

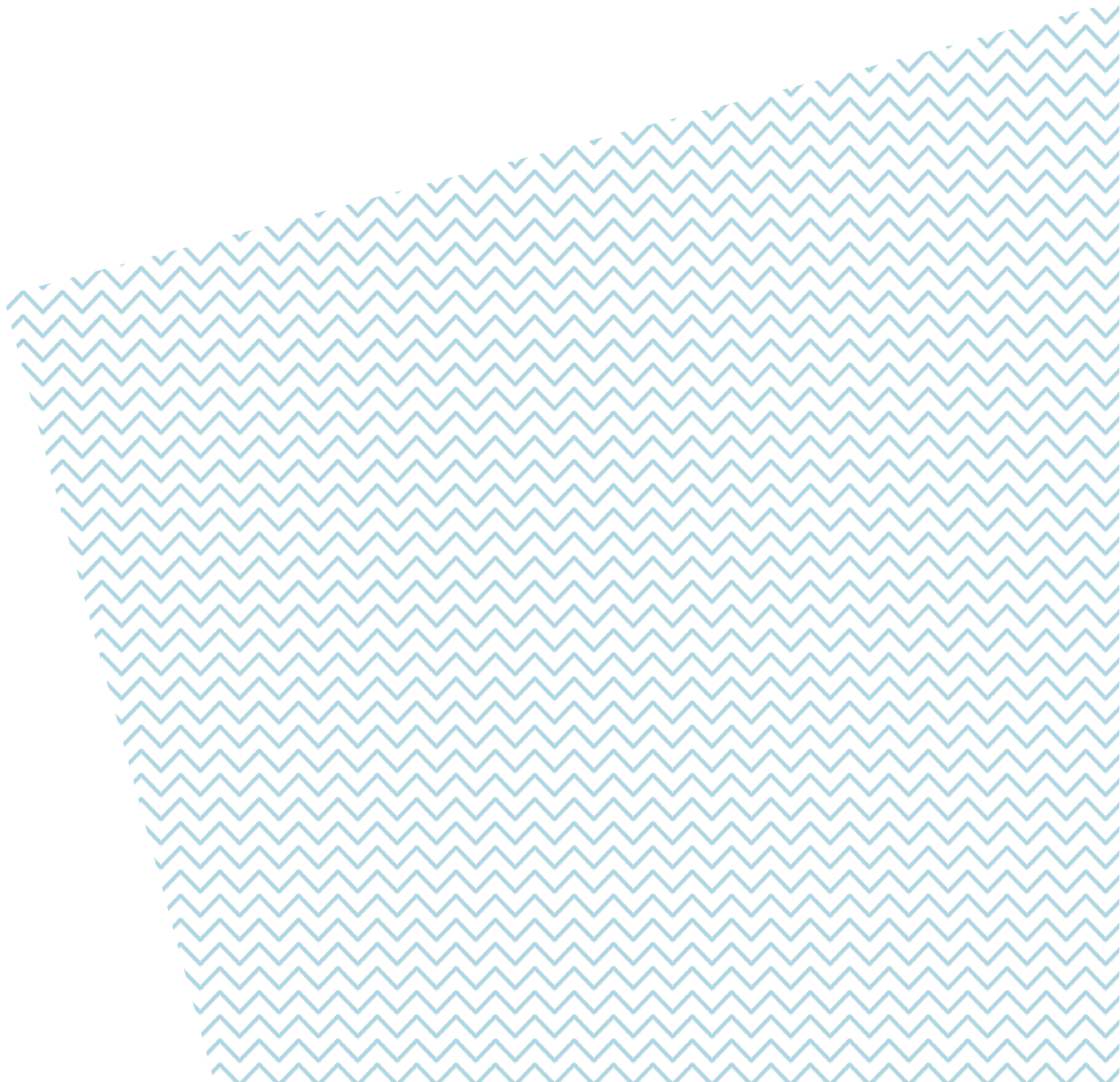


DeathTech Research Team

The Future Cemetery Survey 2020

Executive Summary

March 2020



Introduction

This document summarises the results of the first annual survey for The Future Cemetery research project, conducted by the DeathTech Research Team at The University of Melbourne. It contains an explanation of the method, followed by a high-level overview that calls out some of the most notable findings from this first wave of research.

The full detailed results of the survey are available in the separate spreadsheet file, entitled *Future Cemetery Survey 2020 Results*.

The DeathTech Team

The DeathTech Research Team is a multi-disciplinary group of scholars at the University of Melbourne who research and teach the sociology of technology, cultural and material anthropology, media and communications studies, and information and interactive systems design. Over the past decade, the team has worked across a number of major projects funded by the Australian Research Council Grant Scheme that examine death and technology.

The team's first major project, 'Digital Commemoration' (DP140101871), explored how the internet is changing the ways we approach death and commemoration.

