# Methodology for the smartspider and the smartmap

1st September 2020

Calculation and interpretation

In addition to calculating your congruence with the candidates running for the ACT 2020 election, the *smartvote Australia* website offers additional graphical analyses of political positions. One of these is the smartspider (see Figure 1).

Figure 1: Example of a smartspider
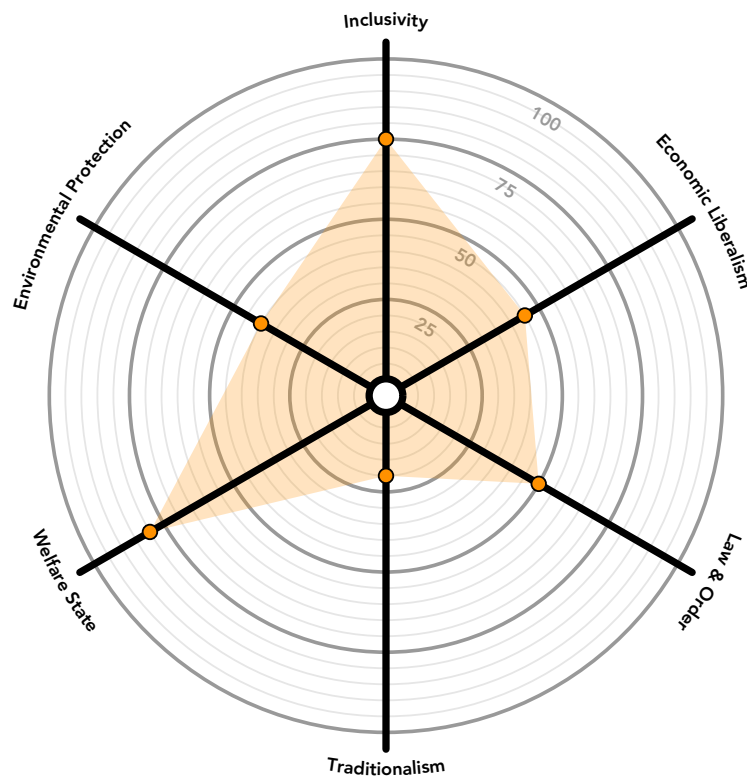
The smartspider expresses the intensity of the candidates' attitudes and political positions on thematic axes. For each axis, a score between 0 and 100 points can be assigned. 100 points means a strong endorsement to the political goal represented by the axis, while 0 point stands for a strong rejection of it.

Before entering the details of the calculation of the smartspider, the following points are to be taken into consideration:

- A smartspider can be analysed separately for either a candidate, or a voter. It provides a summary of the positions taken on questions assigned to the six thematic axes (for the assignment of questions see the document "Question assignment smartspider" in the methodology section on the *smartvote Australia* website). When consulting a smartspider that compares the responses of a voter with those of a candidate, one can check the overlap between the two on those different axes. This information is clearly distinct from the matching score which is calculated on the total number of questions that a user responded to.

- More precisely, some questions of *smartvote Australia* cannot be linked to one of the six axes defined here. These questions are therefore not included in this graphical representation, which must thus be considered as a partial, autonomous and simplifying exercise providing additional information on positions in an attractive way.

The axes of *smartvote Australia's* smartspider:

The smartspider aims at summing up, at a glance, positions on relevant policy areas in the Australian political landscape. We chose to represent six main axes, each made of different political themes.

1. The "Inclusivity" dimension refers to beliefs that emphasize the democratic rights of all individuals, regardless of cultural, economic or social context. Inclusive values promote a broad vision of citizenship and the political participation of all groups – especially those that have traditionally been underrepresented in politics. This includes support for incorporating greater numbers of women, young people, immigrants and Indigenous Australians into the political system.

2. <u>The "Economic Liberalism" dimension</u> refers to the belief that individuals, not the state, are best placed to make economic decisions. It emphasizes the free market and open competition are the best ways to balance the needs of individuals and society as a whole. As a result, government should impose as few constraints on the free market as possible. "Economic Liberalism" is associated with fewer restrictions and regulations on corporations, privatization of assets and services, free trade and lower taxes.

3. <u>The "Law & Order" dimension</u> refers to beliefs that promote respect for the rule of law, obedience to the rules that govern society, and the protection of people and private property. This involves identifying and preventing crime of all forms, including reducing drugs, violence and civil disorder. In this respect, society should prioritize safety and security as much as possible, even if doing so results in the restriction of civil liberties.

4. <u>The "Traditionalism" dimension</u> refers to the belief that society should be guided by specific, immutable moral principles. These values are often associated with religious teachings and ideas of 'good' and 'right' conduct. Traditionalism places high importance on social cohesion, ethnic homogeneity and religious liberty. This often includes support for legal definitions of marriage that exclude same-sex relationships, outlaw abortion and assisted suicide. Traditionalism is associated with greater emphasis on Australia's Anglo-Celtic heritage and British origins.

