

Introduction

Hurling through time, barely glimpsing flashes of new and bizarre beings and new and bizarre behaviour, how do we make sense of the flood of novelty which modern science and technology brings? Confronted with possibilities no prior generation ever faced, how do we decide what is good, what is evil, what is right, and what is wrong among them? Do we reach into our deepest worldviews, spinning ropes of deductions that give us moral insights into new issues? Or have our long-established worldviews collapsed during the rush into the future? Do we turn to authorities – perhaps to traditional religious leaders, or new medical experts?

This book sets out to answer these questions and others like them. Some of this is new territory, and our exploration is rather like that of Captain Cook setting off for the unknown Great South Land. As he worked from existing star charts and maps of the known world, so findings from prior research form the foundations of our research, and offer hypotheses about what we might find in the new areas. Like Cook mapping longitude both from moon charts and from calculations based on the most accurate seafaring clock of his day, we work with the best measurement instruments available now, striving for the greatest precision we can, whilst challenging the future to revise and refine our findings in light of more accurate measurements.

Focus

This book is the second in a series analysing Australian economy and society, emphasising changes over time, comparisons among social groups, and comparisons to other nations. We present our findings in a clear, concise and, we hope, readable style. However, the results underpinning our findings are authoritative. They are the outcomes of rigorous, quantitative analyses by ourselves and other established academics, peer reviewed, and based on our large, representative national sample surveys of Australia and other nations. The first volume in the series, *Australian Economy and Society 2001: Education, Work and Welfare* examined patterns, trends, and sources of diversity in schooling, employment, and welfare, and differences in attitudes towards these matters.

This second volume concerns a range of moral issues and worldviews. We focus especially on two worldviews that are fundamentally important in Australia at the dawn of the 21st century: Christian belief and the scientific worldview.

We begin by describing the contours of these worldviews, by assessing their prevalence in the populace at large. How many people believe in God? How often do Australians go to church? How many people think that species emerge from the process of natural selection by survival of the fittest? The description of the worldviews answers these questions and others like them. We then proceed to analyse changes in patterns of belief and attachment at the turn of the century. Are these worldviews like one room of many in a mansion, through which the master or mistress passes at will, free have other rooms differently furnished and oriented towards entirely different pursuits? Or is one's life more like a symphony, with the worldview being the theme which recurs, and indeed which gives integrity and meaning to the rest?

To answer such questions, we begin by assessing the implications of the worldviews for two long-standing moral issues: homosexual behaviour and abortion. More

specifically, we explore the ways in which, and the degree to which, people make use of their existing “toolkits” of moral reasoning from their religious and scientific fundamentals in making moral judgments about homosexual behaviour and abortion.

We then examine to what degree people use these same processes of moral reasoning to arrive at judgments about whether using new biotechnologies – such as stem cell research or cloning – is right or wrong. Because we examine moral reasoning processes on many topics, we can begin to discover their scope – whether one tends to follow the same chains of moral reasoning on different topics, or different chains for different families of topics, or what.

Turning from questions related to bioethics to moral questions about collectivities, we examine the desire to help others, and the degree to which these desires and perceived obligations are shaped by the general worldviews of religion and science. We proceed to assess the degree to which national goals and achievements strengthen their citizens’ loyalties, which ultimately feed back into feelings of obligation. Our analyses of these different topics are unified by common themes that run through the different topics, by a common methodological strategy, and by a shared source of survey evidence.

We by no means exhaust the range of moral issues, and so cannot claim to have provided a comprehensive portrait of Australian morality. That would be too vast an agenda for a single book. What we aim at instead is to investigate a range of topics that cast light on the big picture, with the understanding that the same questions about moral reasoning also need to be asked of many other topics in the future.

Themes

We pursue three themes: unity or diversity, trends over time, and the role of worldviews in shaping specific moral judgments.

1. *Unity or diversity.* To what degree attitudes and beliefs are common throughout Australian society, and to what degree people take a diversity of stands on moral issues, is a key theme throughout this book. In fact, a full range of heterogeneity can be found: from nearly universal condemnation of human cloning and eugenically motivated abortion; to a veritable cacophony of opinions on abortion as a means of birth control and on cloning farm animals; to widespread endorsement of stem cell research and treatment, provided no embryo was deliberately destroyed to make them possible. There are also factors that contribute to social unity, although not all take part in them. For example, only a minority – albeit a large minority – engage in the regular volunteer work that helps knit the social fabric together. Another tiny minority scale the pinnacles of science, inspiring admiring audiences of Australians with national pride.

2. *Trends over time.* Are Australians’ beliefs, attitudes, and commitments changing over time? Are there deep-running global currents of opinion, perhaps a spirit of the age, tugging attitudes and values throughout the Western world in a particular direction? We examine trends in all the topics on which we have long-term data, and here too, there is great diversity across topics. Some areas are subject to dramatic change: there are very large declines in church going and in the moral condemnation of homosexuality. By contrast, there is little change in religious belief, in the prevalence of the scientific worldview, and in attitudes towards stem cell research.

3. *International comparisons.* We often compare Australia to other societies, drawing on survey data from many societies. Only by such comparisons can we tell:

- What is unique to Australia, and so likely to be explained by Australia’s unique history, circumstances and institutions;

- What is common to English-speaking nations, and so likely to be explained by their common culture and similar economic institutions. Or, alternatively, what is common to English-speaking nations; or to small nations; or to devout nations.
- And only by such comparisons can we tell what is common to many societies, and so likely to be explained by features common to all.

We will see that in many ways Australia is similar to other nations, especially Britain, Canada, New Zealand, and the USA. But in many other ways it is not.

Evidence

To assess the moral feelings of the Australian public, the surest method is through sound survey research. Introspection is not a reliable method, because of diversity of opinion: Other Australians are not necessarily (or even usually) just like one's self. Nor can moral feelings be inferred from behaviour, because moral feelings are only one influence on behaviour – constraints, tastes, and rewards also exert their sway. Neither is content analysis of media presentations a reliable guide to mass opinion, because the audience is not universal and even an avid newspaper reader will leave large portions untouched. For example, daily horoscopes are standard fare in newspapers – possibly occurring more often than any single topic is reported on the news pages – but it would be wrong to infer that all, or even most, Australians read them.

Survey research is a method, both venerable and new, of ascertaining opinions and social practices. It was evidently invented by Aristotle who conducted a survey of leaders of Greek cities in an attempt to trace the consequences of different methods of governance. But its use as a tool to study the attitudes and behaviour of the public at large only became possible with advances in our understanding of probability and with the development of the discipline of inferential statistics to which these advances gave birth. These enable us to select a few representatives of a population in such a way as to generalise from them to the views of the population as a whole.

The findings of survey research are only dependable if the questions addressed to respondents are good measures. This is a problem common to all the sciences: The quality of one's results depends on the quality of one's measurement instruments. It is beyond the scope of this chapter to describe in detail the full battery of assessments that are brought to bear in the development and validation of good questions used in survey research, but let us note several general principles here:

- Write items in the ordinary language of ordinary people, even if that includes “politically incorrect”, colloquial, or imprecise phrases;¹
- Ask multiple questions to measure each topic; never rely on a single question if you can possibly avoid it;²
- Trial the questions on a variety of people and de-brief them to make sure they understand from the question what you intended to ask;

1 Precision and comprehensiveness, in the sense beloved by lawyers and bureaucrats, are often the enemy of clarity, and hence impediments to accurate measurement rather than aids to it.

2 The use of multiple items enables one to reduce random measurement error (this is very important in measuring relationships among variables), and provides a better sense of the distribution of opinion, because the specific wording of different items may carry different “emotional weight” – people may move from less extreme to more extreme positions, depending on the wording. Taken together, a variety of questions build up a nuanced picture of opinion, rather as a pointillist painter uses many dots of colour to portray a landscape.