The second major project, 'Death and Disposal: Beyond Burial and Cremation' (DP180103148), investigates innovative and scalable alternatives to body disposal, and elaborations on conventional burial and cremation.

In 2019, the team commenced a third major project in partnership with the Greater Metropolitan Cemeteries Trust (hereafter 'GMCT'), entitled 'The Future Cemetery' (LP180100757), which will run over three years.

The Future Cemetery

The contemporary Western cemetery, dedicated to the dead and their memorials, has become more than a pervasive urban landmark. It is also a central site in the emotional lives and cultural histories of local communities. However, this model faces several challenges, including growing environmental concerns, rising maintenance costs, and an increasingly complex range of public desires for death care.

Around the world, cemeteries have begun to adopt new technologies to improve their visitors' experiences, reduce their facilities' environmental footprints, and extend the personalisation of services in response to diversifying community desires. These technologies include the potential for digital augmentation of grave management and visitation, alternatives to conventional burial and cremation, and new designs for landscaping and flora.

The Future Cemetery project will identify and critically assess the potential of innovative technologies to enhance the public's experience of the cemetery, diversify service offerings and strengthen community connections, all in the context of rapidly changing circumstances.

Method

The first wave of the annual Future Cemetery Survey was conducted between the 9th and the 13th of February 2020. It was designed and analysed by the DeathTech Research Team at The University of Melbourne. The survey was administered by Qualtrics.

A total of n=1,042 respondents completed the survey. Respondents were screened to ensure a representative sample of the Australian adult population across five factors: state, gender, age, ancestry and household income.

There were four general types of questions:

- *Attitude* questions asked respondents to rate their feelings about 5 examples of technology at the cemetery and 11 methods of body disposal. Responses were on a five-point scale ranging from 1 (very negative) to 5 (very positive).
- *Ranked Factor* questions asked respondents to rank the importance of seven factors (such as cost and environmental impact) in choosing a method of disposal.
- *Frequency* questions asked respondents to choose one or more responses from a list.
- An *Open Response* question invited respondents to explain why cemeteries are (or are not) important to them, in their own words. These responses are reported verbatim.

All results have been broken down by six sets of respondent characteristics: age group, religious affiliation, ancestry, gender, level of education and annual household income. A non-parametric statistical test (Kruskal-Wallis H Test) was used to determine whether differences in attitudes between groups were likely to be due to chance, and comparisons that produced noteworthy differences have been highlighted in the results.

Results

Death wishes

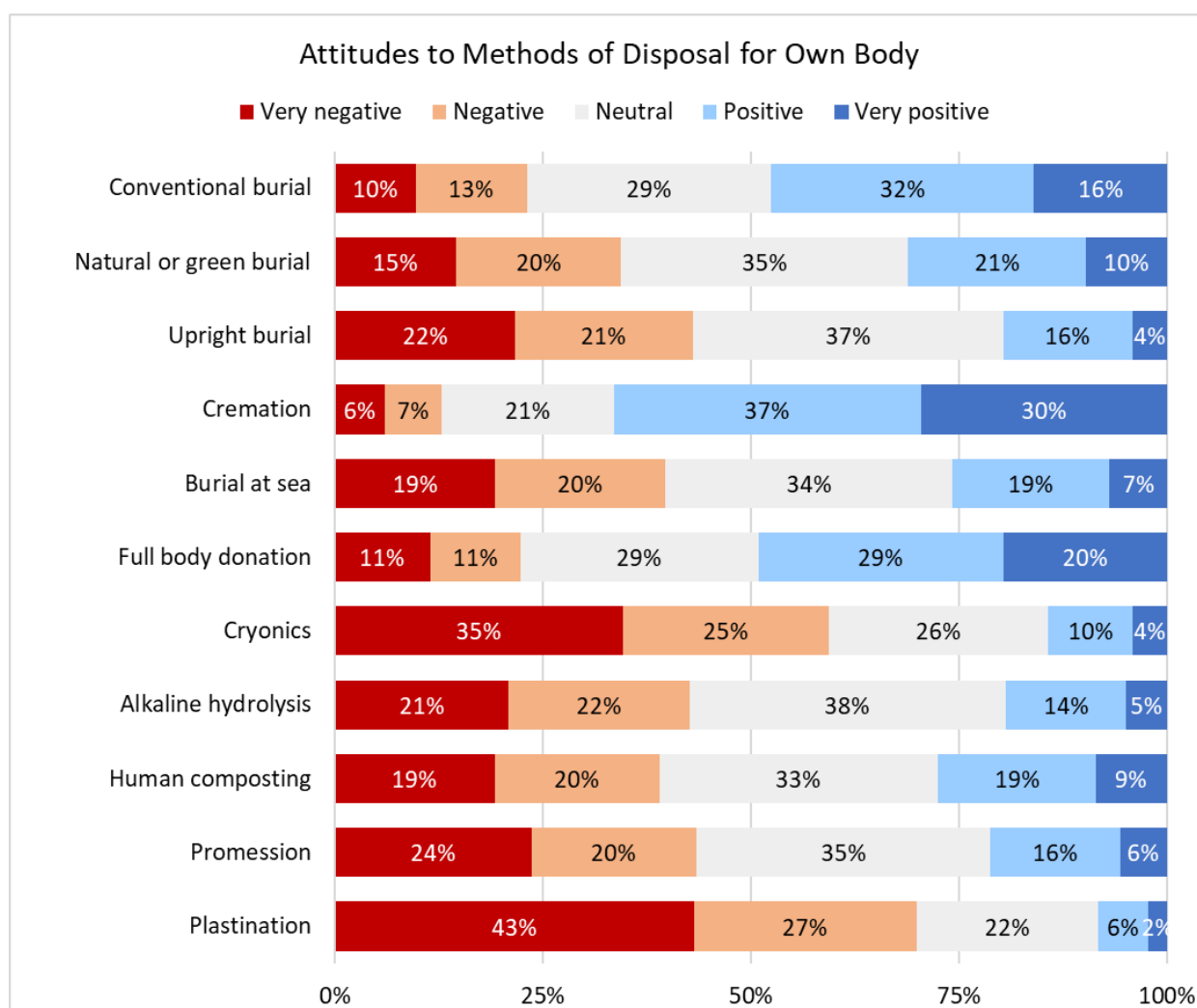
The majority of respondents in every age group reported that they had attended a funeral, wake or memorial service (90% overall). About half (49%) said that they had helped to organise a funeral, wake or memorial service.

