.

A number of studies have specifically examined the inconsistency between bid commitments and legacy delivery of housing plans. Cull^{lxiii} for example, asks whether “any public diplomacy or place branding success was worth [the] disruption” of the 18,000 Shanghai residents who were forced to move for the Expo^{lxiv}. A report by the Centre on Housing Rights and Evictions^{lxv} that specifically addressed mega-events, Olympic Games, and housing rights, including case studies from Seoul 1988, Barcelona 1992, Atlanta 1996, Sydney 2000 and Athens 2004, as well as speculations on Beijing 2008, concluded that, “It is imperative that paying adequate attention to housing considerations should be mainstreamed in the bidding and selection process,”^{lxvi} to ensure that the discrepancy between bid

commitments and the realization of relocation plans is reduced. Malfas *et al*^{lxxvii} similarly describe the failure of the Atlanta 1996 Olympic Games to realise promises of poverty alleviation, which were given by Olympics organisers when 15,000 residents were evicted from their homes in preparation for the Games, and Porter *et al*^{lxxviii} describe the residents' perspective on urban regeneration efforts for the Glasgow, London and Vancouver Games, in which efforts to evict residents for many years became suddenly incontestable with the advent of the mega-events and subsequent legislation allowing for quick and efficient displacements^{lxxix}. This is not to say that re-location efforts for the Games are problematic in themselves, but rather that they fail to address the sustainable resolution of underlying issues: "Under the logic of event-oriented development, the *visibility* of poverty becomes paramount in renewal schemes, and preparations often involve removing the poor from high-profile areas surrounding the venues, without significant attention to long-term solutions to slum problems."^{lxxx} This suggests that the pre-existing desire for the relocations becomes uncomfortable knowledge when the existing rationale for forced relocation is reframed in the context of mega-event delivery, in which legacies are generally framed positively. Thus, the role of ignorance is raised again, and the uncomfortable knowledge of mega-event requirements creates the opportunity for decisions to be made without public debate.

The discrepancies between bid promises and the legacy provided by stadiums and infrastructure is possibly more contentious than the issues around housing. While the infrastructure development legacies for mega-events like the Barcelona 1992 and Sydney 2000 Olympic Games have been celebrated in the international media as examples where mega-events have had positive impacts on host cities^{lxxxi}, there are many other examples where this has not been the case. OCs are well aware of the issue of sustainability in constructing stadiums: "These are expensive buildings to build and you have to be able to justify, not just the capital cost, but the ongoing revenue."^{lxxii}

Both the Montreal 1976 and the Athens 2004 Olympic Games have been much maligned for their stadiums and infrastructure, which are known for cost overruns, major delays, and underuse^{lxxiii}. Cashmore^{lxxiv} even refers to the construction of stadiums for the Montreal 1976 Olympic Games as a "debacle", a view that is fairly universally agreed by

mega-event scholars and practitioners alike. Due to political concerns at the time, the Canadian federal government refused to contribute to any excess costs incurred by the Games. While Chalkley and Essex^{lxxv} suggest that, “the Montreal organizers, initially lacking government support, at first matched these aspirations with a modest, self-financing Games,” they later modified their plans to include major redevelopment of the city. Gross mismanagement, labour disputes and unrealistic architectural designs then contributed to a CAD\$1.5 billion debt at the end of the Games^{lxxvi}. More interesting, however, is the lack of discussion that the overrun generated during the course of planning. Following the Olympics, an independent commission was set up to investigate the circumstances of the overrun, tracking the escalation of costs over time^{lxxvii}. It is clear in this report that the extent of the overruns and decisions made were not clear until very close to the Games themselves, that senior officials were in denial about the extent of the overruns, and did not seek to find out the total overrun until the money had already been spent. Nowhere is this exemplified more clearly than in the statements of Montreal Mayor Jean Drapeau who famously claimed that, “the Montreal Olympics can no more have a deficit than a man can have a baby.”^{lxxviii} Another example is Delhi’s bid for the 2010 Commonwealth Games, which stated that the Athletes’ Village would provide “a hostel facility for the Delhi University” after the Games^{lxxix}. Instead, the facilities were too expensive to have a legacy use as a hostel and have been sold as luxury apartments^{lxxx}. Delhi also built 17 new stadiums, an expense that was justified as ‘leaving a legacy for future athletes.’^{lxxxi} This discrepancy in legacy delivery is partly to blame for the 1600% cost overrun incurred by the Games.^{lxxxii} One of the senior members of the OC claimed that he had not been required to prepare or account for any budgets in his planning for the Games, and furthermore, that it was unclear who was responsible for budgeting in the organisation.^{lxxxiii} In this extreme example, it may be conceived that the budgets themselves were uncomfortable knowledge, as the requirements for the completion of Games venues increased the pressure on finishing the work at any cost.

To try to combat the challenges of increasing costs for the Games, the IOC released a report in 2003 that examined the nature of infrastructure events in host cities.^{lxxxiv} In it, they argued for more restraint in developing plans for the Games, and instead recommended that cities invest in plans that coincide with the long-term requirements of the city. The IOC also

advocated the construction of temporary facilities where no legacy requirement is projected; the use of temporary overlay structures on newly constructed facilities where there is a smaller legacy requirement for the city than for the Games; and close monitoring during the construction of any permanent full-size venues.^{lxxxv} While some Games have showed evidence of attempting to address this advice from the governing bodies, for example in Vancouver 2010 and London 2012, the examples of the substantial increases in spending for both the Sochi 2014 and Rio 2016 Games suggest that the recommendations are not consistently followed.