- Run an analytic pre-test on several hundred respondents including at least twice as many items as you intend to keep, because many attitude items do not work, for unpredictable and sometimes downright obscure reasons;
- Analyse the results of the analytic pretest to check that the multiple measures designed for each topic have high correlations with each other and that each of the measures on one topic has correlations of a similar magnitude with criterion variables;³
- Be prepared for your respondents to disagree with your own feelings;
- Collect data using your measurement instruments from a properly drawn sample, ideally a simple random sample of the nation as a whole;
- Collect a large enough sample to allow statistically reliable inferences, preferably 1,500 or more.⁴

Surveys of large representative national samples

Throughout this book, we use information garnered from thousands of people through surveys of large, representative national samples of citizens throughout Australia and other nations. Most of our data are from three sources (described in detail in the Appendix):

- The *International Social Science Surveys/Australia*, which we direct. The IsssA regularly collects extensive and detailed survey data on large, representative national samples of Australians, beginning in 1984 and repeated most years since then. There are now over 27,000 cases and many hundreds of variables (not all asked in every survey, of course).
- The *International Social Survey Program*, an international project which we co-founded in 1985. It conducts annual surveys on a more limited range of topics, using strictly comparable questionnaires, from representative national samples in more than 25 nations. There are typically 1000 to 1500 cases in each nation.

Some of our analyses report data from a single survey, typically with 1500 to 2000 cases. More combine data from several surveys at different points in time, or in different nations. And for a few topics, we are able to combine data from many surveys, giving pooled samples of over 30,000 cases.

Representative national samples such as these are the only method that provides sound generalisations to the population as a whole. Combined with modern techniques for measuring attitudes and behaviour using carefully developed, rigorously tested, multiple-item scales, survey researchers are now in a position to offer scientifically sound generalisations about the attitudes and behaviour of the nation as a whole. One feature of the IsssA surveys is very important in assessing the quality of survey items: in addition to our ordinary cross-sectional surveys, we have a panel component in which we resurvey the same people on different occasions, a feature which provides invaluable insight into the stability of attitudes.⁵

3 Alternatively, one may re-analyse existing data to select items and confirm their performance on multiple-item indices.

4 Small, unrepresentative samples of a couple of hundred cases can be very valuable in item analysis, enabling one to explore large numbers of candidate items to assess their probable measurement properties much better than by unaided guess work, as a means of developing items for a subsequent larger and more scientific survey, but in itself such a survey is of little scientific value in describing opinion in the nation as a whole.

5 Technically, this enables the assessment of within-respondent reliability.

Such methods are difficult, expensive, and time-consuming. But the quality of the information that can be gleaned from large, well-designed, rigorously analysed surveys is unsurpassed: they are the gold standard of social research.⁶

The development of these modern techniques means that one need no longer rely on traditional methods such as inferring public opinion from the number of persons showing up in demonstrations, or from letters written to newspapers, or from telephone calls to radio talkback shows. These are unreliable, and often misleading, as indicators of public opinion. In a survey, the “silent majority” gets their say too, not just the vocal minority. Representative national samples also make the “tea-leaf-reading” style inferences from focus groups and observational research obsolete. Such research remains invaluable for formulating hypotheses and for help in wording questions for systematic questionnaires, but there is no assurance that generalisations drawn from them apply to the whole community.⁷

Cross-national comparisons

Cross-national comparisons are often vital to understanding what is happening in Australia. For example, economic self-interest is often taken to be the key to politics in Australia, Britain, and other European nations – as Marx long ago argued. But comparative data show that Australia and New Zealand are in fact almost unique in having such intense economic conflict, that Britain and other English-speaking nations have less, and that most European nations have hardly any (see Chapter 7). That suggests there is in fact something distinctive in Australia’s politics, perhaps in the ties between unions and political parties, found in lesser degree in English-speaking nations elsewhere in the world, and not at all in most European nations. Other comparative data show that patterns of religious belief and church attendance in Australia are similar to many other Western nations, and so probably explained by factors common to all, not by factors unique to Australia.

Rigorous statistical analyses

Statistical analyses enable us to summarise mountains of information compactly and to insightfully disentangle the complex and overlapping forces that shape people’s beliefs. To be sure, reading statistical graphs and tables takes some getting used to, and can be slow

6 While the firm statistical basis for survey sampling is the only known scientifically sound technique enabling us to elicit information from a relatively small number of persons and to generalise from that to the nation as a whole, the generalisation of course includes a range bounding the true answer. Basically, the bigger the sample, the more precise the estimates. That is why we often pool surveys in this book, and is also why we are able to detect effects that smaller surveys are not – in small surveys the range of reasonable values for an effect will often be so wide that it includes zero even though the effect is really there. Larger samples are more expensive to collect, but the harvest of enhanced precision is well worth the extra investment.

7 It can be useful to think of topics in sociology as having a methodological life cycle. Initially, hypotheses are raised by theory or serendipitously from observational research. Then observational research and focus groups elicit the language that the community at large uses to discuss these issues or topics. Next, survey work begins by writing many questions on the topic, using language and subtopics suggested by the observational research and focus groups. Pre-tests field small surveys of a great many of these new questions to two or three hundred respondents. Researchers then factor analyse these pre-tests to sift for the best small set of questions on each subtopic. These can be used in future research. These questions are then included in large, representative national surveys. Researchers then can make the small sets of questions into multiple item indices or scales. They analyse the relationships of these new variables among themselves and their relationships to other variables in order to test the hypotheses with which the process began.

going. But compared to the alternatives, statistics analyses have at least three great advantages:

- *Statistics save time.* Some of our studies, for example, are based on information from more than 20,000 people. If we wrote them up one by one, limiting each person's experience to half a page, that would come to over 33 volumes of 300 pages each, which would take you more than a month to read, providing that you read an entire volume every day. A statistical summary of the information saves you not hours, but weeks!
- *Statistics are accurate.* Even if you have the time and inclination to read data in full, the impressions you get from them at the end are likely to be wrong: the weird and the familiar take up unrealistically large territories on our mental maps. At one extreme, one's attention is riveted by extreme or shocking behaviour; at the other, one tends to generalise from one's own familiar, inevitably limited, social circle. Crucially, the summary information the statistics provide will be on target, whereas the natural assaying processes of your own mind unaided by statistics are much less reliable.
- *Statistics are insightful.* Statistics have another great virtue: they can assess the separate effects of different social forces, so you can find out what is important and what is not. For example, do Australians' views about the legitimacy of using foetal tissue to treat diseases depend on the specifics of who is being cured, of what disease, and at what cost? Or does opinion instead reflect people's long-standing religious beliefs, or whether or not they attend church regularly? Or on what they think about abortion, or on what age they think a foetus is human? Or does it depend on whether people understand the science, or trust scientists, or accept the scientific worldview? Or on whether they trust doctors? Answers to these questions are crucial, both to understand what is happening, and for public policy.⁸ The best way to sort out these questions is to get an excellent dataset with measures of all the relevant variables, and then to use multivariate statistics to separate out the pure effects of each of the posited causes. Multivariate statistics are filters – just as we want to separate the noise from the voice on the telephone, or the gold from the dross at a mine, so in social science we use multivariate statistics to view the distinct impact of a variety of potentially important factors. In the text when we say “all else equal”, we are talking about the pure effects discovered through multivariate analysis.

The research in this book therefore relies heavily on multivariate analysis. The methods used are state-of-the-art. They are thoroughly peer reviewed as well: almost every chapter is derived from a research article published in a peer-reviewed journal – one in the world's leading sociology journal, the *American Sociological Review*.⁹ Details on the methods and models are in the technical notes to each chapter and in the Appendix.

8 If, for example, scientific knowledge is the key, then support is likely to grow in the future (as knowledge increases) and might be spurred along by an information campaign on television. But if religious beliefs are the key, then there is little prospect of changing people's minds.