Most respondents indicated that they had a general (51%) or specific (32%) idea about what should happen to their body after they die. Of those, most (71%) reported that they had discussed their preferences with others, either in general terms (50%) or more extensively (21%). A small proportion (3%) said that they had not discussed the topic with anyone else directly, but had written their preferences down in a will or other document.

Methods of disposal

Aside from conventional burial and cremation, the most widely recognised methods of disposal were full body donation for medical research (54%), burial at sea (42%), cryonics (31%) and natural or green burial (25%). Relatively few respondents had heard of upright burial (17%), human composting (10%), promession (6%), alkaline hydrolysis (4%) or plastination (3%).

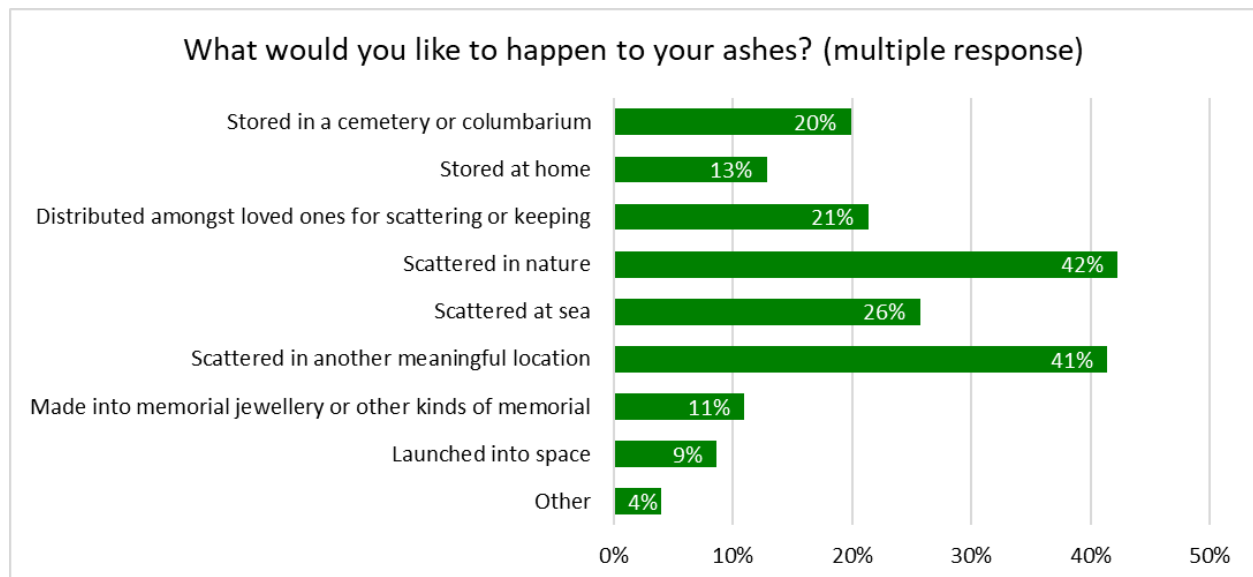
The most widely recognised methods of disposal were also viewed in the most positive light. When respondents were asked to rate their feelings about each method of disposal as an option for themselves, only cremation was rated positively by a majority of respondents (67%). Full body donation and conventional burial also received generally favourable responses.