The question of building temporary versus permanent infrastructure also highlights the lack of alignment between the longer-term focus that characterises most bid documents, which often emphasise the prospect of improved facilities for the host city and country, and the shorter-term needs of creating facilities that suit the requirements of the mega-event competition. Leopkey and Parent^{lxxxvi} provide a detailed analysis of the institutionalisation of the legacy concept within the Olympic movement, exploring the introduction of the concept of legacy in the bidding process “in response to criticisms regarding the money being spent on the Games and a way to justify its return on investment.” However, they also describe how the decision to emphasise legacy has bred governance requirements that cause tensions to arise between the need to deliver to the requirements of the Host City Contract, and the more distant future requirements of the city. The pressures of achieving the Games budget and timeline exasperate this situation; some organisers even admitted that this pressure requires them to sacrifice legacy to stay within the budget.^{lxxxvii} Thus, the boundaries between the short-term requirements and the longer-term legacy vision become another source of uncomfortable knowledge, where decisions are made that favour the event over the legacy.

The evolution of London’s legacy

To further examine the evolution of the role of legacy, and the particular example of urban development as a result of the Games, the case of the construction and legacy use of the London 2012 Olympic Stadium is considered. Documentary evidence from official documents and media reports as well as qualitative data collected from those directly

involved in the discussions is used to present a view of how uncomfortable knowledge can affect the future of mega-event host cities.

With claims that the Games would enable the city to “possess some of the finest sports facilities for hosting national and international events” and would support “the regeneration of an entire community for the direct benefit of everyone who lives there,”^{lxxxviii} London’s bid provided the expected flexibility in the delivery of legacy plans while equally establishing very high expectations. London’s bid also outlined plans for an Olympic Stadium to be constructed in East London as part of the ambitious building plan to regenerate the city’s East End.^{lxxxix} The bid particularly specified an athletics legacy for the Stadium, defined as a post-Games conversion of the facility “to a 25,000 seat multipurpose venue with athletics at its core... with training facilities, offices and sports science and sports medicine facilities.”^{xc} The inclusion of an athletics legacy for the city as a central component of the bid was considered by the bid team to be part of the winning strategy to convince IOC members to vote for London.^{xcii} It was also highlighted in the report of the Evaluation Commission of the IOC, who are responsible for evaluating and comparing the bids, which stated that, “The design of the planned Olympic stadium (80,000 seats) would enable seating capacity to be reduced to 25,000 in post-Games mode, for it to become the National Athletics Centre.”^{xciii} The emphasis in these statements, on having a ‘multipurpose venue with athletics at its core’, and on building a ‘National Athletics Centre’, shows a clear and unambiguous commitment to an athletics legacy in the London stadium. However, according an interviewee involved in the bid, the commercial feasibility of the stadium as an athletics venue was in question from the beginning.^{xciiii} Thus, despite the focus of the bid, this suggests that the post-Games use of the athletics facility was uncomfortable knowledge for those involved.

Following London's successful bid, several governance organisations were set up to manage the staging, construction and legacy of the Olympic Games. These were the London Organising Committee for the Olympic Games (LOCOG), with responsibility for planning and organising the event; the Olympic Delivery Authority (ODA), with responsibility for constructing the Olympic Park; and the London Development Authority (LDA), which had original responsibility for the legacy of the Games until the Olympic Park Legacy Company

(OPLC) was established in 2009, and which later evolved into the London Legacy Development Corporation (LLDC) in 2012. In the intervening years, the Olympic stadium was built under the leadership of the ODA, and completed on schedule in March 2011.^{xciv} Over the 5-year period that the stadium was being built, the LDA, and later the OPLC, searched for a legacy owner for the stadium.^{xcv} While turning the stadium into an athletics venue was the vision of the bid, the LDA and OPLC were unsuccessful in finding a bidder to run the stadium as an athletics venue. Thus, they started to explore alternative options for its legacy use and the OPLC decided to run a competitive tendering process for the post-Games ownership of the stadium. While this change suggested that a solely athletics venue was unlikely, the legacy for athletics that had been promised in the bid was still considered to be a significant part of the responsibility for the future tenants, despite the fact that the IOC had stated publicly that they were willing to be flexible on the athletics legacy for the stadium.^{xcvi} This is in line with a general policy of the IOC that reasonable changes requested by the host city are generally permitted.^{xcvii} This suggests that the IOC was willing to acknowledge that the legacy in the bid may not have been achievable, but that for the OPLC this was still organisationally unknowable.

At this stage, the chairman of the ODA first indicated that he was sceptical about changing the vision for the legacy from an athletics venue to other potential hosts, such as a football team: “If you wanted to use it for a Premier League club you would have to completely redesign it and I think we have gone past that point.”^{xcviii} Similarly, in a report on the progress of the Games with respect to legacy use compiled by the Greater London Authority (GLA), the body that is responsible for planning the future of London’s urban development, it is suggested that:

“It was a mistake to design and build the stadium on the basis that it would be reduced dramatically in size after 2012... When London won its bid to stage the Games there should have been an open and thorough analysis of all legacy options for the stadium, which would inform decisions about legacy use.”^{xcix}

Whether a ‘thorough analysis’ would have been able to provide a different solution from what was ultimately a political decision on a ‘wicked problem’ is an open question. A technical analysis may have provided a different lens through which to analyse the legacy consideration, but would more likely have exposed uncomfortable knowledge about the

differences of opinion that existed. Nevertheless, this debate over the legacy use of the stadium continued to appear at the core of discussions as the OPLC searched for a legacy owner.

