

# **Balanced value orientations: Do they allow for integrative complexity and commitment?**

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## Abstract

The value balance model postulates two independent value orientations representing security and harmony. Individuals who score more highly on one value orientation than the other, the security oriented and the harmony oriented, are most likely to be located at the poles of the right-left attitude continuum. Those with balanced value orientations occupy the centre ground, but amongst the occupants of the middle ground are those with strong and dual value allegiances as well as those who are not interested in politics. This paper uses Tetlock's (1986) value pluralism model to hypothesize and demonstrate the higher integrative complexity of dualists (high harmony-high security) compared with relativists (low harmony-low security). Furthermore, the paper examines whether or not dualists with their greater integrative complexity have less of a capacity to express commitment to a social issue than those whose value orientations are in a state of imbalance. Findings based on a random self-completion survey of 1680 Australians are interpreted as showing that commitment for dualists is possible as long as competing value orientations do not become salient in the domain of action.

Tetlock and his colleagues (Skitka & Tetlock, 1993; Tetlock, 1986, 1989; Tetlock & Mitchell, 1993; Tetlock, Armor & Peterson, 1994) have contributed substantially to our understanding of the role that values play in explaining political behavior. In particular, the value pluralism model has drawn attention to the way in which values not only shape the substance of political decisions, but also the decision making process. Tetlock was able to demonstrate that social problems could be more intractable for some individuals than for others. Where cherished and conflicting values were implicated, individuals were more likely to engage in integratively complex reasoning to arrive at a decision. As part of this process, individuals displayed two capacities, evaluative differentiation (recognizing legitimate and competing perspectives), and conceptual integration (developing guidelines for dealing with different points of view).

According to Tetlock (1986), the integratively complex are more likely to have a pluralistic ideology and to occupy the centre to left-of-centre ground on the right-left political continuum. In contrast, extremists of the right or the left are associated with dogmatism, intolerance of ambiguity and self-righteousness. Tetlock identified extremists as adherents of monistic ideology. In resolving social problems, they are inclined to recognize the importance of only one kind of value, those that are central to their ideological position, and are unable to differentiate or integrate competing points of view.

While advancing the theoretical importance of values in political decision making, Tetlock's work has given rise to a number of unanswered questions. First, the value pluralism model has been developed and tested using conflicts between specific values. Yet values rarely exist in isolation from other values (Braithwaite & Law, 1985; Braithwaite & Scott, 1991; Schwartz, 1992). Full consideration of the trade-off process should take into account the associated values that contribute to the decision to favour one option over another. Second, Tetlock's (1986) claim that the integratively complex are found left of centre on the right-left continuum creates

tension between the value pluralism model and the widely accepted right-left attitude continuum. The integratively complex are occupying territory that is in close proximity to those who have no interest in politics. This somewhat uncomfortable realization raises a third question: Do the integratively complex and the politically uninterested share the middle ground of the right-left continuum because they both are unable to demonstrate commitment to social issues?

Tetlock, Armor and Peterson's (1994) analysis of the slave debate suggests that we might expect a substantial difference between the integratively complex and the politically uninterested with the former capable of showing a considerable degree of political effectiveness. While acknowledging political effectiveness, Tetlock et al. back away from the idea that commitment co-exists with integrative complexity, suggesting some incompatibility between the two. In arguing that both high and low levels of integrative complexity have their positive and negative side, Tetlock et al. point out that while the integratively simple may be dogmatic and self-righteous, they may also be visionary and principled. Similarly, as the integratively complex are displaying reasonableness and flexibility, they may be criticized for being weak and hypocritical. This analysis implies that the integratively complex may have difficulty following through with commitment, but this line of argument overlooks the additional data that individuals draw upon when they judge political actors as visionary and principled, or weak and hypocritical. Such evaluations tend to be global, extending beyond one decision to include coherence in a set of decisions and actions. Commitment similarly is a broader concept that extends beyond the making of a decision, to owning that decision and acting upon it in different contexts. The relationship between integrative complexity and commitment therefore may be less straightforward than Tetlock et al.'s analysis implies.