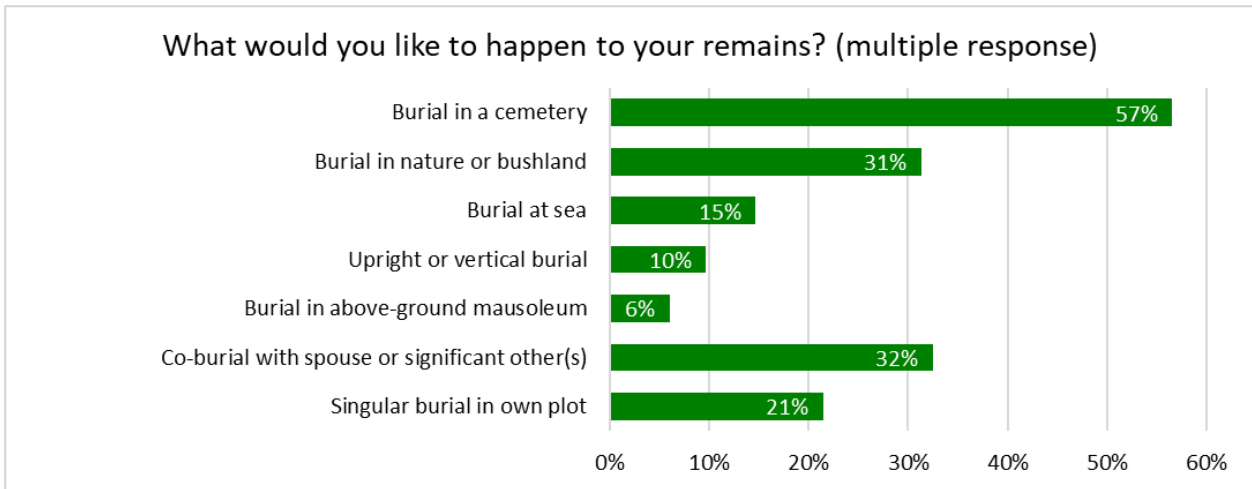
Positive responses to full body donation came particularly from the more highly educated respondents (those with a bachelor's degree or higher) and the non-religious. For conventional burial, the positive responses came particularly from younger respondents and Catholics. Cryonics and plastination were rated negatively by the majority of respondents, and particularly by older respondents. Natural burial, upright burial, burial at sea, alkaline hydrolysis, human composting and promession all received more negative than positive responses, but also received a relatively large number of 'neutral' ratings, perhaps indicating a willingness to be considered, if not widespread enthusiasm. Alkaline hydrolysis, plastination, human composting, cryonics and burial at sea were all rated significantly more positively by those with Chinese ancestry than by those without.

The survey also asked respondents to rate their feelings about the same methods of disposal being used on the body of a loved one. Responses were very similar between these two sets of questions, indicating little distinction in people's views of disposal methods for themselves and for others.

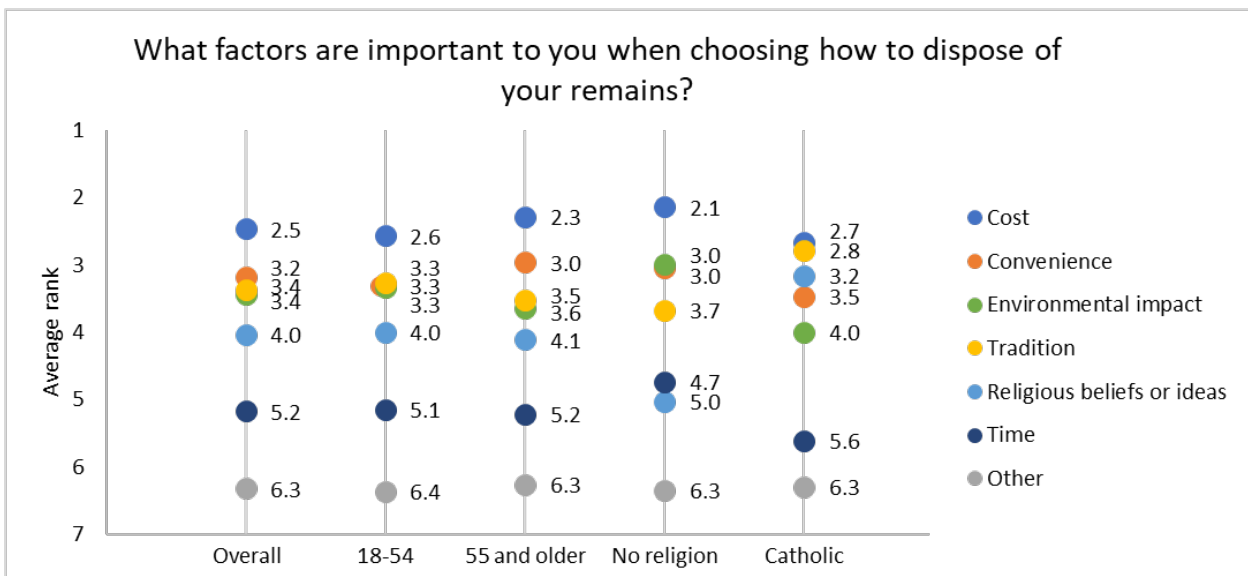
Those who indicated a willingness to be cremated were asked what they would like to happen to their ashes. The most popular answers were to be scattered in nature (42%) or in a personally meaningful location (41%), followed by scattered at sea (26%) or distributed amongst loved ones (21%). Only one-fifth of these respondents (20%) wished to be stored in a cemetery or columbarium.