Two bidders emerged as the leading contestants for the stadium; the West Ham United Football Club, in a bid with Newham City Council, and the Tottenham Hotspur Football Club, in a bid with AEG, owners of London's O2 Arena. Tottenham's bid was based on the idea of dismantling most of the stadium and relocating the athletics track post-Games to a nearby site. West Ham, on the other hand, proposed to keep the athletics track within the stadium.^c The OPLC also reconsidered the option from the original bid proposal, suggesting that "a 25,000-seat multi-use stadium remains a fall-back option,"^{ci} but noted that, "with no commercial backer it would require an annual public subsidy of £5 million."^{cii}

In the ensuing months after the bids were publicly announced, a series of statements began to suggest that the West Ham bid had more backing from the public and politicians. However, Tottenham argued that their bid was more in keeping with the original intent of the bid, as the stadium had never been intended as a permanent facility.^{ciii} West Ham was awarded the legacy ownership of the stadium on 11 February 2011^{civ}, however the lead-up to the decision and the ultimate announcement were surrounded by criticism and threats of legal action, primarily from the Tottenham Club.

A later report by the Select Committee on Olympic and Paralympic Legacy^{cv} stated that in "looking at the future of the Games' facilities, we were disappointed by the disputes over the future use of the Olympic Stadium." However, as one interviewee pointed out, the poor legacy of other Olympic and World Cup stadiums is well known within the Olympic and broader sporting community.^{cvi} In fact, many of the Olympic Games in the last 30 years have had major issues with their stadiums, including Beijing, Athens, Sydney, Atlanta and Barcelona, and while other aspects of the Games provide an excellent physical legacy, this interviewee suggested that the bidding process requires host cities to make promises that are not commercially viable in order to win the bid.^{cvi} This echoes comments by others, as highlighted above, and again emphasises the discrepancy between the publicly stated objectives of the bid, and the ability to achieve them through legacy delivery. It also suggests

that the historical evidence of other cities may itself be uncomfortable knowledge to organisations involved in determining the legacy of their endeavours.

From another interviewee's account, while acknowledging that legacy must be considered, within the London Bid Committee the discussion centred on having the stadium as an athletics facility rather than exploring other options that might meet legacy requirements.^{cviii} This interviewee suggested that the best possible option for the construction of mega-event stadiums is when the post-Games user is identified very early in the bidding or construction process, and ideally where the tenant is secured during the planning process, as was done for the Manchester 2002 Commonwealth Games. London, however, did not follow Manchester's example, so the stadium had to be designed both for the Games and so that it had flexibility for the future, for example by providing the ability to remove the demountable upper structure. Thus, while the original plans were based on the concept of a long-term athletics legacy for London, the realisation of that vision was fraught with the uncomfortable knowledge of how realisable this vision was in practice.

In the example presented by London's Olympic stadium, it appears that one of the initial sources of uncomfortable knowledge stems from the environment in which the bid document is prepared. While academics and practitioners alike both agree that the bid is a document intended to secure votes for that city's bid, the fact that it is then a legally-binding document means that the knowledge of the bid's unreliability as a planning document is subsequently replaced by a necessity to deliver on the promises therein. The knowledge of the bid's aspirational qualities seems to become uncomfortable to those planning for the Games. In London's case, the aspiration of creating an athletics legacy for the city as a winning condition for the bid was challenged by the commercial impossibility of running the constructed stadium for that purpose, as evidenced by the lack of commercial interest. However, according to an interviewee involved in the bid, this knowledge was not by any means a secret to those planning the bid; on the contrary, this was a well-known and understood issue with the legacy proposal.^{cix} Despite this, when the bid was won, it became organisationally unpalatable to acknowledge this issue and thus, LOCOG and the OPLC spent five years attempting to deliver on a promise that had previously been established as a

losing proposition. Finally, they were forced to confront this uncomfortable knowledge when they had run out of options. The impact of this, however, is that the stadium was designed in a way that was not viable for either the preferred option of an athletics legacy, or the realised option of being used as a mixed football and athletics venue, thus requiring significant reconstruction post-Games.

Similarly, the relationship between the host city's government and the planning organisations of the Games is another area replete with uncomfortable knowledge. As government responsibility evolves from conceptually backing a bid to a requirement to deliver on the legacy promises, and usually also to fund any cost overruns that the Games incur, it creates an environment in which the government is a risk-averse funder and accountable party with little control over the outcomes. In the London example, one interviewee suggested that the plan to dismount the stadium after the Games became politically disagreeable because the stadium is an impressive component of the visible legacy of the Games.^{cx} Thus, the interviewee suggested that the government disagreed with Tottenham's plan to tear it down and preferred West Ham's plan to incorporate the existing structure with modifications.^{cxⁱ}

In addition, achieving agreement among the different government stakeholders on the final solution was a complex task. According to one interviewee, the London Olympics had a complicated governance and political structure to be considered, with responsibilities distributed between the organisations described above, as compared to a more integrated planning responsibility for the Manchester Games under a single city council with planning control and responsibility for legacy priorities.^{cxⁱⁱ} The diversity of organisations creates a situation in which there are competing interests in balancing the delivery of the Games, the construction requirements, and the legacy of the venues,^{cxⁱⁱⁱ} which is one of the areas identified earlier as a source of uncomfortable knowledge in mega-event planning. The city council's direct involvement in the legacy of the Manchester Games meant that there was less conflict between the government and private stakeholders. The uncomfortable knowledge that the London stadium was originally designed to be dismountable appears to have been created in part by political boundaries of acknowledgement.