9 Kelley and Nan Dirk De Graaf, “National Context, Parental Socialization, and Religious Belief”, *American Sociological Review*, 1997: 639-659.

Topic 1: Worldviews: Religion and science

How religious are Australians: Belief and church-going

We begin by tracing the contours of religion in the lives of modern Australians – both their beliefs and their church-going (Chapter 2). We find that religion is still important in Australia; it is certainly not a secular society. Indeed levels of belief have not changed greatly in the last 20 years, although there is probably a slight decline in the last decade. Most Australians still believe in God. Church attendance has been declining sharply over the last few decades, but for reasons that have almost nothing to do with religious beliefs. Instead it seems that churches are – like many other large-scale, traditional community-based voluntary organizations – sharing a loss of popularity for reasons not yet clear.

In terms of social differences, social-class has little influence on religion, in contrast to its pervasive effects on education and work documented in *Australian Economy and Society 2001: Education, Work and Welfare*. The fact that social class has little or no influence by no means indicates that family background is unimportant. Instead, the religious (or irreligious) character of the parental home leaves a lasting imprint on young people's subsequent spiritual life.

Gender has a substantial effect on religious belief, with women giving much more credence to the traditional tenets of Christian belief than men, but equally devout women and men are equally faithful church-goers.

Going to church makes people happier: Freedom on Sunday does not buy contentment. But there are no denominational differences in happiness, except that people who eschew all religious affiliation are even a little less satisfied with their lives than people who have a religious affiliation but do not attend church.

Denomination: Diversity and inheritance

The largest religious group in Australia are the nominal Christians – people who claim a religious affiliation but attend worship services once a year or less (Chapter 3). The Catholics are the next most numerous group, followed by the unchurched (people who say they belong to “no religion”).¹⁰ Anglicans, historically the largest denomination, come next, followed by the Orthodox. No other religious grouping holds even 2 per cent of the population.¹¹

All the religious groups except for nominal Christians and the unchurched have been shrinking from generation to generation recently. About three in ten Australians were brought up as nominal Christians or as not belonging to any faith, but about five in ten are in these groups as adults. Importantly, this change does not reflect changing religious belief: today people are much more likely to be nominal Christians or to be unchurched than were their peers who match them in intensity of religious belief two decades ago. Belief has changed little, but there is a major exodus from the churches.

The denominations differ considerably in their degree of belief. Of the different Christian churches, Catholics have the strongest religious belief and Anglicans the weakest, with other mainline Protestant groups and the Orthodox in between. Nominal Christians have weaker faith, about halfway between atheism and strong belief. Even the unchurched are tepid Christians rather than committed atheists.

10 How many people report “no religion” versus giving a denomination depends a good deal on how the question is asked (see Chapter 3 for details).

11 That small size also means that there are very few cases of people of other faiths such as Islam or Hinduism in a normal random sample, generally too few to analyse reliably.

From generation to generation, there is a good deal of religious change in Australia. The strongest inheritance is found among the Orthodox and the unchurched, with about 80 per cent of the children reared in these groups remaining in them as adults. The Catholics come next. Apostasy – rejecting one’s original affiliation – is more the rule than the exception among all the mainline Protestant denominations, and also among nominal Christians. There is a certain amount of denominational “churning” among the Protestants – shifting among churches – but Catholics tend either to cleave to the faith of their fathers or to abandon churches altogether. Religious change is concentrated among the young, but is equally common among men and women.

Belief and church-going throughout the developed world

Australians have patterns of belief very similar to the rest of the Christian world, with the strength of belief in God, for example, averaging about 66 points out of a possible 100 (Chapter 4). Like the rest of the Christian world, Australians are more likely to believe in Heaven than in Hell.

The international data clearly show that the strength of inheritance of religion is shaped by the societal context (Chapter 5). (1) Highly religious nations imbue their citizens with stronger religious beliefs than are acquired by their peers (people similar in religion and other respects) living in church-shunning nations. (2) In relatively secular nations, religious upbringing has a more decisive effect on one’s adult religiosity and the effect of social context is small. But looking at more religious nations, there the religiosity of the nation as a whole is a stronger determinant than is family history of religiosity. These three patterns hold in rich nations and in poor ones, in formerly Communist nations and in established democracies, and among old and young, men and women, early school leaver and university honours graduate, and among Catholic and Protestant.

The scientific worldview: Evolution

Darwin’s theory of evolution by natural selection offered an alternative worldview to 19th century Christianity: Instead of the struggle within one’s soul for moral improvement, Darwin proposed the bitter struggle for survival as the central theme of life on Earth. Although this elicited furious intellectual debate at the time – from the public strife of titans such as Huxley and Wilberforce to earnest debates in country pubs – the elites of science and religion seem to have reached a mutual accommodation since then. But what about ordinary citizens? To what degree do they endorse or reject the basic elements of the theory of evolution? Is embracing the scientific worldview simply an enlargement of one’s mental horizons, or does the scientific worldview displace traditional religious beliefs?

We find that the scientific worldview has penetrated a very broad cross-section of the public, but that the penetration is usually not very deep (Chapter 6). A large majority of Australians accept that modern species of plants and animals evolved over eons by survival of the fittest from earlier, distinct species. But only a narrow majority hold that humankind evolved thus, and only minorities, albeit large minorities, agree that the first people lived millions of years ago in Africa or that people’s ancestors were ape-like animals. This suggests rather mixed feelings about evolution: Most of the populace find persuasive the Darwinian account of the development of species of plants and animals, but nonetheless, to some degree, feel that human origins or perhaps human natures are so special that the mundane, even rather repellent, process of survival of the fittest cannot fully account for us. Attitudes on these aspects of evolution are closely linked, so that people who accept evolution on one indicator, tend to have a rather pro-evolution orientation on the other

indicators, and people who reject one facet of evolution tend also to cast a cold eye on the others. Individuals' views on evolution are quite stable over time, but there may be a glacially slow shift towards more acceptance of evolution.

Religious and scientific elites may have made their peace, but there is still considerable strain in the populace at large between a religious upbringing and adoption of a scientific worldview. Growing up in a religiously observant home inclines people against evolution, but denomination makes little or no additional difference. Other aspects of one's upbringing, such as one's parents' social class, do not matter.

A little less important than religiosity of the parental home, but far from negligible, is the influence of education. At successively higher rungs of the educational ladder, one finds people increasingly persuaded that the basic tenets of evolution are correct.

One's current social situation is largely irrelevant, but it is noteworthy that none of the controls in the model account for the effects of gender. Men are a little more likely than women to adhere to the scientific worldview.

Religion and politics

From the labour pains of the Protestant reformation until the settlement of the compromise of Utrecht, religious struggles dominated the European political scene. Indeed, struggles between more devout and more worldly variants of Catholicism had been prominent for some centuries before that. Was all this swept away in the cataclysmic change of the industrial revolution, with religious divisions replaced by bitter class-based turmoil which mellowed into the domesticated class struggle of modern electoral politics? To answer such questions, we turn to data on political party preference in 28 nations (Chapter 7).

On a descriptive level, in Australia, religiosity is moderately strongly linked to politics, with the most devout Australians being considerably more likely to favour the Liberal-National Coalition over Labor, people of middling religiosity being evenly split, and the most secular Australians tending to favour Labor rather than the Liberal-National Coalition. This difference in party support according to intensity of religious belief is substantially larger than the difference according to income.

We find that this large effect of religious belief on political party preference partly reflects continuity from generation to generation. Moreover, some of it comes about because people tend to draw on their religious (or secular) worldview in making moral assessments about major social and economic issues, and these moral assessments, in turn, shape political party preferences. But about half of the effect comes about independently of those things, perhaps indicating a general feeling by religious people that the Coalition shares their basic values and a general feeling among secular people that Labor is more in tune with them.

