	Number of projects examined	Number of projects that shared the Appraisal Stage and percentage where advice ignored		Number of projects that shared the Treatment Stage and percentage where advice ignored		Number of projects that shared the Display and Storage Stage and percentage where advice ignored	
TOTALS	32	26	0%	13	46%	18	0%
Museum professionals	10	8	0%	5	100%	4	0%
Religious community	6	6	0%	3	67%	2	0%
Community of origin	10	7	0%	4	75%	8	0%
Artists	6	5	0%	1	100%	4	0%

Table 1. The proportion of case studies where stakeholder advice was ignored, as found by Henderson and Nakamoto (2016) in an analysis of 32 published conservation projects.

The arithmetic of the decision matrix: adding up good points

Table 2 illustrates a decision matrix applied to a very common conservation decision – choosing between imperfect treatment options for flaking and powdery paint, each imperfect in its own way. The scores and weights of the original case study (Michalski and Rossi-Doria, 2011) have been adjusted so as to illustrate better issues that are discussed below.

The rows of Table 2 contain four criteria – reversibility, stability, appearance, and speed of application. (These are almost universal in a conservator's judgement of treatments.) The specific definitions used were as follows: 'appearance' means the appearance immediately after treatment; 'stability' means primarily the estimated change in appearance after 100 years and 'speed' refers to the total labour cost. Under 'stability', the threshold of minimally acceptable degree of yellowing is defined as; noticeable but not disfiguring after 100 years (best available estimates), and this is assigned a score of three.

As is usually the case, stability versus appearance presents a trade-off: Treatment A has excellent stability (stable polymers, 5 out of 5), good speed (4 out of 5), but poor appearance (1 out of 5, it darkens the object noticeably). Treatment C, a traditional method, is the complete reverse – looks great today (5 out of 5) and applies easily (5 out of 5), but is predicted to be very yellow in much less than 100 years (1 out of 5). Treatment B scores well on appearance and stability but is extremely laborious (application of consolidant flake by flake). If the decision-makers had decided that there was to be no mandatory minimum on stability, then Treatment C would emerge as the best option (11 points), but given the minimum acceptable stability of three points, then Treatment A emerges as the best option before weighting (10 points).

Weighting: some issues are more important

It is unusual for criteria to be equally important. One can correct this imbalance by assigning different 'weights' to each criterion. In Table 2, the appearance has been weighted as most important: weight 3.