

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: <https://orca.cardiff.ac.uk/id/eprint/167510/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Waller, Robert and Henderson, Jane 2024. The problem of compromise in conservation and exhibit decision making. *Collections: A Journal for Museum and Archives Professionals* 10.1177/15501906241232454

Publishers page: <https://doi.org/10.1177/15501906241232454>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.






The problem of compromise in conservation and exhibit decision making


Journal:	<i>Collections: A Journal for Museum and Archives Professionals</i>
Manuscript ID	CJX-23-0021
Manuscript Type:	Original Manuscript
Date Submitted by the Author:	26-May-2023
Complete List of Authors:	Waller, Robert; Protect Heritage Corp.; Queen's University, Art Conservation; Canadian Museum of Nature Henderson, Jane; Cardiff University, Archaeology and Conservation
Keywords:	Museum < Subject Focus, Library < Subject Focus, Archives < Subject Focus, Access < Activities < Collections, Exhibition < Collections, Preservation < Collections, Professional Development < Staff and volunteers, Visitor engagement < Profession
Abstract:	<p>The multiple objectives involved in creating a safe and effective exhibit can lead to conflict and unhelpful digging in of positions among team members. Understanding factors that contribute to conflict and identifying some means of avoiding or minimizing those factors can lead to teamwork at a higher level.</p> <p>Collection management challenges are explored, in a practical way, to reveal how simple changes in thinking habits and perspective can improve decisions and outcomes. A range of heuristics that shape our instinctive decision making are explained and illustrated to create the opportunity for insight into how these unconsciously create an unnecessarily conflict-based response. Strategies for shifting perspective are discussed and offered as a route to identifying mutually beneficial outcomes.</p> <p>A key challenge in managing collections is optimizing the value to society that collections offer, both now and in the future. This challenge can be framed as an issue requiring compromise or it can be considered as an opportunity to optimize. The goal is to help heritage professionals to engage in decision-making in the most constructive way. By focusing on high-level institutional gains and benefits while avoiding picking battles over less significant issues, a compromise and win-lose mindset can be avoided.</p>

SCHOLARONE™
Manuscripts

The problem of compromise in conservation and exhibit decision making

Robert Waller¹ and Jane Henderson²

¹ Protect heritage Corp. 622 Simoneau Way, Ottawa ON K4A 1P4; Queen's University, Art Conservation; Canadian Museum of Nature. rw@protectheritage.com  [0000-0002-9500-4113](https://orcid.org/0000-0002-9500-4113)

² Department of Archaeology and Conservation, John Percival Building, Colum Road, Cardiff CF10 3EU hendersonlj@cardiff.ac.uk  [0000-0003-3027-8452](https://orcid.org/0000-0003-3027-8452)

Abstract

The multiple objectives involved in creating a safe and effective exhibit can lead to conflict and unhelpful digging in of positions among team members. Understanding factors that contribute to conflict and identifying some means of avoiding or minimizing those factors can lead to teamwork at a higher level.

Collection management challenges are explored, in a practical way, to reveal how simple changes in thinking habits and perspective can improve decisions and outcomes. A range of heuristics that shape our instinctive decision making are explained and illustrated to create the opportunity for insight into how these unconsciously create an unnecessarily conflict-based response. Strategies for shifting perspective are discussed and offered as a route to identifying mutually beneficial outcomes.

A key challenge in managing collections is optimizing the value to society that collections offer, both now and in the future. This challenge can be framed as an issue requiring compromise or it can be considered as an opportunity to optimize. The goal is to help heritage professionals to engage in decision-making in the most constructive way. By focusing on high-level institutional gains and benefits while avoiding picking battles over less significant issues, a compromise and win-lose mindset can be avoided.

Introduction

Skillful and responsible collection management within museums, libraries, and archives involves developing, preserving, and using collections for the benefit of humanity. Staff in these institutions might expect a cooperative and collaborative teamwork approach to the delivery of these duties. Yet experience often defies such optimism, as staff find themselves competing for resource and status when seeking to deliver their part of the mandate. In this paper we aim to shed light on the habits and perceptions that may unconsciously underpin the creation of conflict. Where conflict is perceived then parties may either try to overrule each other's needs, or perhaps more commonly, compromise to partly achieve their operational goals. Such compromise in turn leads to concessions and a sense that everyone has had to sacrifice part of their agenda to achieve the institutional goals.