Those who indicated a willingness to be buried, via any method of burial, were asked where they would ideally like their remains to be interred. The majority wished to be buried in a cemetery (57%), with the next most popular option being burial in nature or bushland (31%). About a third of these respondents (32%) wished to be co-buried with a spouse or significant other.



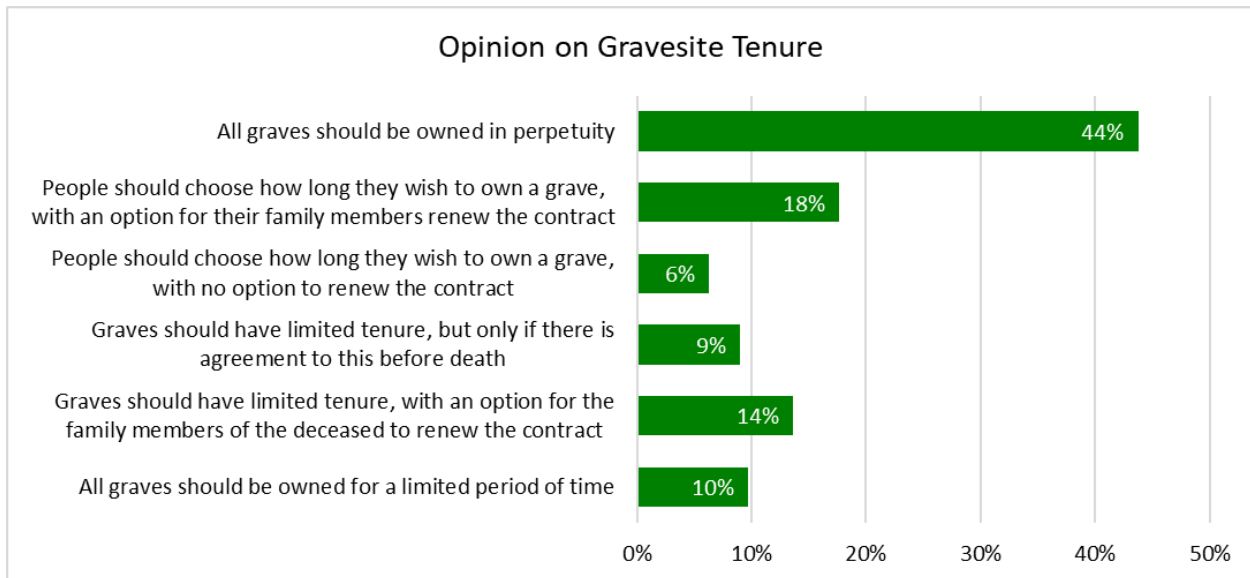
Respondents were asked to rank seven factors in order of which would be most important to them when choosing how to dispose of their body.¹ The most highly ranked factor was cost (average rank 2.5 out of 7), followed by convenience (average rank 3.2), tradition (average rank 3.4) and environmental impact (average rank 3.4). Environmental impact was ranked significantly more highly as a factor by people under 55 and the non-religious than by older people and the religious. Catholic respondents were significantly more likely than non-Catholic respondents to rank religious beliefs and tradition highly. Respondents were also asked to rank the importance of factors in making decisions about the disposal of a loved one's body, with the inclusion of 'Their documented last wishes' as one of the factors; and for that question, the deceased person's last wishes were the dominant consideration (average rank 2.1 out of 7).



¹ The meaning of each factor was not further specified to respondents, beyond the names shown here.