Aside from their greater religiosity, which tends to draw them towards the Coalition, Catholics are somewhat inclined towards Labor. So Australian Catholics are pulled two ways. It seems that some of the issues that gave rise to the DLP have been swept under the carpet, rather than resolved.

Turning to the international data, we find that the size of the influence of religiosity on politics varies widely among nations. The gulf between devout and secular people in political party preference is greatest in the Netherlands (although there is no longer any political difference between Protestant and Catholic). In the Catholic Mediterranean countries, religiosity has a strong impact on political orientation. Among the remaining countries, Australia is towards the upper band of the middle of the pack. At the bottom, religiosity is unrelated to political party preference in Britain, Cyprus, Denmark, Norway, the Philippines, Portugal, Russia, Sweden and Switzerland (although religious denomination

is influential in several of these counties). Interestingly, societies with strong political cleavages between the devout and the secular tend to have higher level of welfare spending. The pronounced international variability in political linkages is not unique to religion. It is noteworthy that the influence of income on political party preferences is strong in some countries, moderate in others, and entirely lacking in some.

Should clergy refrain from politics?

A large majority of Australians think that clergy should not try to persuade people how to vote: In their view, voting choices are not the clergy's business (Chapter 8). Similarly, but less emphatically, most Australians feel that clergy should not endeavour to sway government. The European corporatist style of politics with elite political leaders routinely consulting clergy would not be welcome in Australia.

But that does not necessarily mean an overwhelming enthusiasm for changing the current system: Opinions are more diverse on the issue of whether Australia would be a better country if religion had less influence on politics, with the average voter being poised just slightly in favour of curbing the influence of the churches. When asked rather bluntly about the amount of power wielded by the churches in Australia, a substantial majority say that the churches have about the right amount of power now.

Why do people tend to feel that the clergy ought to stay out of politics? One clue is that a substantial majority perceive churches around the world as generating more conflict than peace. Another clue is that a large majority of Australians perceive people with strong religious beliefs as being too intolerant of others.

A pronounced preference for the exclusion of clergy from politics was already clear in the early 1990s, when we first collected information on this topic. That preference has grown even stronger over the 1990s, so Australia is entering the 21st century with a strong preference for separate spheres for clergy and politics. Over the 1990s and the beginning of the new century, politicians have been struggling with a whole array of new regulatory issues with large moral overtones – perhaps feeling a bit like Hercules confronting the Hydra, with two new issues seeming to spring up for every one that has been settled! The evidence in the opinion data is that the Australian public does not feel that clergy are appropriate guides for politicians.

These feelings are very widespread throughout Australian society. Social differences in this zone are small or absent, except for a moderately strong difference between religious and secular people.

Internationally, Australian opinion on this issue is very similar to that in the other English-speaking countries. Most continental European countries are considerably more emphatic than the English-speaking countries about the need for the separation of church and politics. The experience of corporatist politics with a strong role for the churches does not seem to make the heart grow fonder.

These first eight chapters provide an overview of the faiths and patterns of religious observance of Australians. In all, religious belief continues strong, but church-going has declined, and many people have been shedding their denominational affiliation. The scientific worldview remains at odds with Christianity in the populace at large, although most people accept some elements of both. To what degree do religion and the scientific worldview continue to shape our judgments concerning both new and venerable moral issues? The rest of this book is devoted to finding out.

Topic 2: Moral issues: Highly personal questions

Homosexual behaviour

Although homosexuality is rare, it attracts a great deal of attention both as the standard fare of the uninspired comedian and as drama. From the hair-raising story of the destruction of Sodom and Gomorrah to the annual defiant frolic of Sydney's Gay and Lesbian Mardi Gras, narratives and dramas involving homosexuality have elicited a strong response from heterosexuals. In the past, condemnation by the churches and the populace at large was the rule. How do Australians feel today?

Current Australian opinion is strongly polarised on whether or not homosexual behaviour is wrong: views are concentrated in strong opposition or full tolerance, with relatively few taking a shades-of-grey position.¹² Strong opposition still commands a large following, with nearly half the populace endorsing it. This nonetheless represents a huge change since the early 1980s when we first began asking the question: 64 per cent felt homosexual behaviour was "always wrong" then, compared to 46 per cent now.

Countries vary enormously in the degree to which their citizenries condemn homosexuality. Substantially, the least tolerant are denizens of Chile and the Philippines, the two developing countries in our sample. Australians are towards the less tolerant end of the developed countries. By far the most tolerant country is the Netherlands. Other countries are in between. The descriptive results suggest a rough income gradient, and our multivariate models reveals that, when we adjust for differences among countries in their religiosity and social composition, then it is clear that richer countries are more tolerant.

There are substantial social differences in attitudes towards homosexual behaviour. Men are inclined to condemn it than are women, although the size of this gender gap varies greatly among countries. Education also is a great divider on this issue: Tolerance increases steeply with education. The international data involve a single cross-section, so one cannot reliably distinguish age differences from changes over time in these data, but one or the other is substantial.

In terms of religion, both how strongly one believes matters and moreover, church-going also exerts an additional influence. In terms of the general questions about moral reasoning, it is noteworthy that people seem to be both building deductively on the basic tenets of their faith (the belief effect) and to be influenced by the experience of church attendance (the church going effect). Religion is certainly a very vital force generating moral judgments in this domain.

Abortion

The Australian public is overwhelmingly in favour of allowing abortion in catastrophic circumstances, is divided over whether abortion should be allowed as a tardy form of birth control, and is strongly opposed to allowing abortion for eugenic purposes. Thus, there are not many people who are consistently in favour of forbidding abortion. Neither are there many who are consistently in favour of allowing it. Instead, moral judgments of the Australian populace about allowing abortion strongly depend on the reasons for the abortion. Importantly, individuals' moral judgments on these issues are very stable over time: these are not matters on which people frequently change their minds.

12 The degree of polarisation depends to some degree on the exact phrasing of the question. This discussion refers to the internationally comparable question eliciting moral evaluations of "... sexual relations between adults of the same sex."

Moreover, the same pattern of support and opposition in the general public has held largely steady since 1984. Generation has replaced generation, but the opinions of the incoming generations have been very similar to the opinions of those making their departures. The only marked change over time is depolarisation: as the 20th century has waned, so also have extreme opinions both pro and con allowing abortion.

Internationally, Australians are more inclined to allow abortion than are people in most other developed countries, although Britons and New Zealanders have very similar views, and allowing abortion is even more widely endorsed in Hungary. There is a wide spectrum of opinion across the 18 countries represented in these data. A multivariate analysis shows that a large portion of this variation reflects the religiosity of the populations, rather than reflecting specifically national features.

In forming their moral judgments about whether abortion should be allowed in various circumstances, people throughout the developed world draw heavily on their religious faith and experiences in several ways. Even apart from any specific injunctions of their denomination, and even apart from exposure to preaching, implicit liturgical teaching, and a community of believers via church attendance, deductive moral reasoning from strong Christian belief inclines people to forbid abortion. Moreover, even aside from their beliefs, faithful church-goers are more opposed to abortion than are otherwise similar people who attend irregularly or not at all. Thus attitudes towards abortion, like attitudes towards homosexuality, are shaped both by private religious beliefs and by participation in public worship.

The orientations of one's religious authorities matter too, with Catholics, especially those who attended Catholic school, being more inclined to forbid abortion than are equally strong believers of other faiths. At the same time, it is noteworthy that the boost that Catholicism gives to anti-abortion attitudes is not large. Although opposition to abortion has been the goal of a highly-concerted persuasion campaign over a period of decades conducted by priests who are respected by their flocks and with the weighty imprimatur of the Catholic hierarchy supporting them, this massive effort has had only a modest effect on lay Catholics' moral judgments about whether abortion should be allowed or forbidden.