In this paper we select the case study of conservation and access as a focus to examine the nature and value of compromise in a collection management context. These two aspects of museum practice are often portrayed as being in conflict. Although the examples here are drawn from this apparent division,

1
2
3 the lessons are broader and could be used to inform changes in practice across cultural heritage
4 organisations. The goal is to shift understandings of apparent conflict to move towards mutual support
5 between team members, with better understood and beneficial outcomes. To do this we challenge the
6 idea of compromise as a default or benign tool in conservation decision-making.
7

8
9 Many conservation problems are not solved by splitting the difference leading us to ask whether there is
10 an alternative default than compromise? We explore the benefits of optimizing and the habits,
11 perceptions, and thinking tendencies we have that can lead us to compromise instead of optimizing
12 towards a common goal. By becoming familiar with, and aware of, our perceptions and intuitive default
13 thinking, we can improve the chances of taking a benefit-oriented optimization strategy instead of a
14 deficit-oriented compromising strategy.
15

16 17 Deficit, Asset and Balanced Thinking.

18
19 Deficit Based Thinking (DBT) refers to a tendency to think about improving systems in terms of
20 identifying and rectifying deficiencies. In contrast, Asset Based Thinking (ABT) is a concept that
21 encourages us to make small shifts in perception and thinking to focus on what is possible. This
22 standpoint has roots in diverse academic fields including sociology, economics, political science,
23 education, social work, and community building (Green and Haines 2015). In DBT, the decision-maker
24 has a constant focus on problems which is both polarizing and demotivational. DBT is a blame-based
25 system that focuses attention on what can be lost and by implication encourages us to allocate the
26 blame for this to others, or internalise it ourself – the existence of blame means it is located somewhere.
27 Extreme DBT thinking with externalized blame casts other parts of your institution or team as
28 dysfunctional which is a severe inhibitor to building a shared and positive change culture. Conservators
29 have a mandate to manage risk to avoid unnecessary damage to collections and this can generate an
30 unreflexive DBT approach. It is normal conservation practice to imagine future risks and pre-emptively
31 manage them. Combine this with a common (miss)perception that risks are associated with use creates
32 the problematic mindset that conservation and access are in conflict. This fosters a mindset of focusing
33 on problems, that is, adopting a deficit-based thinking approach.
34
35
36

37
38 The focus of ABT is on rewards and encourages the decision maker not to start from what is not working
39 and the problems that they face, but on the people and resources that can generate the outcomes that
40 they want. ABT is based on identifying strengths and seeking new creative ways to combine them with a
41 focus on the possibility of what might be. When faced with problems, ABT encourages you not to ignore
42 them but set about searching for the opportunities associated with the situation that you can leverage
43 from those problems. ABT encourages a positivity bias that moves from a concession mindset to an
44 optimisation one. An asset-based approach shifts focus from what might be characterised as wrong
45 (such as adverse relative humidity, children touching collections) to what could also be positively valued
46 (increase in visitor numbers on a rainy day or children enjoying collections).
47
48

49
50 To illustrate an ABT approach in conservation consider how the recent cost of living crisis has caused
51 many organisations to rethink their priorities and opportunities. This can feel like the closing of
52 opportunities to do conservation, but an asset-based approach encourages you to seek the positive.
53 Perhaps this is a good time to work on the combined conservation and sustainability policy and to revisit
54 and tailor specific collection care targets rather than follow a more generic approach. Such discussions
55
56
57

1
2
3 may both reduce energy consumption and re-frame how conservators are viewed, becoming positive
4 partners in the institutional mission.
5