The example of the London Olympics stadium demonstrates the opportunities for uncomfortable knowledge to arise and to affect the planning processes of mega-events, and in particular to disrupt the continuity of bid promises into legacy outcomes. While it is difficult to establish the presence of uncomfortable knowledge in the minds of particular individuals or entities, the concept of uncomfortable knowledge can assist in interpreting the behaviours exhibited, and in articulating the reasons for the continued discrepancies between bids and legacies.

Discussion

Why would uncomfortable knowledge be the source of disparity between bid proposals and legacy realisation? First, we argue, because the bid sets out benefits that are ambiguous, which are thereby agreeable to the multiple parties interested in supporting the host city's candidacy for a mega-event. This 'constructive ambiguity' provides the foundation at an early stage for different interpretations of the final result, and for politically or socially undesirable consequences to be smoothed over. This means that there are inherently unacknowledged interests that remain ambiguous during the bidding phase when a 'united' front must be presented for the purposes of winning the bid, which are later raised when decisions must be made.

Then, there is the process of formalisation of the bid into a legal document; thus, the parties responsible for delivering the Games are required to start from the point where the Bid Committee has left off, no matter how difficult the legacy requirements of the bid might be to achieve. As the planning and development of the mega-event takes place, a lack of desire for public consultation and dispute in considering changes made to initial plans suggests that uncomfortable knowledge may be implicated in driving behaviour. Combined with the legislative power enacted for the purpose of hosting mega-events, the boundaries of the organisationally knowable and 'not-knowable' are carefully managed. In particular, issues around housing displacements, which tend to be politically unpalatable, are conducted with broad vocal adherence to the required legacy of the mega-event but limited argument. Similarly, substantial changes are sometimes made to the original concepts set out in the bid, and new plans are put in place with limited public debate, and often against the

recommendations of the governing bodies responsible for the long-term viability of the mega-event brand. Thus, the short-termism of mega-event requirements and the long-term needs of the host city and governing body are brought into relief, though only publicly acknowledged in rare circumstances.

Finally, the term legacy is itself is a contributor to the discrepancy with bid promises, due to its overly affirmative nature and detachment from the reality of the circumstances of the host city. To illustrate these issues, we reviewed the example of the London Olympic Stadium legacy, and found a number of examples to support the nature of uncomfortable knowledge as a contributor to the discrepancy in the original bid documents.

Fundamentally, uncomfortable knowledge stems from information that conflicts with the prevailing discourse at the time. This is the very nature of a 'wicked problem', which cannot simply be resolved. In the interests of making policy decisions, however, it is clear that compromises must be achieved. The suppression or exclusion of uncomfortable knowledge enables planning to go forward despite discrepancies between bid promises and legacy plans. In applying this to the broader discussion of the impacts on the legacy of housing, infrastructure and stadiums from mega-events, it is worth considering in more detail what the unstated objectives of stakeholders bidding for the Games might be and how these can be addressed more effectively. The future of mega-event host cities depends on being able to articulate the legacy opportunities in a way that is achievable while at the same time securing the right to host the event.

In the context of wicked problems, the concept of uncomfortable knowledge presents a lens through which debates can be conceptualised and interpreted. This lens can be used to look at the spaces between the debates; rather than what is said, uncomfortable knowledge focuses on that which is left unsaid and thus provides an alternative view for those seeking to explore the multiplicity of stakeholders involved in urban development, either for the purposes of mega-events or for other development efforts.