These religious forces shape attitudes towards abortion partly directly, and partly indirectly by shaping other attitudes which in turn influence moral judgments about abortion. For example, a bit over half the effect of religious belief is direct, with the rest coming about mainly because strong believers tend to oppose sexual permissiveness which has a substantial effect on abortion attitudes. Thus, a fat "half" of the effect of religious belief is a principled one rooted in the logic of the beliefs themselves, with the remainder being a consequentialist or instrumental effect. This remainder represents strong believers' staunch opposition to sexual permissiveness, and the fact that this opposition leads them to oppose abortion. The result for church attendance is broadly similar: About two-thirds of the effect of church-going on attitudes towards abortion is direct, with the rest operating indirectly through the desire to impose sexual abstinence on unmarried people and, to a lesser extent, support for the traditional nuclear family with the father being the breadwinner and the mother being mainly a homemaker.

Just as important as religious belief in shaping attitudes towards abortion is the scientific worldview. We suspect that the scientific worldview inclines people generally to feel that humans are just part of the physical world, and that it is right to intervene in any natural processes, if that intervention suits the goals of the persons involved. In terms of attitudes towards abortion, the data show that people who cleave to the scientific worldview are much more likely than are otherwise similar people who doubt Darwin to approve of allowing abortion.

Traditional moral views – partly buttressed by religion, partly independent of it – continue to exist and to shape public opinion. In particular, the data show that sexual restrictiveness is an important source of opposition to legalised abortion. We have argued that this represents an attempt at social control through the threat of unwanted pregnancy to discourage sexual indulgence. In addition, opposition to women working is a minor source of opposition to legalised abortion. We have argued that this also represents an attempt at social control – at keeping women at home, not in careers. The opposition is not to abortion itself, but is rather to disapproved behaviour that might be facilitated by legal abortion. Equally, support for allowing abortion contains a large dose of sexual permissiveness and a small dose of support for women’s employment. Thus, consequentialist moral reasoning provides an important source of opposition to abortion.

The anti-abortion side of the public debate over abortion has also emphasised a major issue that is largely ignored by the other side: the moral status of the abortee. Whether (and when) the mass public sees fetuses as human is a question yawningly absent from studies of public opinion on abortion.

When does a foetus become human?

Is an embryo human at conception, or does it become human at some point between conception and birth? To examine the views of the citizenry on this issue we asked a series of flexible questions designed to allow people to express any opinion ranging from asserting that personhood begins at the moment of conceptions all the way to denial of personhood even at birth.

Australians hold a wide spectrum of opinions about whether an embryo is human at the moment of conception. Indeed, there is neither a majority perceiving nor denying personhood at this stage. The average opinion is very near the neutral point in between. Thereafter, as the embryo/foetus develops, more and more people grant it personhood. By the time the first primitive structure begins to emerge at 14 days, opinion has begun to shift slightly, with the average perception moving slightly towards the “human” side, although still very near the neutral point. Thereafter, at the embryo/foetus develops, steadily, but gradually, more and more people come to feel that it is human, with a majority feeling certain that an embryo/foetus is human at six or seven months. An important feature of the way opinion develops here is that few people feel that the onset of personhood is sudden: For most people, it seems that humanness is not a “yes or no” matter, at least when it comes to embryos/foetuses. Instead, most Australians perceive embryos as becoming increasingly human over a period of time rather than making a sudden transition to personhood.

There are marked social differences in perceptions of the personhood of embryos/foetuses.

Religious belief is the spring that dominates the stream of attitudes flowing into perceptions of when an embryo/foetus is human. Note that this large effect represents deductive moral reasoning from the basic tenets of Christianity, not church pronouncements, nor conformity to the opinions of other believers, nor implicit lessons of the liturgy, for these other matters are filtered out from this effect. Strong Christian believers see early fetuses as much more human than do their atheist peers. The difference dwindles steadily over the course of foetal development and vanishes entirely by birth.

Church teachings matter too. The Catholic church has consistently and frequently taught for some decades that the embryo/foetus is human from the moment of conception, and their adherents do accept this view more often than do equally devout Protestants. However, the effect is only half the size of the influence of individual religious belief. Interestingly, this difference is not limited to the moment of conception, which has been the

focus of the formal teaching. Instead, Catholics views continue to shift more rapidly towards the perception of personhood across the early stages of development. Protestants and people who claim “no religion” begin to converge towards the Catholics around the end of the first trimester, but do not fully converge until birth.

Religious practices exert a separate, additional influence shaping perceptions of the personhood of early embryos. Church-goers see early embryos as more human than do their unchurched peers, even apart from individual differences in belief and in religious affiliation. This difference is about as important as the denominational difference between Catholics and others. This is probably not an effect of explicit teaching on this topic in the churches, for it is in addition to the Catholic effect, and the Protestant denominations have diverse positions on this issue. Rather, it might reflect implicit lessons common across the Christian liturgies about the human body as invested with religious meaning, and might also reflect a tendency for church-goers of weaker religious beliefs to conform their attitudes to those of their more devout brethren.

Christianity is not the only basic outlook shaping the views of the citizenry on such issues. The scientific worldview exerts a separate influence on perceptions of when an embryo/foetus is human. At conception and shortly thereafter, adherents of the scientific worldview see embryos/foetuses as substantially less human than do their peers who reject the scientific worldview. But the gap narrows and vanishes after the end of the first trimester. So the disagreement between those who accept the scientific worldview and those who reject it is really a dispute about the personhood of very early embryos/foetuses. Before seeing the results, one might have expected that the implication of the scientific worldview that genetics are what really matter about a person would lead adherents of this view to be especially inclined to think that early embryos are fully human since they possess their full genetic endowment from the moment of conception. But it is not so. Instead, they are especially unlikely to perceive early embryos/foetuses as human.

Perceptions of the degree of personhood of early foetuses are mainly shaped by these cultural forces, but there are also some less important, but still significant effects of other things. Women see embryos/foetuses as a little more human than do men across nearly the whole span of development, with the gender difference in perceptions only vanishing at birth. Education inclines people to see embryos/foetuses as a little less human across the whole span of development. Older people and their younger peers perceive the same degree of personhood in early embryos/foetuses, but among the more developed foetuses, younger people are more convinced that they are human. Neither marital status nor urban residence has any effect. But time does.

Apart from many powerful recent social changes that have reshaped attitudes towards abortion in their own way – for example, declining church attendance and rising education – there is a very gradual underlying trend towards perceiving foetuses as human.

Moral views on use of stem cells from abortions

Is it right to use stem cells from abortions in medical treatments and biological research? There are plenty of cells because there are many abortions, and such treatments have a reasonable prospect of success, so the question is really a moral one: Is using such cells good or evil or somewhere in between?

To find out, we asked a series of questions that varied the potential gain from the treatment, the entitlement of the recipient to compassion, and the distance of the treatment from the respondent (Chapter 12). The common introduction to these questions clearly stated that such cells would come from the many abortions ordinarily conducted every year.

In the event, the citizenry is strongly supportive of the use of embryonic/foetal tissue in medical treatment and research across the whole range of uses we asked about. They are strongly in favour of permitting medical treatments employing stem-cell treatment to save the life of a child and only a little less strongly in favour of permitting it to enhance the quality of relatively brief life of an elderly person. They strongly support it when the chances of a stem-cell based treatment succeeding are remote, as well as when success is virtually guaranteed. They warmly support it in the case when they themselves or their families might benefit from the treatment, when the recipient is a stranger, and when there is no immediate recipient to claim our pity, but only the distant and somewhat mysterious process of research.

In short, Australians warmly support allowing the use of embryonic/foetal tissue in treatment and research. Interestingly, this level of support is substantially higher than the level of support for allowing abortion (see Chapter 11). This difference suggests to us that the populace may find some redemptive value in stem-cell research and treatment. Another noteworthy difference between moral judgments about abortions and about using foetal tissue from abortions is that the circumstances of the abortion make a huge difference to people's moral assessments of it – ranging from overwhelming support for allowing it in the case of a danger to the mother's health to overwhelming opposition to allowing it as a eugenic tool – whereas the range of uses we asked about for stem-cell tissue all elicited warm support.