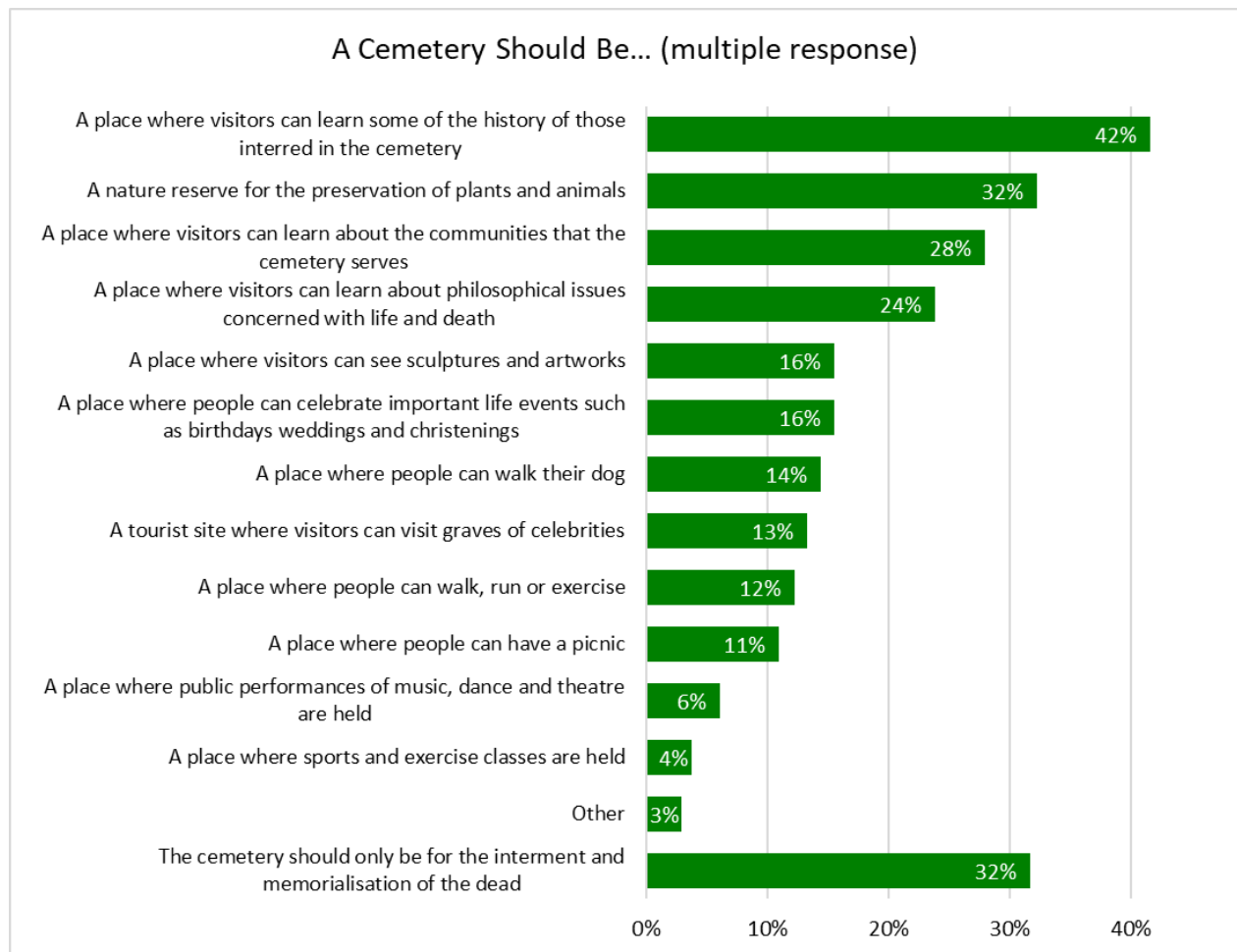
Graves Tenure

Respondents were asked their opinion on grave tenure. The largest proportion stated that 'All graves should be owned in perpetuity' (44%). About a quarter of the respondents replied that people should be able to choose how long they own their own grave, either with (18%) or without (6%) an option for surviving family members to renew the contract. The remaining third of respondents stated that gravesites should have some form of limited tenure.