Acknowledgements

This work was supported by the Oxford Programme for the Future of Cities

<http://www.futureofcities.ox.ac.uk>

Bibliography

- Agamben, G. (2005) *State of Exception*. New Serbian Political Thought, 1-4: 135-145.
- Andranovich, G., M. J. Burbank, C. H. Heying (2001) *Olympic Cities: Lessons Learned from Mega-event politics*. Journal of Urban Affairs, 23(2): 113-131.
- Baptista, I. (2009) *Regimes of Exception in Urban Planning and Governance: The Case of the Polis Program, Portugal*. Dissertation: University of California, Berkley.
- Baptista, I. (2013) *Practices of Exception in Urban Governance: Reconfiguring Power Inside the State*. Urban Studies, 50(1): 39-54.
- Burton, R. (2003) *Olympic Games Host City Marketing: An Exploration of Expectations and Outcomes*. Sport Marketing Quarterly, 12(1): 35-45.
- Canadian Olympic Association (1980) *Rapport de la Commission d'enquete sur le cout de la 21e Olympiade (vol 1)*. Accessed 14 September 2011, at the Olympic Studies Centre, call number 721(086)-CIO MA 6754/1.
- Cashman, R. (2002) *Impact of the Games on Olympic host cities*. University lecture on the Olympics, Centre for Olympic Studies at the University of New South Wales (Australia). Available at: <http://olympicstudies.uab.es/lectures/>.
- Cashmore, E. (2005) *Making Sense of Sports*. New York: Routledge.
- Centre on Housing Rights and Evictions [COHRE] (2007) *Fair Play for Housing Rights: Mega-Events, Olympic Games and Housing Rights Opportunities for the Olympic Movement and Others*. Geneva: COHRE.
- Chalkley, B. and S. Essex (1999) *Urban development through hosting international events: a history of the Olympic Games*. Planning Perspectives, 14: 369-394.
- Cohen, S. (2001) *States of denial: Knowing about atrocities and suffering*. Cambridge: Polity Press.
- Commonwealth Games Federation (2003) *The Report of the CGF Evaluation Commission for the 2014 Commonwealth Games*. Available at www.thecgf.com/media/games/2014/2014_Evaluation_Report.pdf.
- Comptroller and Auditor General of India (2011) *Audit Report on the XIXth Commonwealth Games, Report No. 6 of 2011-2012*. Available at: http://saiindia.gov.in/english/home/Our_Products/Audit_Report/Government_Wise/union_audit/recent_reports/union_performance/2011_2012/Civil_%20Performance_Audits/Report_No_6_CWG/CWG%20English%20-%20Part-1.pdf.
- Cull, N. J. (2012) *The legacy of the Shanghai Expo and Chinese public diplomacy*. Place Branding and Public Diplomacy, 8: 99-101.
- Kent, D. "Tottenham go against rivals West Ham to ramp up bid for 2012 Olympic Stadium," Daily Mail, 13 January 2011.
- Department for Culture, Media and Sport (DCMS) (29 March 2011) *Construction completes on the Olympic Stadium*. Available at: http://www.culture.gov.uk/news/news_stories/7999.aspx. Accessed 24 February 2013.
- Douglas, M. (1986) *How institutions think*. Syracuse: Syracuse University Press.

- Douglas, M. (1995) *Forgotten Knowledge*. In M. Strathern, Shifting contexts: transformations in anthropological knowledge. London: Routledge, pp. 13-30.
- Essex, S. and B. Chalkley (2004) *Mega-sporting events in urban and regional policy: a history of the Winter Olympics*. *Planning Perspectives*, 19 (April): 201–232
- Evans-Pritchard, E.E. (1940) The Nuer. Oxford: Oxford University Press.
- Flyvbjerg, B., N. Bruzelius and W. Rothengatter (2003) Megaprojects and Risk: An Anatomy of Ambition. Cambridge: Cambridge University Press.
- Flyvbjerg, B., M. K. Holm & S. L. Buhl (2002) *Underestimating costs in public works projects: Error or lie?*, *Journal of the American Planning Association*, 68(3): 279–295.
- GLA (2010) *Legacy United? The Legacy of London's Olympic Venues*. Economic Development, Culture, Sport and Tourism Committee. Available at <http://www.london.gov.uk/moderngov/mgConvert2PDF.aspx?ID=1265>.
- Greene, S. J. (2003) *Staged Cities: Mega-Events, Slum Clearance and Global Capital*. *Yale Human Rights and Development Journal*, 6: 161-188.
- Hiller, H. (2006) *Post-event Outcomes and the Post-modern Turn: The Olympics and Urban Transformations*. *European Sport Management Quarterly*, 6(4): 317-332.
- Horne, J. (2007) *The Four 'Knowns' of Sports Mega-Events*. *Leisure Studies*, 26(1): 81-96.
- Horne, J. and W. Manzenreiter (2006) *Sports mega-events: social scientific analyses of a global phenomenon*. Blackwell Publishing.
- House of Lords, Select Committee on Olympic and Paralympic Legacy (2013) Report of Session 2013–14, Keeping the flame alive: the Olympic and Paralympic Legacy. London: The Stationery Office Limited. Available at <http://www.publications.parliament.uk/pa/ld201314/ldselect/ldolympic/78/78.pdf>.
- IOC [International Olympic Committee] (2004) *Report of the IOC Evaluation Commission for the Games of the XXX Olympiad in 2012*. Available at multimedia.olympic.org/pdf/en_report_952.pdf.
- Kelso, P. "Olympic Stadium: Tottenham and West Ham left hanging as decision delayed," *The Telegraph*, 24 January 2011.
- Leopkey, B. & M. M. Parent (2012) *The (Neo) institutionalization of legacy and its sustainable governance within the Olympic Movement*. *European Sport Management Quarterly*, 12(5): 437-455.
- London 2012 Organising Committee (2011) *About the Venues*. Available at: <http://www.london2012.com/olympic-stadium>.
- London Bid Committee (2004) *London Candidature File, Theme 1: Olympic Games Concept and Legacy*. Available at <http://www.london2012.com/documents/candidate-files/theme-1-olympic-games-concept-and-legacy.pdf>.
- Majumdar, B. and N. Mehta (2010) *Sellotape Legacy: Delhi & the Commonwealth Games*. London: Harper Collins.
- Malfas, M., E. Theodoraki and B. Houlihan (2004) *Impacts of the Olympic Games as mega-events*. *Proceedings of the Institution of Civil Engineers, Municipal Engineer*, 157(ME3): 209–220.
- McGoey, L. (2007) *On the will to ignorance in bureaucracy*. *Economy and Society*, 36(2):212-235.
- McIntosh, M. (2000) *The Olympic Host City Bid Process: Facing Challenges and Making Changes*. In Messing, M. and N. Muller (Hg.) Focus on Olympism: Discoveries, Discussion, Directions. Walla Walla Press: Sydney.
- Miles, M. B. and A. M. Huberman (1994) Qualitative Data Analysis: An Expanded Sourcebook, 2nd edition. London: Sage Publications.