6 Stuart (2018) argued for the development of a best of both worlds approach which seeks to combine the
7 perspective of both routes. She leans on the grounded-in-reality opportunities from DBT and combines
8 this with the positive focus of ABT calling his perspective an asset balanced approach. An illustration of
9 each perspective is offered in Table 1. This balanced approach recognizes that there are sometimes
10 critical deficits that need to be addressed directly. The asset balanced approach from Stuart encourages
11 innovative, positive solution seeking and enables identification and treatment of problems with surgical
12 precision. It is about conservators conceiving their professional mandate as playing a part in a shared
13 endeavour with their colleagues to deliver value to society and exercising control only in targeted ways
14 as necessary. While a balanced approach is possibly the ideal ultimate target, we believe an existing
15 default to deficit-based thinking warrants a shift to asset-based thinking to eventually arrive at a
16 balanced situation. To effect change, some degree of oversteering may be necessary.
17
18
19

20 Use it, eventually we lose it all

21 Conservation has often been described as having an aspirational goal to strive to preserve collections for
22 all time. In a non-infinite world, decisions must be made about the allocation of resource. A 'for ever'
23 perspective has at least two significant limitations. The first is that restitution may necessitate the
24 current accelerated consumption of resource in recognition of past exclusion (Henderson 2020). This
25 approach may require conservators to reconfigure the urge to keep by considering wider benefits of
26 social equity.
27
28
29

30 The second is that within classical economics the value of benefits delivered to society in the distant
31 future should be discounted relative to the same benefit delivered in the near future (eftec 2005,
32 Staniforth 2014). The sudden destruction of heritage reminds us that the things we have attempted to
33 cherish for the future at the expense of the now can suddenly be lost and the hoarded value is
34 squandered. A catastrophic fire consumes all the present and future value of heritage and serves as a
35 reminder that it is prudent to extract some benefit in the present which inevitably limits the possible
36 future use. The value we place on existence and use of a collection through next year must be greater
37 than the value we place on the existence and use of that same collection 100 years from now. This is
38 known as social discounting.
39
40
41

42 Heuristics and biases affecting strategy choice

43 Evolution has moulded our brains for the default use of heuristics - simple rules of thumb for thinking
44 (Kahneman 2011; West et al. 2008; De Neys 2021). These heuristics have created many tendencies in
45 our thinking that, while good for survival in general, sometimes have specific and significant
46 disadvantages. All human minds default to using heuristics. Analyses of heuristics remind us that our
47 decisions – even the ones we feel confident about - can be skewed by bias that stem from our own
48 natural response to environment. Whatever decision-making strategy we use creates a lens through
49 which we look. The lens of asset-based thinking supports conservators to avoid casually following sub
50 optimal decision-making strategies by boosting meta-awareness of thinking process. We can examine a
51 selection of these default decision-making strategies and offer examples of how they play out in
52 conservation decisions to identify opportunities to move from compromising to optimizing.
53
54
55
56
57
58
59
60

Affect Heuristic

Our sense of the importance of something can often depend on the emotional impact associated with it and that is called the affect heuristic. Emotion is an accepted feature of the cultural heritage discourse (Smith et al. 2018, Smith 2021) but its place in conservation decision-making is often relegated to below the more apparently rational concepts stemming from normative scientific practice. Yet emotion plays a huge, if often unacknowledged, part in decision-making – including in conservation. The affect heuristic (Finucane et al. 2000) captures how our feelings can work automatically and impact our judgement. The emotion that we feel is drawn from context and experiences and will shape our judgements even where numerical data and calculated expressions of value are offered.

Emotional responses are generally well understood even if they are side-lined in official conservation discussions. A current example is where climate activists attempted to engage the affect heuristic by targeting art for example throwing soup onto Van Goughs sunflowers in the National Gallery in London in October 2022 (Gayle 2022). With minimal damage to the frame, the art was cleaned and returned to display quickly while a discussion about the protest continued for considerably longer with more than a million views of the video of the soup throwing within a week. Whatever message was discussed because of the action, there is no doubting the power of the strong visual statement to stimulate discussion.

How might the affect heuristic materialise in collection care? Consider Figure 1, which shows an article clipped from a newspaper without permission and the librarian sadly examining the hole. This image was used by the library to communicate to the public why the archive room had been closed for visitors (Holden 2019). The library communication team knew that the visual rendition of the damage is upsetting, and this is why it was used in the newspaper story to communicate to the public. This one clipped out article represents a loss of probably less than 0.001% of the library holdings and as such the library understands that technical account of loss would be less influential than the emotional one.