This paper addresses the above questions, using the value balance model of political evaluations (Braithwaite, 1982, 1994, 1997, 1998a). The value balance model postulates two relatively independent value orientations, one representing harmony values, the other security values. The vast majority of the population see

some merit in both kinds of value orientations (Braithwaite & Blamey, 1998), but differences can be found in how much importance is placed on them and in how the value orientations are balanced in day to day living. These differences give rise to a 2x2 table representing high and low levels of value balance and engagement.

The model draws a distinction between the structure of social-political values and the structure of social-political attitudes. Values are guiding principles that transcend objects and situations, they are perceived by those who believe in them as “ultimate ends”, as “absolutely good under all circumstances”, and as the “universal ‘ought’ towards which all people should strive” (Scott, 1965, p.12). As such, values belong to the domain of ideals where all things are possible. Not until the values are taken off the shelf, so to speak, to use in the real world for evaluation and decision making, does the incompatibility of some values become apparent, and trade-off becomes necessary. Some of society’s institutions formalize this trade-off more than others, and some thrive on the extent to which value incompatibilities can be debated and contested. The adversarial right-left political system of western democracies exemplifies such an institution. The trade-off between security and harmony values is unproblematic for those who follow conventional politics, consistently prioritizing one orientation over the other, but is difficult for those with balanced, strong allegiances to both security and harmony values. Their engagement with political institutions involves adopting a mixture of left and right positions (Braithwaite, 1998a). In so doing, they are classified as “middle of the roaders” on the liberalism-conservatism continuum (Blamey & Braithwaite, 1997a). Yet, their approach differs from fellow travellers on this continuum who attach less importance to social values and politics. Those with strong security and harmony allegiances want to engage with the political process, those with relatively weak allegiances are not interested.

The value balance model provides a conceptual framework in which the principles of Tetlock’s value pluralism model can be embedded. While Tetlock has outlined the process of value trade-off, the value balance model focuses on content and postulates that much of political debate can be understood at a values level

through the concepts of a security value orientation and a harmony value orientation. Those who align themselves with one value orientation more than the other are adopting a monistic ideological position. Those who do not are pluralistic, but even here there is a difference between those who are engaged with value based governance and those who are not. Through taking both content and engagement into account, the value balance model is useful for testing whether those who place importance on both value orientations have greater integrative complexity in decision making, but are less able to commit to a social issue.

### The value balance model

The harmony and security value orientations have been empirically derived from a series of studies of the value preferences of Australians measured over a 25 year period. The initial pool of 125 values was compiled in 1974 (Goal, Mode and Social Values Inventories) on the basis of semi-structured interviews with a random sample of Australians. Participants were invited to express their views on what values were important to them personally and to Australians generally. Since that time, the inventories have been administered on a number of occasions to students and to the general population. Two major factors have consistently emerged from factor analyses of the instrument, one representing security, the other harmony (Blamey & Braithwaite, 1997a; Braithwaite, 1982, 1994, 1997, 1998b; Braithwaite & Law, 1985; Braithwaite & Scott, 1991).

In some samples these dimensions are independent, in others they are positively correlated. Response bias may account for a small proportion of the shared variance between the scales, but evidence to date has failed to support this interpretation of why high scorers on harmony tend to be high scorers on security (Braithwaite, 1994). On the basis of findings so far, the most likely explanation for the positive correlation between the factors is derived from Merton's (1968) analysis of social structure and anomie. Merton described some individuals as being in the system, but not of it. It seems reasonable to postulate that individuals feel different

degrees of affinity for the system, and for the values that it espouses. Those who are disenchanted, however, are more likely to express luke warm support for all of society's treasured values, rather than a selected few. The positive correlation between harmony and security, therefore, is interpreted as a function of engagement with one's society.

The security value system brings together guiding principles that ensure that one is well positioned to protect interests and further them within the existing social order. Security values provide a socially accepted framework for deciding how to divide up limited resources, what kinds of competition between groups and individuals is legitimate, and how winners and losers are constructed. The principles apply at a personal or societal level. At the societal level, values such as the rule of law, national economic development, and national greatness are socially sanctioned goals for ensuring the safety of one's group and individuals within it.