- Minton, A. (2012) Ground Control: Fear and Happiness in the Twenty-first Century. London: Penguin.
- National Archives (2006) London Olympic Games and Paralympic Games Act 2006. Available at: <http://www.legislation.gov.uk/ukpga/2006/12/crossheading/the-olympic-delivery-authority>. Accessed 27 January 2013.
- Olympic Games Study Commission (2003) *Report to the 115th IOC Session*. Available at www.olympic.org/Documents/Reports/EN/en_report_725.pdf.
- Porter, L., M. Jaconelli, J. Cheyne, D. Eby and H. Wagenaar (2009) *Planning Displacement: The Real Legacy of Major Sporting Events; "Just a person in a wee flat": Being Displaced by the Commonwealth Games in Glasgow's East End; Olympian Masterplanning in London; Closing Ceremonies: How Law, Policy and the Winter Olympics are Displacing an Inconveniently Located Low-Income Community in Vancouver, Commentary: Recovering Public Ethos: Critical Analysis for Policy and Planning*. *Planning Theory & Practice*, 10(3): 395–418.
- Preuss, H. (2002) *Economic dimension of the Olympic Games: university lecture on the Olympics* [online article]. Barcelona : Centre d'Estudis Olímpics (UAB). International Chair in Olympism (IOC-UAB). [Date of consulted: 17/02/10]
- Preuss, H. (2004) *The economics of staging the Olympics: a comparison of the Games, 1972-2008*. Cheltenham: Edward Elgar Publishing Ltd.
- Proctor, R. N. (2008) *Agnotology: A Missing Term*. In R. N. Proctor and L. Schiebinger, eds., Agnotology: the making and unmaking of ignorance, pp 1-36. Stanford, CA: Stanford University Press.
- Punch, K. F. (1998) Introduction to Social Research: Quantitative and Qualitative Approaches. London: Sage.
- Raco, M. & Tunney, E. (2010) *Visibilities and invisibilities in urban development: small business communities and the London Olympics 2012*. *Urban Studies*, 47 (10): 2069-2091.
- Rayner, S. (2006). Wicked problems, clumsy solutions - diagnoses and prescriptions for environmental ills. Jack Beale Lecture at the University of New South Wales: July.
- Rayner, S. (2012) *Uncomfortable knowledge: the social construction of ignorance in science and environmental policy discourses*. *Economy and Society*, 41(1): 107-125.
- Rayner, S., D. Lach and H. Ingram (2005) *Weather Forecasts are for Wimps: Why Water Resource Managers do not use Climate Forecasts*. *Climatic Change*, 69: 197-227.
- Rittel, H.W.J. and M.M. Webber (1973) *Dilemmas in a General Theory of Planning*. *Policy Sciences* 4: 155-169
- Roche, M. (2000) *Mega-events and modernity: Olympics and expos in the growth of global culture*. Abingdon: Routledge.
- Sherwin, A. "Jeremy Hunt admits Olympic Games have put off London's tourists." *Independent*, 2 August 2012.
- Slater, M. "IOC reopens 2012 stadium debate," BBC Sport, 30 October 2008.
- Stewart, A. (2012) Knowledge Games: The Achievement of Ignorance in Planning the Mega-Events of the Olympic and Commonwealth Games. University of Oxford thesis, available upon request.
- Sunstein, C. (1994) *Incompletely Theorized Agreements*. *Harvard Law Review*, 108: 1733-1772.
- Tversky, A. and D. Kahneman (1974) *Judgment under Uncertainty: Heuristics and Biases*. *Science, New Series*, 185(4157): 1124-1131.
- Vadnais, Y. "Montreal Olympics 1976: 'self-financing?'" CBC Radio News, 29 January 1973.
- Verweij, M., and M. Thompson, eds. (2006) Clumsy Solutions for a Complex World: Governance, Politics and Plural Perceptions. New York: Palgrave MacMillan.

- Vigor, A., M. Mean and C. Tims (2004) After the gold rush : a sustainable Olympics for London. London: IPPR.
- Whitson, D. and J. Horne (2006) Underestimated costs and overestimated benefits? Comparing the outcomes of sports mega-events in Canada and Japan. *Sociological Review*, 54(2): 71-89.
- Yin, R. K. (2011) Applications of Case Study Research, 3rd edition. London: Sage Publications.
- Zerubavel, E. (2006) The elephant in the room: Silence and denial in everyday life. Oxford: Oxford University Press.