The basic conditions of social life divide Australians in many ways, but not concerning the rights and wrongs of foetal/embryonic stem-cell treatment and research. Youthful and elderly Australians are equally warm in their support of these procedures. Both early school-leavers and their peers with advanced degrees have equally favourable moral judgments on the matter. The maiden and the matron both feel that it is right to allow such treatment and research, as do the bachelor and the husband. Moreover, men and women agree. Indeed, on average, staunch adherents of the Coalition and stalwart Labor Party members are equally strong supporters of allowing embryonic/foetal tissue to be used in treatment and research. There are no important social differences here.

By contrast, subcultural differences diversify people's moral views on the issue, although the differences are mainly between stronger and weaker support for allowing stem cell use (rather than between support and opposition). Religion, not surprisingly, plays a large role. Catholics, fervent religious believers, and faithful church-goers are all less supportive, and each of these characteristics exerts a separate, additional influence eroding support. Of the religious characteristics, church attendance exerts substantially the most important influence on attitudes towards the use of embryonic/foetal tissue: The influence of church attendance is approximately twice as important as the influence of religious belief and approximately three times as important as the influence of denomination. These aspects of religion tend to operate indirectly, by shaping intermediate attitudes which, in turn, exert immediate, direct influences on attitudes towards the use of stem cells. All of the sway of Catholicism and religious belief is indirect – through their influences on perceptions of the onset of personhood, on attitudes towards abortion, trust in scientists, and moral dependence on the medical establishment. About half of the influence of church attendance works this way, too.

The scientific worldview is the other major influence on these attitudes, being just as important as the combined influence of the different aspects of religion, but scientific knowledge plays no role. This is a matter of outlook rather than information. As was also the case with religion, most of the impact of this deep-rooted worldview is indirect. It inclines people against the view that early embryos/foetuses are human, increases their tendency to oppose abortion, enhances their trust in scientists, and encourages them to grant

moral authority to the medical establishment. All these positions, in turn, pull them in favour of allowing the use of embryonic/foetal stem cells in treatment and research.

Features of the patient and the treatment also influence support and opposition, although to a much smaller degree. Treating a child patient increases support slightly and providing direct treatment rather than research also elicits a small increase in support. Offering a cure that is certain (rather than highly improbable) increases support slightly, but the effect is surprisingly small. Many medical rationing systems place a great weight on the success rate of the treatment, but these results suggest that such an emphasis in a cost-benefit calculation may be at odds with public attitudes.

This does not however mean that the public has unbridled enthusiasm for the use of stem cells in medical treatment and research. They strongly support the use of embryonic/foetal tissue from contraceptive or catastrophe-prevention abortions, but stem cells from other sources are quite a different matter, as the findings in Chapter 13 show.

Public opinion on sacrificial pregnancies

Does the strong public support for using stem cells from abortions conducted for other reasons extend to the use of stem cells generated in other ways? In particular, what about embryos/foetuses conceived with the intent to destroy the potential life in order to use the tissue?

In fact, the public opposes sacrificial conceptions in which pregnancies are started on purpose to abort the embryos in order to use their tissue (also sometimes called donor-oriented abortions or spare-parts pregnancies or instrumental pregnancies). Nearly one-third of the population think sacrificial pregnancies should definitely not be allowed, and milder disapproval is the next most common moral judgment. In fact, views on the rights and wrongs of sacrificial pregnancies are almost the opposite of opinion on the morality of using tissue from embryos/foetuses aborted for birth control reasons.

Moreover, this dominance of negative views on sacrificial pregnancies is in a stark context, for our question specified that the purpose was to save an existing life. This also puts the citizenry's moral judgments on these pregnancies in sharp contrast to their views on aborting an ordinary pregnancy if that is necessary to save the mother's life. An overwhelming majority of the populace feel that an abortion to save the mother's life should be allowed, but only a minority think that it is right to allow an embryo to be conceived with the intention of aborting and using the tissue to save the mother's life (for example as a cancer treatment). We also asked about several other potential recipients and in every case, there was very limited support. This means that there is some very deep and serious moral barrier to conception with intent to destroy. The populace finds it so repellent that they think it is better to let an afflicted adult – an indisputable person with hopes and fears, who thinks and loves, and strives fallibly to do right -- die than to allow such a conception.

Although the biotechnologies that would make such procedures possible were very new in 1994 when we first asked the question, people had no difficulty using their existing moral reasoning apparatus to form judgments on the rights and wrongs of sacrificial pregnancy. Interestingly, although the various possible uses of stem cells and other embryonic/foetal tissue had a very low public profile in the early 1990s and debate on them filled the sky like fireworks around the turn of the century, mass public opinion on sacrificial pregnancies has remained very stable, with no sign of a time trend.

There are some notable social differences. Older people are a good deal more favourable towards sacrificial pregnancies than are their younger peers. This is not an effect of changes over time, for there are no trends in these attitudes. Instead it is a matter of people, as they age, moving towards the view that sacrificial pregnancies should be allowed.

It is possible that as people age, the growing dread of death pulls them towards favouring the rights of indisputably existing persons over the rights of potential persons, an interpretation that is supported by the fact that aging *per se* also enhances support for contraceptive abortions (Chapter 10).

Men are a little more inclined than women to think that sacrificial pregnancies should be allowed. Yet there is no gender difference in attitudes towards using embryonic/foetal tissue from contraceptive abortions. We found no other social differences: neither marital status nor education nor political party preference has any effect on either attitudes toward sacrificial pregnancies or attitudes towards use of tissue from contraceptive abortions.

Subcultural differences are large. Religious believers are a good deal more opposed to sacrificial pregnancies than are atheists, with the difference being even greater than the gap that separates them over foetal tissue use from contraceptive abortions. Even apart from their stronger religious beliefs, faithful church-goers are more opposed to sacrificial pregnancies than are their unchurched peers. The effects of both belief and church attendance are largely indirect, with belief shaping more proximate commitments and ideas that, in turn, shape moral judgments about sacrificial pregnancies. Catholicism, too, has an independent effect intensifying opposition to sacrificial pregnancies.

Science matters too. But it is the scientific worldview – adherence to the concepts of “big bang” cosmology and of evolution by natural selection – rather than scientific knowledge *per se* that shapes moral views on sacrificial pregnancies. The hopes of some materialists (and fears of their opponents) that the diffusion of scientific information would resculpt the moral landscape appear to be groundless in this domain. The scientific worldview, however, is a major source of views about the legitimacy of sacrificial pregnancies (as it is also a major source of moral assessments of use of foetal tissue from contraceptive abortions). The influence of the scientific worldview in this area is even greater than the combined effect of religious belief and church attendance. About half of this influence is transmitted through more proximate beliefs and commitments. The findings suggest that many adherents of the scientific worldview feel that humankind is merely one form of life that evolved by chance on one of many similar worlds, and that hence there is nothing wrong with almost anything that will reduce present suffering.

Intermediate culture – more limited and specific judgments, commitments, and moral evaluations about human life and culture – is highly influential in shaping attitudes towards foetal tissue use. Many of the influences of religion and of the scientific worldview are “knock on” effects through intermediate culture, notably through judgments about when life begins, norms about abortion, trust in scientists, and the granting of moral authority to the medical establishment.

Our data only concern the aborting of implanted pregnancies, so we cannot say whether the same degree of moral opprobrium attaches to sacrificial IVF conceptions as well. But the strength of moral feelings here suggests that the area demands further research on a variety of procedures.

On a number of the reproduction-related topics covered in this section, the importance of religion and of the scientific worldview is clear. Does this extend to possibilities like cloning?