5. <u>The "Welfare State" dimension</u> refers to the belief that equality and justice should be the guiding principles of the state. It emphasizes that government has a responsibility to provide certain services to its citizens, especially those in greatest need. This often includes greater government intervention in areas such as education, health, disability and unemployment. The welfare state is also associated with greater government oversight of the free market and policies that guarantee a minimum wage, parental leave and prevent unpaid overtime.

6. <u>The "Environmental Protection" dimension</u> refers to the belief that society cannot ignore the impact of cultural, economic and social development on nature and the environment. This involves promoting sustainability and restrictions on pollution, consumption and natural resource exploitation. These attitudes are often associated with support for government incentives for the development of renewable energy, taxing carbon output and reducing the use of fossil fuels.

The full list of questions and the direction in which responses affect one's position on the axis is provided in the attached document "Question assignment smartspider" in the methodology section on the *smartvote Australia* website.

Calculation of the smartspider

The calculation of the positions in the smartspider is based on the answers to the questions in the *smartvote Australia* for the ACT 2020 election questionnaire. The approval (endorsement of the goal stated in the name of the axis) is calculated by summing the responses values for each question included in the relevant axis. This is done for the six axes of the smartspider respectively. The values of the answers are classified as follows (see Table 1):

Table 1: Numerical values of answer options

Standard questions		Budget questions	
Answer	**Value**	**Answer**	**Value**
"Definitely yes"	100	"Much more"	100
"Mostly yes"	75	"Somewhat more"	75
"Mostly no"	25	"Same"	50
"Definitely no"	0	"Somewhat less"	25
		"Much less"	0

There may be questions that must be answered negatively ("No" or "Less" answers) in order to be consistent with the goal formulated on the smartspider axis. The answer values to these questions are reversed, that is, they will receive the following values (see Table 2):

Table 2: Numerical values of answer options (reversed)

Standard questions		Budget questions	
Answer	**Value**	**Answer**	**Value**
"Definitely yes"	0	"Much more"	0
"Mostly yes"	25	"Somewhat more"	25
"Mostly no"	75	"Same"	50
"Definitely no"	100	"Somewhat less"	75
		"Much less"	100

In the next step we are calculating the total approval for each axis by adding the answer values of all assigned questions of a specific axis. In addition to that we also calculate the maximum possible approval for each axis. The maximum approval value is obtained by multiplying the number of questions pertaining to an axis by the maximum possible score per question. If, for example, six questions are classified as relating to one of the axes of the smartspider, the maximum possible approval for that axis is 600 points (6 * 100 points).

Finally, the total approval across the questions of the axis is divided by the maximum possible approval for that axis, and it is reported as the position (expressed as a percentage) on the smartspider axis.

Method for the smartmap

The smartmap represents a second visual analysis of political positions. It shows the political positions within a two-dimensional political space based on the economic left-right dimension as well as a liberal-conservative dimension.

- How to read and interpret the political map: The positioning of voters, candidates on the smartmap require the preliminary assignment of the smartvote Australia questions for the ACT 2020 election to two pre-defined political dimensions. We have chosen to code questions according to whether or not they relate to classical economic left-right dimension on the role of the State in the economy (horizontal axis) or the liberal-conservative divide on cultural and social issues (vertical axis).

- The economic left-right dimension owes much to the traditional class cleavage at the heart of the structuration of the European political space, one that opposes the State on the one hand and the market on the other. It pertains to differences in opinion with regard to the role of the State in the regulation of the economy and the provision of social protection. Right-wing supporters would tend to support laissez-faire economic principles (including nowadays national competitiveness on world markets) and a defence of private ownership, while left-wing advocates would support an active government providing a more equal redistribution of resources.

- The liberal-conservative dimension finds its historical roots in the Church and State divide. It is mainly structured by issues of cultural liberalism and social conservatism, pitting traditional values (order, certainty, security) and institutions (Church, monarchy, traditional forms of families, a strong army) against liberal and libertarian positions in ethical debates (abortion, euthanasia, homosexuality, drugs) as well as universalistic-multicultural visions of the community (positive view of immigration, minority rights and inclusivity in general).

- The full list of questions and the direction in which responses affect one's position on the axis is provided in the attached document "Question assignment smartmap" in the methodology section on the *smartvote Australia* website.

- General interpretation of the smartmap: The map represents similarities of the political profiles of the candidates on those two dimensions. The closer the points marking the candidates' positions, the more similar are the ACT candidates' political profiles (i.e., their answers to the *smartvote Australia* questionnaire). Please note that

because of the fixed quadratic shape of the smartmap, inferences from the height or width of the figure on the statistical relevance of the two dimensions are not valid.

- The calculation method used for the smartmap is the same as the one applied to the smartspider.