Endnotes

-
- ⁱ See M. Roche, *Mega-events and modernity: Olympics and expos in the growth of global culture* (Abingdon: Routledge); and, J. Horne and W. Manzenreiter *Sports mega-events: social scientific analyses of a global phenomenon* (Blackwell Publishing).
- ⁱⁱ G. Andranovich, M. J. Burbank and C. H. Heying, *Olympic Cities: Lessons Learned from Mega-event politics* (*Journal of Urban Affairs*), 113-131.
- ⁱⁱⁱ Roche, *Mega-events and modernity*, 1.
- ^{iv} B. Chalkley and S. Essex, *Urban development through hosting international events: a history of the Olympic Games* (*Planning Perspectives*), 369-394.
- ^v Andranovich *et al*, *Olympic Cities*, 113-131.
- ^{vi} S. Essex and B. Chalkley, *Mega-sporting events in urban and regional policy: a history of the Winter Olympics* (*Planning Perspectives*), 201–232.
- ^{vii} Chalkley and Essex, *Urban Development*, 391.
- ^{viii} Horne and Manzenreiter, *Sports mega-events*, 9.
- ^{ix} See also: J. Horne, *The Four 'Knowns' of Sports Mega-Events* (*Leisure Studies*), 81-96.
- ^x *Ibid*.
- ^{xi} *Ibid*.
- ^{xii} Andranovich *et al*, *Olympic Cities*, 113-131.
- ^{xiii} Sherwin, A. "Jeremy Hunt admits Olympic Games have put off London's tourists." *Independent*, 2 August 2012.
- ^{xiv} H. Preuss, *Economic dimension of the Olympic Games: university lecture on the Olympics* (Barcelona : Centre d'Estudis Olímpics), 1.
- ^{xv} Chalkley and Essex, *Urban Development*, 369-394.
- ^{xvi} M. Malfas, E. Theodoraki and B. Houlihan, *Impacts of the Olympic Games as mega-events* (*Proceedings of the Institution of Civil Engineers*), 209.
- ^{xvii} A. Vigor, M. Mean and C. Tims, *After the gold rush: a sustainable Olympics for London* (London: IPPR), 3.
- ^{xviii} N. J. Cull, *The legacy of the Shanghai Expo and Chinese public diplomacy* (*Place Branding and Public Diplomacy*), 99.
- ^{xix} See H. Hiller, *Post-event Outcomes and the Post-modern Turn: The Olympics and Urban Transformations* (*European Sport Management Quarterly*), 317-332; Horne and Manzenreiter, *Sports mega-events*.
- ^{xx} *Ibid*.
- ^{xxi} D. Whitson and J. Horne, *Underestimated costs and overestimated benefits? Comparing the outcomes of sports mega-events in Canada and Japan* (*Sociological Review*), 73.
- ^{xxii} See A. Stewart, *Knowledge Games: The Achievement of Ignorance in Planning the Mega-Events of the Olympic and Commonwealth Games* (University of Oxford theses).
- ^{xxiii} K. F. Punch, *Introduction to Social Research: Quantitative and Qualitative Approaches* (London: Sage).
- ^{xxiv} M.B. Miles and A. M. Huberman, *Qualitative Data Analysis: An Expanded Sourcebook*, 2nd edition (London: Sage Publications).
- ^{xxv} R. K. Yin, *Applications of Case Study Research*, 3rd edition (London: Sage Publications).
- ^{xxvi} Hiller, *Post-event outcomes*, 317-332.

-
- xxvii B. Leopkey and M. M. Parent, *The (Neo) institutionalization of legacy and its sustainable governance within the Olympic Movement*, (European Sport Management Quarterly), 437-455.
- xxviii Session S-24; note that this is a unique identifier that denotes a session attended by the researcher.
- xxix Interview I-83; note that this is a unique identifier that denotes an interview conducted by the researcher.
- xxx C. Sunstein, *Incompletely Theorized Agreements*, (Harvard Law Review), 1733-1772.
- xxxi See also: M. Verweij and M. Thompson, eds, *Clumsy Solutions for a Complex World: Governance, Politics and Plural Perceptions*, (New York: Palgrave MacMillan).
- xxxii Andranovich et al, *Olympic Cities*, 113-131.
- xxxiii Interview I-64.
- xxxiv R. Burton, *Olympic Games Host City Marketing: An Exploration of Expectations and Outcomes*, (Sport Marketing Quarterly), 35-45.
- xxxv H.W.J. Rittel and M.M. Webber, *Dilemmas in a General Theory of Planning*, (Policy Sciences), 155-169.
- xxxvi S. Rayner, *Wicked problems, clumsy solutions - diagnoses and prescriptions for environmental ills*, (Jack Beale Lecture at the University of New South Wales).
- xxxvii E.E. Evans-Pritchard, *The Nuer*, (Oxford: Oxford University Press).
- xxxviii M. Douglas, *How institutions think*, (Syracuse: Syracuse University Press); and, M. Douglas, *Forgotten Knowledge*, in M. Strathern, *Shifting contexts: transformations in anthropological knowledge*, (London: Routledge), 13-30.
- xxxix S. Rayner, *Uncomfortable knowledge: the social construction of ignorance in science and environmental policy discourses*, (Economy and Society), 107-125.
- xl *Ibid.*
- xli Rayner, *Uncomfortable Knowledge*, 5.
- xlii R. N. Proctor, *Agnotology: A Missing Term*, in R. N. Proctor and L. Schiebinger, eds., *Agnotology: the making and unmaking of ignorance*, (Stanford: Stanford University Press), 1-36.
- xliii Douglas, *How Institutions Think*.
- xliv S. Cohen, *States of denial: Knowing about atrocities and suffering*, (Cambridge: Polity Press).
- xliv L. McGoey, *On the will to ignorance in bureaucracy*, (Economy and Society), 212-235.
- xlvi S. Rayner, D. Lach and H. Ingram, *Weather Forecasts are for Wimps: Why Water Resource Managers do not use Climate Forecasts*, (Climactic Change), 197-227.
- xlvi Interview I-17.
- xlvi H. Preuss, *The economics of staging the Olympics: a comparison of the Games, 1972-2008*, (Cheltenham: Edward Elgar Publishing Ltd); and, Horne and Manzenreiter, *Sports Mega-events*.
- xlix A. Tversky and D. Kahneman, *Judgment under Uncertainty: Heuristics and Biases*, (Science, New Series), 1124-1131.
- l B. Flyvbjerg, M. K. Holm & S. L. Buhl, *Underestimating costs in public works projects: Error or lie?*, (Journal of the American Planning Association), 279-295.
- li Session S-17
- lii Interview I-91
- liii E. Zerubavel, *The elephant in the room: Silence and denial in everyday life*, (Oxford: Oxford University Press), 3.
- liv Session S-17
- lv Interview I-89
- lvi B. Flyvbjerg, N. Bruzelius and W. Rothengatter, *Megaprojects and Risk: An Anatomy of Ambition*, (Cambridge: Cambridge University Press).
- lvii A. Minton, *Ground Control: Fear and Happiness in the Twenty-first Century*, (London: Penguin), xiii.
- lviii National Archives, *London Olympic Games and Paralympic Games Act 2006*.
- lix National Archives, *London Olympic Games and Paralympic Games Act*, 4.1.
- lx I. Baptista, *Regimes of Exception in Urban Planning and Governance: The Case of the Polis Program, Portugal* (Dissertation: University of California, Berkley).
- lxi *Ibid.*, 1. See also: G. Agamben, *State of Exception*, (New Serbian Political Thought), 135-145.