The affect heuristic can also work against logical decision making. For example, the power of imagining the damage caused by a sprinkler going off in a store is so substantial that the value of a well-maintained sprinkler system in preventing fires and the statistics on accidental use (Roche and Lima 2019) do not offset this visualisation sufficiently in people's consciousness. When fire damage occurs it is also emotive, but it is not as easily attributed to the failure to install a sprinkler system as sprinkler leaks are to their installation. Such affect led decision are less available for calm evaluation and are therefore more likely to lead to defensive positions and heightened arguments should disagreements arise about their installation. Where there is considerable emotion in a situation people may struggle to look beyond their own battle lines and so the possibility to reframe problems for common gain is reduced.

Numerator Bias

When presented with numerical data humans are shown to have biases of perception. This can be illustrated by the way that people select a best option. Imagine trying to pick a red ball from a glass container full of red and blue balls with your eyes shut. People are more optimistic of their ability to pick a red ball from the container if there is a larger number of red balls in total rather than a larger percentage of red balls. Our decisions are impacted by the frequency of something happening rather than the probability of it happening. Generally, people are not sufficiently considerate of sample size.

1
2
3 To set this problem in a museum context, imagine a discussion on allowing objects on exhibition to be
4 touched and consider the perspectives of two members of staff. The exhibition designer has planned
5 installations of 1000's of objects in their career and rarely seen any damage from touch. Even if they are
6 made aware of any such damage, it was likely seen in a report long after their interest in the exhibition
7 has passed, hence, lacking affect. In contrast the conservator is always called out when an object is
8 damaged. They see the damage and will probably have an intimate relationship with the response, with
9 a full sensory connection to the damage that they repair. The conservator's affect heuristic is operating,
10 and their numerator bias is off the scale as their experience of the frequency is the highest in the staff
11 team. Attempts by these two parties to 'compromise' on an open display are set up to be fraught. The
12 conservator and designer experience the same probability but different frequency, so they experience
13 the impact of touch damage differently.
14
15

16 17 Zero risk bias

18
19 Most people strive to avoid uncertainty by seeking to increase their sense of reassuring certainty. If we
20 believe that the level of risk is very low, we will think and act as though there is zero risk. That in part
21 explains why we can feel so shocked when low, but not zero, probability events, such as the Notre Dame
22 Cathedral fire, occur. In our default decision making this leads to an imbalance in the way we think
23 about risks to items on exhibit, in comparison to items in store. The risk to any item in a reserve
24 collection (Figure 2a) can easily be thought to be so small as to "feel" that it is zero. In contrast, the risks
25 to an item on exhibit (Figure 2b), from light damage to theft will be perceived as greater than zero. Thus
26 zero-risk bias can influence our thinking about the relative benefit to risk ratio of an item being placed
27 on exhibit or held in reserve and negates the social acceptance of a degree of social discounting. This
28 skewed and potentially emotionally charged miss-perception of risk may result in colleagues being
29 unnecessarily drawn into conflict.
30
31

32 33 My side bias

34
35 My side bias describes the tendency to only seek information that conforms to our current opinions and
36 to refuse to attend to evidence that refutes them. My side bias is a comforting bias in that it allows us to
37 feel confident about our own world view and justifies us being frustrated, angry or belittling about other
38 people's views. Throughout the world we have seen much of this in political life with polarised and
39 angry debates. The power of my side bias corresponds with the strength with which a belief is held - the
40 firmer a belief is held the stronger the resistance is to alternative perspectives (Stanovich 2021). This is
41 not a measure of intelligence, so the bias is largely immune to classic 'rational' data driven appeals. My-
42 side bias is compounded by confirmation bias (Mercier 2017) whereby people only seek out or attend to
43 'facts' which support their already established opinions. To attempt to compromise without recognising
44 my side bias ensures that both parties remain convinced of their own positions. The greater conviction
45 that either side has, the less open they will be to accepting alternative visions. This doubles down on the
46 sense of compromise and loss that every concession is a bad thing and must be matched by the other
47 party losing something of equivalent value.
48
49