Should cloning be allowed?

Most Australians approve of cloning plants and animals, but disapprove of cloning humans (Chapter 14). There seems to be a gradient of approval, with support being stronger, the further the cloned species is from humankind. The evidence supports the view that moral

evaluations of cloning depend to some degree on the motives of the cloners as well as on the “clonee”, the object of the cloners’ endeavours. Consistent with the view that motives matter, cloning for endangered species is more strongly supported than commercial cloning. However, a much more extreme contrast in motive for human cloning nonetheless yields a smaller difference in levels of support. Cloning a child killed in a traffic accident elicits only 8 points more approval than cloning oneself on a whim. These results are based on just one survey, rather than on the large databases of pooled surveys used in some other chapters, so the results need to be regarded more tentatively, as working hypotheses rather than established facts.

Deciding whether cloning is good or evil is influenced by somewhat different considerations, depending on what (or who) is being cloned. Moral evaluations of the cloning of animals and plants are strongly shaped by the scientific worldview, by endowing the medical establishment with moral authority, and by gender. Men who look to the medical establishment for moral guidance and who strongly adhere to the scientific worldview are much keener on cloning plants and animals than are women who see the medical establishment’s expertise as limited to domains other than morals and who strongly reject the scientific worldview. When it comes to cloning humans, only gender and investing the medical establishment with moral authority continue to matter.

The size of the gender gap over moral issues varies considerably among the different issues we consider in this book. The difference over cloning is among the larger gender gaps we observe, although not quite so large as the divergence over the morality of homosexuality.

Importantly, cloning differs from every other moral issue we have examined in this book: Religion plays little or no role in the formation of judgments about the legitimacy of cloning. Neither belief, nor church-going, nor denomination has any apparent influence on support for (or opposition to) cloning either of plants and animals or of humans.

The scientific worldview – which is such a pervasive influence on assessments of right and wrong in the other domains we have investigated – matters to some degree to views on cloning, although its sway is limited. In particular, the scientific worldview shapes attitudes towards non-human cloning, but pulls no strings connected to moral judgments about human cloning.

How risky is genetic engineering?

Besides asking whether sunrise biotechnologies are right or wrong in themselves, it can be useful to know to what degree people think they are safe. Cost/benefit analysis is surely not the only tool people apply when assessing whether new possibilities ought to be pursued, but it is one important aspect of such judgments. This seems to be particularly pertinent in the case of genetic engineering/genetic modification, about which there has been a cacophony of claims about the degree of risk this new technology poses.

We discover that Australians are moderately, but not hugely, worried about genetic engineering/genetic modification. The perceived degree of risk is within the range of perceived dangers of established scientific/technical public goods/intrusions in modern life. The citizenry thinks that genetic engineering is riskier than fluoridation of drinking water (although they do not see that as risk-free), but no riskier than the current use of chemical pesticides in farming.

Australians tend to form generalised attitudes towards genetic engineering, seeing it as generally dangerous or benign. That general view colours their perceptions of the degree of risk posed by different possible problems with specific applications of genetic

modification (GM). This is something different from a general tendency to feel secure or fearful, although that matters, too.

Despite the generalised component, concerns about genetic modification show some variations on the theme. The citizenry is most worried about a possibility of a genetically-modified human disease escaping the laboratory and devastating the general population. This “Frankenstein disease” worries people about as much as does the use of chemical pesticides in farming. The populace is a little less concerned about side-effects of a lifetime of eating genetically-modified crops. A bit less frightening yet is the possibility of genetically-engineered plants getting past containment procedures and spreading in the wild.

When it comes to who fears genetically-modified organisms (GMOs) and who does not, there is less a clash of worldviews than we have seen on many other topics in this book. Strong Christian believers are a little more worried, but, aside from that there is no impact of church-going or of which religion one belongs to. Perhaps equally strikingly, there is no effect of the scientific worldview. That means that the same balance of dread and confidence about genetic engineering is felt just as strongly among evolution’s stalwarts as among Darwin-deniers. There is, however, a small difference according to depth of scientific knowledge: People who know more science are a little more concerned.

Women fear a genetic-engineering disaster more than men do. But there are few other social differences. The perceived degree of risk posed by GMOs is basically the same among rich and poor, native and immigrant, old and young, married and single.

Politics differentiates views on genetic engineering to a considerable degree. People who favour privatisation are a little less worried about genetic-engineering disasters than are their peers who favour a larger purview for government. Even aside from that, Liberal Party supporters take a more sanguine view of genetic modification than do their Labour counterparts, with people who are keen on the Greens being the most fearful.

Importantly, a decade of experience with GM crops planted increasingly widely has not increased confidence that genetic engineering risks can be contained. Instead, there is actually a trend of increasing fear of a genetic-engineering disaster. We speculate that the government’s failure to move swiftly and confidently to require labelling of GM foods stirred suspicions that something is wrong.

Topic 3: Larger collectivities: What we owe them, and what they give to us

How wrong are tax cheating and welfare fraud?

In most of the 29 Western nations examined here, large majorities of people accept their government’s demands for refraining from cheating on welfare as largely legitimate, but in all the countries studied, people feel less moral obligation to comply fully with government’s taxation demands (Chapter 16). Australia and the other English-speaking countries are rather strict about tax cheating, with the New World English-speaking countries being even more censorious than are their Old World peers.

People who feel that tax cheating is very wrong tend also to feel that welfare fraud is very wrong. Conversely, people who shrug at pulling the wool over the tax man’s eyes tend also to wink at people dipping a little too deep or a little too often into the welfare till. In other words, there is a moderate positive correlation between moral judgments about tax cheating and about welfare fraud.

These moral feelings are widespread throughout society, with few sharp differences. There are no clear groups that strongly reject the legitimacy of government

demands (although the young are a little restless). But it is also true that there are no easily identifiable groups that unequivocally accept the legitimacy of government demands. This may mean that general social duties and identities rather than subgroup obligations and identities are largely influential in shaping moral feelings about taxation.

The strongest social influence in our model is age, a result that echoes findings of strong age effects on tax legitimacy in Sweden and the USA. We have not been collecting these data long enough to assess changes over time formally, but our hunch is that the age effect observed in these cross-sectional data represents a genuine life-course-related effect rather than the residue of historical change. Just why the legitimacy of the tax system increases with age is less clear, but warrants further research.

The second strongest influence is church attendance. This result shows that the influence of religion on moral reasoning is not limited to the personal domain, but extends into the realm of the nation. Church and state may be officially separate, but with regard to trustworthiness and honesty of the citizenry, the government is the silent beneficiary of morality fostered by religion.

Two smaller social effects are also present. Men are a little more tolerant than are women of both kinds of cheating. Moreover, educated people feel more strongly than do their less educated peers the legitimacy of government demands for taxes.

There are some signs that people feel that the wrongness of the cheating depends to some degree on the perceived moral capacity of the agent: Church-goers are less tolerant of tax cheating (which is presumably conducted by morally autonomous people of full capacity), but more tolerant of welfare cheating (which is perhaps seen as being conducted by people who are of diminished moral capacity). This echoes the importance of intentions in the domains of personal morality explored earlier in the book.

But not all governments are equally legitimate. Corrupt governments have less legitimacy when they try to collect taxes, according to the findings from our model (which incorporates an independent measure of the degree of corruption of the national governments). These results suggest that corruption opens a major rift of interests between the taxpayer and the government, thereby eroding legitimacy of taxation.

Several other features of nations matter, too. First, post-Communist governments' tax collection endeavours remain a little less legitimate than is the case in long-established democracies. Second, in poor nations, welfare fraud is not as strongly stigmatised as it is in richer nations.