Cemetery Use

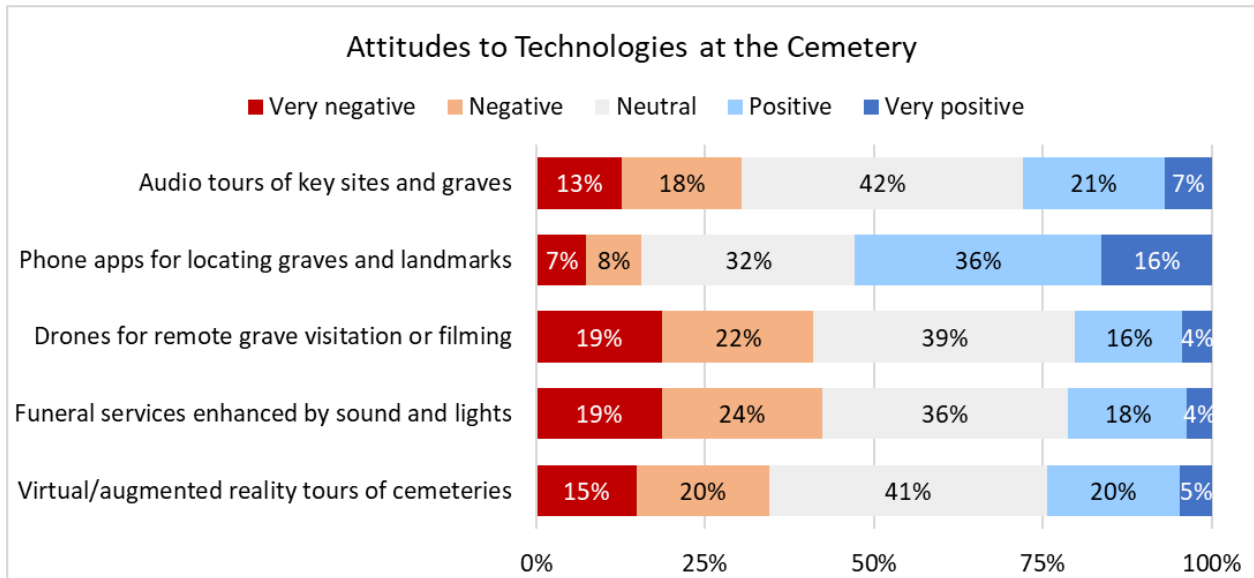
The survey asked respondents whether they would approve of a cemetery offering a range of secondary services and amenities.² About a third of respondents (32%) rejected all of the suggestions, stating that ‘The cemetery should only be for the interment and memorialisation of the dead’. However, many respondents felt that a cemetery could be a good place to learn about the history of those interred (42%), the communities served by the cemetery (28%) or philosophical issues concerned with life and death (24%). About a third of respondents (32%) supported the idea of a cemetery as a nature reserve for the preservation of plants and animals. Few respondents were enthusiastic about the cemetery as a tourist site (13%), a place for people to run and exercise (12%), a picnic site (11%), a performance venue (6%) or a place for sports and exercise classes (4%).



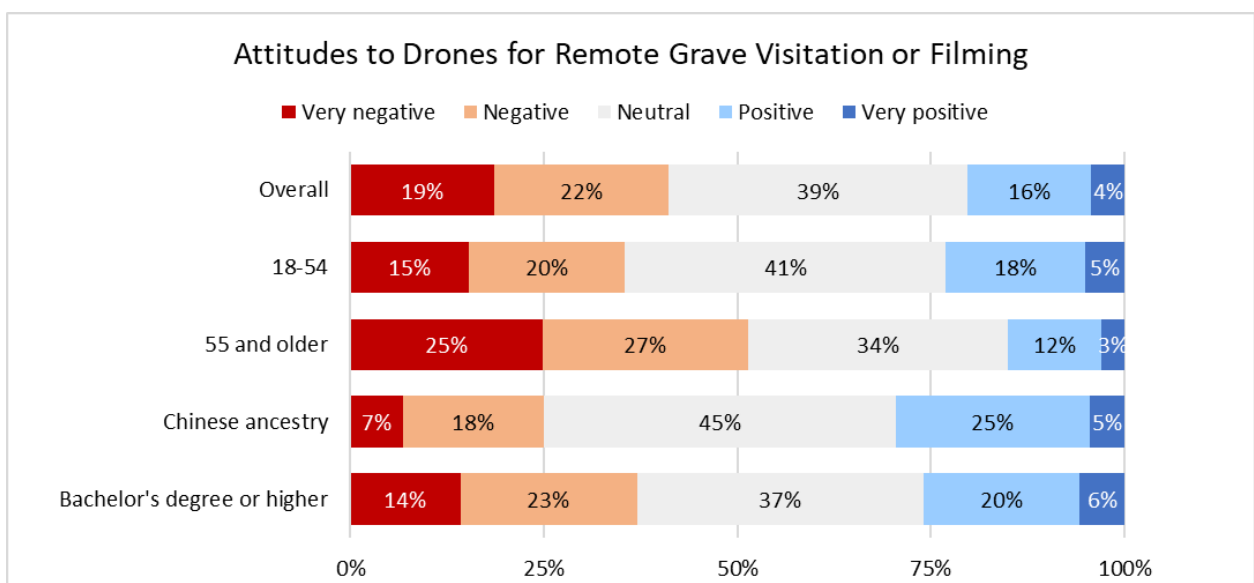
² This question presented a total of 14 options for the cemetery. As that is a fairly long list, it is likely that the absolute proportions are somewhat lower than they might otherwise be. The results are best understood in comparative terms, rather than as an absolute representation of the popularity of each suggestion.

Technologies at the Cemetery

Finally, respondents were presented with five different technologies for use at a hypothetical cemetery, and were asked to rate their feelings towards them. All five technologies received a substantial number of 'neutral' responses, which may indicate that respondents were cautiously open to the idea. The majority of respondents (52%) were positive about the idea of a smartphone app to provide wayfinding assistance at the cemetery. Audio tours of gravesites received similar numbers of positive (28%) and negative (31%) responses, as well as the highest proportion of neutral responses (42%), alongside virtual/augmented reality cemetery tours. Substantially more respondents disapproved than approved of drones at the cemetery and funeral services enhanced by sound and lights.