50 51 The challenge of bias in conservation decision making

52
53 These biases are important because they create a perfect storm of adverse perceptions. Consider the
54 world as perceived by the conservator: they have the most frequent and emotive exposure to damaged
55 objects and the consequence of responding to object damage falls to them. The perception of risk for a
56 temporary exhibition is in stark contrast to keeping something in a box in the store. The consequences
57
58
59

1
2
3 of decades of storage are spread over several generations and are not readily apparent. Any damage
4 noted on a stored item (perhaps in a condition audit) is framed as a clearly defined proportion of the
5 whole collection. In contrast any damage to a displayed item is specific and urgent. This bundle of biases
6 pushes a conservator into thinking that an exhibition is a very dangerous occasion. Whenever one is
7 proposed there is a danger that the conservation team find themselves immediately in adversarial mode
8 – how little can I concede - how can I negotiate down all these alarming risks? A deficit-based thinking
9 approach may kick in instinctively. Where conservators find themselves in unnecessarily adversarial
10 mode there are strategies available to shift perspectives.
11
12

13 Perspectives of thinking

14 System thinking perspective

15
16 Cultural property managers should recognize that focussing all of their priorities on any one aspect of
17 management, be it public outreach or preservation, may redirect their energy from their highest-level
18 goal of serving society. Maintaining a focus on the whole is a feature of ‘Systems thinking’. This is a
19 methodology for making sense of complexity by considering the whole of a system and the relationships
20 of parts within it rather than attempting to understand a system through a tight focus on its parts. This
21 holistic approach reminds us that optimizing (attending to) high level objectives requires sub optimizing
22 (reducing attention to) all lower-level systems (Beenhakker 1964, Meadows and Wright 2009).
23 Therefore, we must ensure our focus is continually orientated to the high-level goals of our organisation
24 rather than what may feel more pressing but are our own more localised lower-level goals. On a day-to-
25 day basis our goals rightly attract our attention, but conceiving of these as lower-level goals within our
26 organisation may help us to resolve what appears to be conflict. A return to the larger mission should
27 help us to orientate on our priorities.
28
29
30
31

32 Broad framing

33 A recognition of our biases and perspectives may help conservators to reframe and ask what intellectual
34 exercise can be used to help re-think their approach yet still offer wise counsel. To counter negativity
35 conservators can stand back – literally and intellectually and ask themselves ‘am I seeing the whole
36 picture and what picture do other people see?’. This is known as broad framing (Tversky and Kahneman
37 1986; Barberisa and Huang. 2009). For example, taking a broader frame than an individual item at risk
38 on display and thinking about all the risks across all the collection over a significant time period should
39 help create a shift towards joint endeavour.
40
41
42

43 Technical versus strategic thinking

44 Many of the objectives of conservation are technical in nature, from resolving humidity levels to
45 specifying storage systems. For these technical problems drilling into the details is necessary for a
46 successful project - after all a few cm wrong in a mobile density storage system could spell disaster. In
47 contrast the core goals of heritage institutions are socio cultural and are strategic in service of society. If
48 not carefully integrated into the wider picture, bringing finely honed technical and analytical skills to
49 these problems could be counterproductive. Analysis based on a description of the smallest technical
50 detail will rarely illuminate a strategic pathway to a better society. In such discussions conservators are
51 in danger of operating in a technocratic comfort zone. Other tendencies in conservation approaches
52 such as the desire for perfection or an ill-defined commitment to an abstract future also encourage
53 defensiveness and competitive default of needs and priorities leading to compromise and attrition.
54
55
56
57
58
59
60

Beyond Compromise

Compromise is often framed in terms of negotiation - I give a little, you give a little and we meet in the middle. All too often within heritage organisations the goals of conservation are presented as a negotiation where preservation goals compromise other activities in the organisation. This is an unhelpful formulation arising from understandable biases and perspectives. For example, where a conservator is struggling to deliver on their own goals and perceives that collection care is threatened, they could re-frame their needs in the light of high-level goals and identification of positive outcomes such as the societal benefits of an activity. Is it a 'compromise' to illuminate an exhibition if it means visitors can enjoy it? Is it a compromise to relax environmental control requirements if it reduces the climate impact of an exhibition? Instead of considering such shifts as compromise we could recognise them as choices that speak to higher level objectives. By describing preservation goals as part of a larger system and recognizing those objectives that may be at a higher level than our habitual priorities, we can reconceive of our conservation strategies. This avoids a more confrontational approach of compromise that always suggests winners and losers.