The prospect in Australia for national tax and welfare systems that succeed by being "administratively weak but normatively strong", seems mixed, in part because although a large majority support compliance, they support it fairly weakly. This suggests that the norms would need to be strengthened before any administrative weakening could occur. Such strengthening would be eased to the degree that tax expenditures can be focused on collective goods, such as defence, or focused on widely shared goals, such as security against medical catastrophe. But moving in such a direction would not necessarily enhance electoral success. Political party elites are likely to prefer a "normatively weak but administratively strong" system that is better aligned with the values of their partisans, rather than with the values of the society as a whole.

Charity work: Volunteering in Australia in comparative perspective

The taxes demanded by governments are not the only contributions that members of the populace make to the well-being of their fellow citizens. About one-third of Australians regularly donate time to charitable causes, taking part in activities that directly benefit others. They serve in an astonishing variety of roles, from coaching the local children's

cricket team, to bringing visiting pets to cheer up patients in hospital, to tutoring reading, to taking disabled people on outings, to wielding the ladle in soup kitchens. On conservative estimates, each Australian volunteer makes an annual contribution of time worth over \$6,000, on average.

Internationally, Australia, New Zealand, and the USA are among the leaders in charitable activity. At the opposite extreme, volunteering is a very rare activity in the German-speaking countries, where only around 10 per cent participate. Denizens of other Old World countries volunteer for charitable duties at intermediate levels, lower than the English-speaking New World countries, higher than the German-speaking countries.

Religion is an important wellspring of volunteering. Strikingly, it is the fellowship or social capital side of religion that matters: church-goers are highly active in charitable work. Interestingly, every small increment in church attendance counts: It is not just that weekly church-goers volunteer more than do those with other ways of life. Rather, even “festivals Christians” who go to church a few times a year volunteer more than do resolute church-shunners, and rather lax church-goers who achieve only a monthly attendance volunteer even a bit more, and so forth. The other important feature of the association between religion and volunteering is that it is participation in worship services and the fellowship of other church members – rather than religious belief -- that entails charitable action. This is quite a different situation from many of the aspects of religion’s influence on moral judgments which we examined in Topic 2, where religious belief and church-going typically both matter.

Volunteering occurs throughout the class structure in Australia: Lady Bountiful does charity work, and so also does Joe Average. Rich and poor are equally likely to volunteer. Moreover, Liberal and Labor partisans are equally likely to donate time to charitable causes.

However, education makes a difference. Highly-educated people are especially likely to volunteer, but whether that is because of their networking and organisational skills, their strong sense of citizen duty, or for some other reason is not known. Importantly, there is no sign of a decline in the propensity of university graduates to volunteer, despite the privatisation of university tuition fees via the HECs scheme.

Also prominent among volunteers are middle-aged and older people, housewives and retirees. There appears to be some time trade-off between paid work and volunteering, but not a very large one. Note that age exerts an effect even apart from the fact that people in late middle age and old age tend to be more leisured than their juniors. The baby-boom generation, often derided for selfishness, is no less generous in volunteering than are their peers of different ages.

These results should allay recent concerns, first over whether the welfare state would “crowd out” individual charity, and second whether recent attempts at deregulating the Australian economy would enshrine ruthless individualism in other spheres of life, that neo-liberalism would dissolve social bonds. To the extent that “social capital” – the capacity to rely on one’s neighbours and co-workers to obey and enforce rules of honesty and public order, to provide speedy information flows, and to be prepared to work together to bring about valued ends – is enhanced by volunteer work, then our social capital accounts are, for the later 1990s, in the black rather than in the red. A fuller assessment of the “funds” of social capital in Australia would also need to take into account the degree of trust merited and received by a wide array of institutions, and preliminary indications are that “investments” in fighting corruption have paid off in relatively stern disapproval of tax and welfare cheating (Chapter 16), and that Australia offers its citizens multiple sources of national pride (Chapter 19) which enhance social inclusiveness.

Attitudes to foreign aid

Australians are very generous with their time to Australian charities (Chapter 17), but does that generosity extend across national boundaries? In their assessments of wealth inequality among nations, Australians find that it is larger than they would like it to be, but are fairly evenly divided on the question of whether this disparity should be addressed by redistribution (Chapter 18). It seems that some favour redistribution, and others favour enhancing the growth of the currently poor countries, a division of opinion that we have also seen in some aspects of attitudes towards domestic welfare (*Australian Economy and Society 2001: Education, Work, and Welfare*).

Australians' attitudes towards the degree of international inequality are very similar to those of the other English-speaking countries, but most European nations are more concerned about wealth disparities among countries. The view that global inequalities should be bridged by an extra tax imposed on individuals in more economically successful countries finds little support in the general public either here or abroad.

In terms of social differences, older people perceive more inequality, but there is no age difference in the desire to redistribute to poorer countries. Women are a fraction more likely than men to find worldwide disparities unacceptable and to support taxation to reduce them. There is also a small difference with the economically successful being even less enthusiastic about taxes to fund international redistribution than are their peers on more modest budgets.

People with more education are a little less concerned about global inequalities, and are definitely less supportive of international redistribution. Note that this is not a "hip-pocket" effect as income is controlled in the analysis, and recall that highly educated people are especially generous in volunteering (Chapter 17). Rather it seems that the broader horizons of highly educated people lead them to doubt the efficacy of international redistribution.

Religion matters in this domain of life, too. Devoted church-goers tend to endorse the idea of direct redistribution more warmly than others, perhaps because they see it as yet another form of charity. Interestingly, they are not especially likely to see global inequalities as excessive, just more eager than others to take action to ameliorate them. Protestants are somewhat less likely than others to see global inequalities as excessive, and they also are less likely to support charitable measures to reduce them.

Thus, it seems that national boundaries still demarcate claims on charity: "social inclusion" does not quite stop at the national boundary, but it certainly decreases sharply there. We feel the needs of our fellow citizens more urgently than the claims of those beyond our borders. Also, the same debate about redistribution versus individual responsibility that rages over the reform of welfare is echoed in the issue of foreign aid as well.

What is it then that the evidently still animated nations of this globalised era do for their citizens? Does the kind of institutional disaffiliation that has been occurring in religion presage a retreat from other loyalties and collective identities? One way of gaining insight into these questions is to examine what varieties of national endeavour people esteem, and how these are linked to national feelings.

National pride: What stirs hearts today

What brings credit and prestige to a nation in the eyes of its citizens? What role do science, economy, arts and literature, and sport play in our national feelings? Does the populace at large still aspire to national goals in the face of relentless globalisation? Chapter 19 explores

the dynamics of patriotism by assessing the citizenry's national pride in a variety of endeavours, and by discovering the degree to which these aspects of national pride, in turn, influence national attachment. We've seen that Australians feel national duties to pay taxes and not to exploit welfare (Chapter 16), and that they give generously of their time to charity (Chapter 17). Here we turn to the question of what it is about their country that reinforces the feelings of attachment that underlie a myriad specific acts of loyalty and selflessness.

Australians are especially proud of their science, despite their ambivalence concerning the scientific worldview (Chapter 6). Pride in our sporting achievements and in Australian arts and literature run very high here as well. The citizenry is also very proud of the Australian military and of Australian history. They are noticeably less proud of Australia's economic performance and of the Australian social security system.

People throughout the rest of the developed world also feel national pride in all these things, contrary to arguments that economic and institutional globalisation are eroding national identity. But not all peoples are equally proud of the same things. Pride in the economy differs the most among nations. Pride in science also varies greatly. By contrast, pride in the arts and literature and in sport vary less.

Moreover, regression analyses show that linkages of pride to national attachment also vary cross-culturally. Pride in science is especially consequential for feeling close to one's nation in the English-speaking countries, but pride in arts has less impact on national attachment there. Pride in sports matters especially in smaller nations. Pride in economic achievements affects national attachment everywhere. The evidence on volunteer work and on acceptance of a duty to pay taxes suggests that people are definitely willing to make contributions to the public good, but this result suggests that such commitments may be strengthened or weakened by national success.