In contrast, the harmony value system brings together societal and personal values that aim to further peaceful coexistence through a social order that shares resources, communicates mutual respect, and cooperates to allow individuals to develop their potential to the full. Harmony values orient the group toward establishing connections with others, transcending individual grievances and dissatisfactions, and finding peace within themselves and with the world. Harmony values for society include a good life for others, rule by the people, international cooperation, a world at peace, human dignity, greater economic equality, and preserving the natural environment.

These two value orientations have an independent influence on the position of individuals on the right-left continuum and on the way in which individuals resolve social problems (Blamey & Braithwaite, 1997a; Braithwaite, 1994, 1997, 1998a, 1998b). Although most people value both security and harmony (Braithwaite & Blamey, 1998), political institutions operate in an adversarial way pitting one against the other. When harmony and security values are brought into conflict in political

debate, the difference in the importance attached to each value orientation best predicts position on the right-left continuum.

The value balance model gives rise to a 2 X 2 table through dichotomizing scores at the median on security and harmony, and combining the two sets of high-low scores to define four value orientation groups. The “security oriented” are individuals whose security values are more important than their harmony values, and the “harmony oriented” are individuals whose harmony values are more important than their security values. For individuals who value both security and harmony highly, the term “dualist” is used. Individuals who place relatively low importance on both security and harmony values are termed “relativists”. Relativists express acceptance of security and harmony social values, but are sceptical of their place in the political process, preferring to rely on contextual cues, and harbouring a degree of cynicism about social and political institutions (Braithwaite, 1998a).

#### Value orientations and integrative complexity

From the perspective of Tetlock’s (1986) value pluralism model, the security oriented and the harmony oriented have monistic political ideologies while dualists and relativists have pluralistic ideologies. The harmony and security oriented, therefore, should exhibit low integrative complexity and dualists high integrative complexity. Relativists are unlikely to be swayed by value considerations and should be most open to persuasion through providing context specific information. Low overall allegiance to social values, however, means they are unlikely to be sufficiently motivated to direct effort toward resolving social problems, regardless of the nature of the information provided. These hypotheses are tested in Study I.

#### Integrative complexity and commitment

Whereas integrative complexity describes the process of decision making, commitment describes the consequences of the decision and its relationship with other beliefs and practices. Commitment is inferred from expressions of obligation

and responsibility that restrict freedom of choice in future situations and lead to actions. Thus, an individual may be painstaking in examining different points of view and arriving at a solution that meets conflicting needs. It is another question, however, whether or not such a person will show commitment to the ideas and actions in other contexts.

Although conceptually distinct, Tetlock et al. (1994) may be correct in suggesting an empirical relationship of some kind between the concepts. If integrative complexity means being unsure about the correctness of a decision (Tetlock et al., 1994), there is the possibility that chronic uncertainty will lead to procrastination across a range of situations, and thus, lower commitment. The reverse of this sequence is also plausible and consistent with a body of attitude research (Abelson, 1986). Commitment to a social issue may inoculate the decision maker against counter arguments that are challenging or persuasive.

The question addressed in Study II is whether either of these arguments is relevant to the situation facing dualists when they are asked to commit to a social issue. Specifically, how does the commitment of dualists compare with that of the security oriented, the harmony oriented and relativists? If dualists are more integratively complex than other groups, can we expect their commitment to suffer, or do they find a way to resolve the complexity and commit to a course of action?

#### Value orientations and commitment

Whereas integrative complexity differentiates those with monistic and pluralistic ideologies, commitment should differentiate left and right sympathizers. Commitment should be higher among the group that “owns” the belief (Abelson, 1986). Underlying this prediction is the assumption that beliefs possessed by ideologues of the right are often different from the beliefs possessed by ideologues of the left. Kerlinger (1967, 1984) expounded this view through his theory of criterial referents in which he showed that the salient issues for conservatives were different from the salient issues for progressives. A similar thesis has been advanced by Budge

and Farlie (1983) who have shown how electors consistently identify political parties of the right and left with different issues.

In practice this means that once an issue is owned by one side of politics, beliefs and actions come into play to demonstrate commitment. Others may oppose the position, but they need not do so by owning the opposite belief. Opponents can focus their attention on discrediting the commitment of the other, through pointing out risks and harmful side effects.