Compromise may feel like a virtuous route out of disagreement making it the default position for resolving difference. However, a compromise-based approach might inadvertently settle the status quo as unchangeable, that the options immediately on the table are the best ones. Compromise as a concept is mentally tied to negotiations with definable monetary values, like a salary or house price negotiation. Neither side really starts with their absolute limit, and both recognise that a move from the edges to meet in the middle creates a compromise that many are happy to accept. However, the relevance of this approach for other exchanges of value is debateable. If negotiating a restitution claim, then a compromise solution may seem more like the more powerful party surrendering detail to hold onto their status. The compromise may not resolve the power imbalance that underlies the problem. If negotiating cool storage conditions for fluid preserved specimens, then achieving a result of being nearly below the flash point temperature will provide little reassurance. This compromise sacrifices an absolute requirement on the altar of agreement and perhaps lacks a focus on the importance of communicating how avoiding fires satisfies everyone's higher level goals!

Exhibition conditions for the Ardibil carpet at the Victoria and Albert Museum (Pretzel 2008; Hillyer and Pretzel 2005) provide an example of how overall benefit to visitors can be enhanced when conservators and exhibit designers are prepared to engage in creative exploration of strategies for achieving higher level goals. The team at the V&A attained a more powerful visual and emotional experience for visitors while managing light damage risk to a tolerable level. Light levels are scheduled to be low enough to simply note the presence of the carpet in the exhibit hall (about 10 lux) for 20 minutes per half hour, and are then raised to 50 lux for 10 minutes on each hour and half hour so visitors are able to see fine details in the carpet. Visitors not only have opportunity to see intricate details in the carpet but also to enjoy an enhanced sense of the preciousness of the item evidenced by the institution's obvious care in controlling its light exposure. Thus, a possible lose-lose compromise situation of too much light for preservation and too little light for good visibility has been transformed into a win-win strategy of delivering an overall enhanced experience to visitors.

Sometimes recognition that our problem is a lower order problem in an organization need not make us feel small. Instead by aspiring to a loftier vision we can revisit a problem in a way that is not possible by addressing it at the level at which we have previously considered it.

Conclusions

Defensive positions that we adopt, possibly unconsciously, can prevent us from working well with others. Understanding these mental traps helps us to develop strategies to avoid them and seek creative solutions to what had previously been cast as a problem.

When we recognize emotional aspects of decisions, we can choose to make time and space to pause in an emotional encounter to reflect on our responses. We can ask if the emotion is helpful and where it originated, we can also compare this with the emotional response of others and by identifying and respecting each other's perspective find a constructive way to more broadly explore options. Recognising the multifaceted aspects of people's choices should help us to develop more flexible options for engaging with them. This is especially important if we have become accustomed to technocratic, data heavy argument approaches. When we reflect on our own practice, we should note the areas where we have the most conviction as it is likely that these are areas we need to be on guard against over confidence and reluctance to consider alternatives. Remember that our judgments based on heuristics can be excellent in some situations and suboptimal in others.

When you find yourself in disagreement with others, ask if it is possible that you are holding close focus on a problem that is perhaps unnecessarily narrow in conception? Take a moment to think about stakeholders and their values that might be missing from the equation. If we are responsible for a single item or instance, should we be thinking about the whole collections, a series of events or a longer time period? We can re-frame risk from focusing on a single potential occurrence to contemplating risk from a continual stream of choices. We should check whether our focus has been drawn to immediate and tangible risks - such as the danger of tearing a page in a book whilst ignoring a steadily accruing risk such as failing to demonstrate the relevance of the collection.

Although each of us in an organisation is mandated to act on our own specific areas of responsibility, have we lost touch with how these connect to the bigger picture? Could it be helpful to circle back to the organisational mission and attempt to define where this situation sits and how solutions that we propose contribute to these higher-level goals? We want to avoid defaulting to compromise. Compromise is not necessarily a benign strategy. When approaching a difference of opinion, the best solution is to seek opportunities for, and means of, optimization.