-
- lxii I. Baptista, *Practices of Exception in Urban Governance: Reconfiguring Power Inside the State*, (Urban Studies), 50.
- lxiii Cull, *The legacy of the Shanghai Expo*, 100.
- lxiv See also: Centre on Housing Rights and Evictions (COHRE), *Fair Play for Housing Rights: Mega-Events, Olympic Games and Housing Rights Opportunities for the Olympic Movement and Others*, (Geneva: COHRE).
- lxv COHRE, *Fair Play for Housing Rights*, 11.
- lxvi COHRE, *Fair Play for Housing Rights*, 10.
- lxvii Malfas *et al*, *Impacts of the Olympic Games*.
- lxviii L. Porter, M. Jaconelli, J. Cheyne, D. Eby and H. Wagenaar, *Planning Displacement: The Real Legacy of Major Sporting Events; "Just a person in a wee flat": Being Displaced by the Commonwealth Games in Glasgow's East End; Olympian Masterplanning in London; Closing Ceremonies: How Law, Policy and the Winter Olympics are Displacing an Inconveniently Located Low-Income Community in Vancouver; Commentary: Recovering Public Ethos: Critical Analysis for Policy and Planning*, (Planning Theory & Practice), 395–418.
- lxix See also: M. Raco and E. Tunney, *Visibilities and invisibilities in urban development: small business communities and the London Olympics 2012*, (Urban Studies), 2069-2091.
- lxx S. J. Greene, *Staged Cities: Mega-Events, Slum Clearance and Global Capital*, (Yale Human Rights and Development Journal), 163.
- lxxi Chalkley and Essex, *Urban Development*, 369-394.
- lxxii Interview I-64
- lxxiii R. Cashman, *Impact of the Games on Olympic host cities*, (University lecture on the Olympics, Centre for Olympic Studies at the University of New South Wales).
- lxxiv E. Cashmore, *Making Sense of Sports*, (New York: Routledge), 446.
- lxxv Chalkley and Essex, *Urban Development*, 382.
- lxxvi Chalkley and Essex, *Urban Development*.
- lxxvii Canadian Olympic Association, *Rapport de la Commission d'enquete sur le cout de la 21e Olympiade (vol 1)*.
- lxxviii Y. Vадnais, "Montreal Olympics 1976: 'self-financing?'" CBC Radio News, 29 January 1973.
- lxxix Commonwealth Games Federation, *The Report of the CGF Evaluation Commission for the 2014 Commonwealth Games*, 8
- lxxx B. Majumdar and N. Mehta, *Sellotape Legacy: Delhi & the Commonwealth Games*, (London: Harper Collins).
- lxxxi Interview I-22
- lxxxii Comptroller and Auditor General of India, *Audit Report on the XIXth Commonwealth Games, Report No. 6 of 2011-2012*.
- lxxxiii Interview I-99
- lxxxiv Olympic Games Study Commission, *Report to the 115th IOC Session*.
- lxxxv *Ibid*.
- lxxxvi Leopkey and Parent, *The (Neo) institutionalization of legacy*, (European Sport Management Quarterly), 452.
- lxxxvii Interview I-22
- lxxxviii London Bid Committee, *London Candidature File, Theme 1: Olympic Games Concept and Legacy*, 19.
- lxxxix IOC [International Olympic Committee], *Report of the IOC Evaluation Commission for the Games of the XXX Olympiad in 2012*.
- xc London Bid Committee, *London Candidature File*, 23
- xci Interview I-104
- xcii IOC, *Report of the IOC Evaluation Commission*, 72.
- xciii Interview I-104
- xciv Department for Culture, Media and Sport (DCMS), *Construction completes on the Olympic Stadium*.
- xcv Interview I-104
- xcvi M. Slater, "IOC reopens 2012 stadium debate," BBC Sport, 30 October 2008.
- xcvii M. McIntosh, *The Olympic Host City Bid Process: Facing Challenges and Making Changes*, in M. Messing and N. Muller (Hg.) *Focus on Olympism: Discoveries, Discussion, Directions*. (Walla Walla Press: Sydney).
- xcviii M. Slater, "IOC reopens 2012 stadium debate," BBC Sport, 30 October 2008.