All five technologies were rated more positively by people aged under 55 and those with a bachelor's degree or higher, as compared to older people and those without a bachelor's degree. Respondents with Chinese ancestry rated drones, audio tours and sound-and-light-enhanced funerals significantly more positively than those without. The results for the question relating to drones are shown below to provide an indication of these differences.



Conclusion

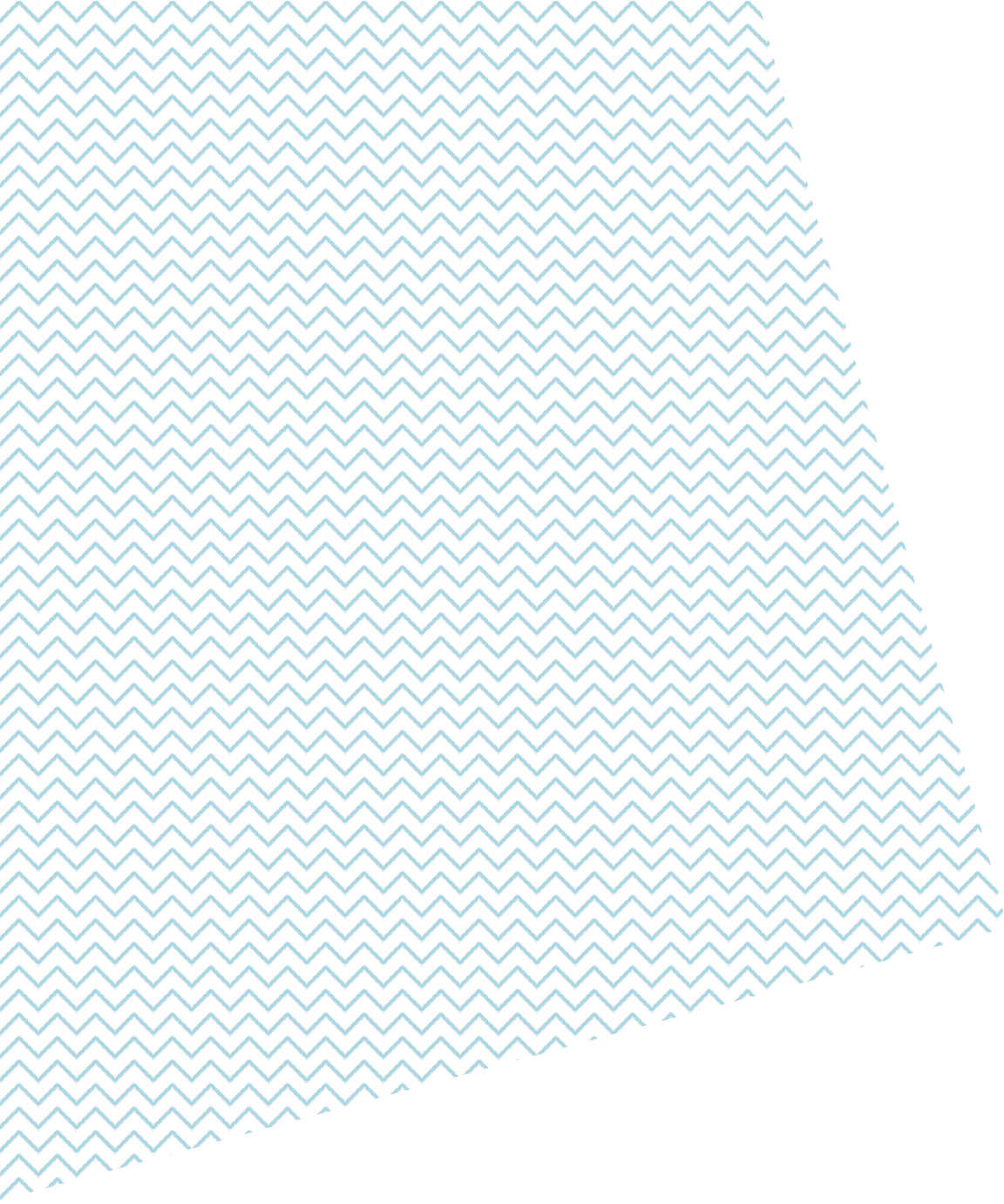
This first wave of the Future Cemetery survey lays out the general landscape of public attitudes to death, disposal and cemeteries in Australia. One of the most striking findings is that large numbers of people are, as yet, neutral towards both new methods of body disposal and new technologies at the cemetery. In future surveys, we will seek to investigate the meaning of these responses with additional targeted questions about the public's understanding of and attitudes towards emerging cemetery technologies, and monitor the extent to which those attitudes are changing over time. In addition, we will undertake more qualitative research to understand how people come into contact with or learn about cemetery service offerings and technologies.

The DeathTech Team is based at The University of Melbourne, Parkville VIC 3010. Its members are:

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For project updates and further information, visit www.deathtech.org or contact deathtech-research@unimelb.edu.au



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