References

- Alonso-Díaz, Santiago and Gabriel I. Penagos-Londoño. 2021. The numerator bias exists in millions of real-world comparisons. *Acta psychologica* **213**: 103248–103248.
<https://doi.org/10.1016/j.actpsy.2020.103248>.
- Barberisa, N. and M. Huang. 2009. Preferences with frames: A new utility specification that allows for the framing of risks. *Journal of Economic Dynamics & Control* **33**: 1555–1576
- Beenhakker, H. L. 1964. Optimization versus suboptimization. *International journal of production research*. **3**(4): 317–325. <https://doi.org/10.1080/00207546408943064>.
- De Neys, Win 2021. On dual- and single-process models of thinking. *Perspectives on Psychological Science* **16**(6): 1412 –1427.

1
2
3 Eftec. 2005. *Valuation of the Historic Environment - the scope for using results of valuation studies in the*
4 *appraisal and assessment of heritage-related projects and programmes*. Final Report. Report to English
5 Heritage, the Heritage Lottery Fund, the Department for Culture, Media and Sport and the Department
6 for Transport.

7
8 Henderson, Jane. 2020. Beyond lifetimes: who do we exclude when we keep things for the future?
9 *Journal of the Institute of Conservation*, **43**(3): 195-212. DOI: 10.1080/19455224.2020.1810729

10
11 Holden, Joanne. 2019. Tamaru library closes archive room access as people clip old newspapers.
12 Oct 23 2019 Tamaru Herald [https://www.stuff.co.nz/timaru-herald/news/116748993/timaru-library-](https://www.stuff.co.nz/timaru-herald/news/116748993/timaru-library-closes-archive-room-access-as-people-clip-old-newspapers)
13 [closes-archive-room-access-as-people-clip-old-newspapers](https://www.stuff.co.nz/timaru-herald/news/116748993/timaru-library-closes-archive-room-access-as-people-clip-old-newspapers)
14

15
16 Finucane, M. L., A. Alhakami, P. Slovic & S.M. Johnson. 2000. The affect heuristic in judgments of risks
17 and benefits. *Journal of Behavioral Decision Making*, **13**(1): 1–17. doi: 10.1002/(SICI)1099-
18 0771(200001/03)13

19
20 Gayle, Damien. 2022. Just Stop Oil activists throw soup at Van Gogh's Sunflowers. The Guardian. Friday
21 14 Oct 2022.

22
23 Green, Gary Paul and Anna Haines. 2015. *Asset Building & Community Development*. SAGE Publications.
24 ISBN 1483386996, 9781483386997. 416 pages.

25
26 Hillyer, Lynda and Boris Pretzel. 2005. The Ardabil Carpet – a new perspective. *Conservation Journal*.
27 Spring 2005 Issue 49. [http://www.vam.ac.uk/content/journals/conservation-journal/issue-49/the-](http://www.vam.ac.uk/content/journals/conservation-journal/issue-49/the-ardabil-carpet-a-new-perspective/)
28 [ardabil-carpet-a-new-perspective/](http://www.vam.ac.uk/content/journals/conservation-journal/issue-49/the-ardabil-carpet-a-new-perspective/) [Accessed 2023-04-14]
29

30
31 Kahneman, Daniel and Amos Tversky. 1979. Prospect theory: Analysis of decision under risk.
32 *Econometrica*, **47**, 263–291. doi:10.2307=1914185

33
34 Meadows, D. H. and D. Wright. 2009. *Thinking in Systems: A Primer*; Earthscan: London.

35
36 Memphis Comparison Between Asset and Deficit Based Approaches
37 <https://www.memphis.edu/ess/module4/page3.php>
38

39
40 Mercier, Hugo. 2017. Confirmation Bias – Myside Bias. In: R. Pohl (Ed.) *Cognitive Illusions*. 3rd ed., 78-91.
41 Routledge, New York.

42
43 Roche T. and M. Lima. 2019. It's time to protect our heritage and stop burning it. FM Global, Johnston,
44 RI.

45
46 Slovic, P., Västfjäll, D. Erlandsson, and A. Gregory, R. 2017. Iconic photographs and the ebb and flow of
47 empathic response to humanitarian disasters. *Proceedings of the National Academy of Sciences*
48 **114**(8):640-644. doi:10.1073/pnas.1701230114

49
50 Smith Laurajane, Margaret Wetherell, and Gary Campbell (Editors). 2018. *Emotion, affective practices,*
51 *and the past in the present*. Routledge.

52
53 Smith Laurajane 2021. *Emotional heritage: Visitor engagement at museums and heritage sites*.
54 Routledge.

1
2
3 Sarah Staniforth. 2014. Environmental conditions for the safeguarding of collections: Future
4 trends, *Studies in Conservation*, **59**(4):213-217. DOI: [10.1179/2047058414Y.0000000142](https://doi.org/10.1179/2047058414Y.0000000142)
5

6 Stanovich, Keith. E. 2021. *The Bias That Divides Us: The Science and Politics of Myside Thinking*; The MIT
7 Press. Cambridge, Massachusetts.
8

9 Stuart, Kaz (2018) Rebalancing the scales: from asset-based to asset-balanced practice. *Sociology*
10 *International*, **2** (1): 1-2.
11

12 Tversky, Amos and Daniel Kahneman. 1981. The framing of decisions and the psychology of choice.
13 *Science* **211**:453–458.
14

15 West, Richard F., Toplak, Maggie E., and Keith E. Stanovich. 2008. Heuristics and Biases as Measures of
16 Critical Thinking: Associations with Cognitive Ability and Thinking Dispositions. *Journal of educational*
17 *psychology*, *100* (4): 930
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

For Peer Review

1
2
3 Figure captions
4

5 Figure 1. Librarian Jessica Liddy shows one of the old Timaru Herald editions that has had a section
6 clipped out (Holden 2019; Photo: John Bisset/Stuff; ©The Timaru Herald: Stuff)
7

8 Figure 2. a) items in a reserve collection ©https://www.123rf.com/profile_jvdwolf and b) an item on
9 exhibit. Photo by Natasha Herman, courtesy of www.stiltbookcradles.com
10

11 Figure 3 The Ardabil Carpet at the Victoria and Albert Museum. Photograph by Peter Kelleher ©Victoria
12 and Albert Museum, London <https://www.vam.ac.uk/articles/the-ardabil-carpet>.
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

For Peer Review



Figure 1. Librarian Jessica Liddy shows one of the old Timaru Herald editions that has had a section clipped out (Holden 2019; Photo: John Bisset/Stuff; ©The Timaru Herald: Stuff)

425x254mm (300 x 300 DPI)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60



Figure 2. a) items in a reserve collection ©https://www.123rf.com/profile_jvdwolf and b) an item on exhibit.
Photo by Natasha Herman, courtesy of www.stiltbookcradles.com

1852x1234mm (72 x 72 DPI)



Figure 2. a) items in a reserve collection ©https://www.123rf.com/profile_jvdwolf and b) an item on exhibit.
Photo by Natasha Herman, courtesy of www.stiltbookcradles.com

1066x800mm (72 x 72 DPI)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60



Figure 3 The Ardabil Carpet at the Victoria and Albert Museum. Photograph by Peter Kelleher ©Victoria and Albert Museum, London <https://www.vam.ac.uk/articles/the-ardabil-carpet>.

451x301mm (72 x 72 DPI)

Deficit thinking	Asset-balanced thinking	Asset thinking
Starts from gaps in skills, knowledge, and abilities.	Balanced assessment of skills, knowledge, and abilities.	Starts from available skills, knowledge, and abilities.
Goals set from on high.	Team goals emerge from joint consideration of mission and capabilities.	People set own goals, possibly myopic.
Specifications set by upper echelons and/or consultants.	Specifications arrived at through negotiation for best application of capabilities to advance mission.	Specifications set by individuals' professional associations.
All are required to give in, abandon to some extent their standards.	Out of the box approaches are developed.	Everyone does what they can without total capitulation.
People are labelled as issues (structure view).	People seen as having priorities linked to their professional background (structure and agency view).	Circumstances are blamed for people's issues (agency view).
Enabling people to conform to their prescribed roles.	People supported to be flexible within the norms of the organization.	Supporting people to be who they want to be.