The issue chosen for analysis in this paper is the protection of native forests, an issue owned by the left (Forgas & Jolliffe, 1994), and opposed by the right because of the risks posed to job security and economic development. This is the social problem used to examine the relationship between value orientations and integrative complexity (Study I) and value orientations and commitment (Study II).

### Hypotheses

Because of their strong, balanced support for both value orientations, dualists will experience conflict when asked to solve an environmental-development dilemma of political importance. They must use additional information to find ways of trading-off the values to which they are strongly attached. In contrast, the security oriented and harmony oriented can rely on their dominant value orientation to solve the dilemma without the need for additional information. Relativists need additional information, but their lack of political interest and weaker commitment to social values means that they are least likely to be motivated to work through information to resolve the dilemma. The first and second hypotheses, therefore, are that:

- (1) Greater integrative complexity will be evident among dualists making a decision over an environmental-development dilemma than among the harmony oriented, the security oriented, or relativists.
- (2) Relativists will be least likely to demonstrate integrative complexity in arriving at a decision.

We have argued that dualists need not necessarily lack commitment because of their integrative complexity. The hypotheses tested in Study II, therefore, are that:

(3) Dualists and the harmony oriented will show higher commitment to environmental issues than either the security oriented or relativists because they own the issues.

(4) The harmony oriented are likely to have higher commitment to environmental issues than dualists because their commitment is less likely to be undermined by new information being introduced to change their decisions from one context to another.

### Study I

Tetlock (1986) defined integrative complexity in terms of capacity (a) to recognize different points of view as legitimate and (b) to develop a decision model that takes competing points of view into account. Tetlock's preferred methodology for identifying integrative complexity has involved coding text written by respondents to show the arguments they considered in coming to a decision about a social problem.

The present study departed from this tradition through developing measures of integrative complexity that could be used in a national mail survey, the National Forest Attitudes Survey (Blamey, 1995a). The objective was to find closed ended rather than open ended questions to capture Tetlock's (1986) concepts of differentiation and integration. All three approaches used here are indirect measures of integrative complexity. Blamey (1995b) avoided using measures that could be construed as ability measures or requests to self-report on ability because of the likelihood of socially desirable responding.

The first measure asked respondents for their evaluation of the important forest management issues, the second required respondents to introspect on the effort expended in making a policy decision in relation to the environmental-development dilemma, and the third involved a between subject manipulation of the information available to the respondent to resolve the dilemma.

The concept of “differentiation” was captured through asking respondents to indicate the importance that the government should place on a set of forest management issues in deciding policy. The issues covered both environmental and economic development interests. The assumption made was that the level of differentiation expected of the nation’s leaders would be directly proportional to the level of differentiation characteristic of the respondent in her/his decision making.

“Integrative effort” was the second measure used in this study as a proxy for effort expended to differentiate issues and integrate the information. Integrative effort was based on respondents’ reports of how much they thought about environmental arguments and how much they thought about development arguments when they made their policy decision.

In order to assess the capacity to integrate conflicting information at the stage of making a decision, a further measure was required. The approach taken here did not involve an index to represent an individual’s integrative capabilities. Instead, the capacity to integrate conflicting information into a decision was captured for the different value orientation groups through a between groups experimental manipulation.

Each individual was asked to consider a particular version of the dilemma. The decision options in relation to the dilemma were the same for all individuals, but the information contained in the dilemma was varied across respondents. Different versions were distributed randomly to the sample. Dualists were hypothesized as being most sensitive to the information provided in making their final decision. Therefore, dualists, as a group, were expected to show variation in their preferred solution across the different scenarios described in the dilemma. The security oriented, the harmony oriented and relativists were expected to show informational insensitivity, with little change evident in the groups’ decision across the different scenarios set out in the dilemma.

## Method

### Participants and Procedure

The survey was mailed to a random sample of 3500 adults on electoral rolls in Australia in 1994 with a reply paid envelope. Two weeks after the initial mailing, a reminder card was sent to all non-respondents, and in cases where no reply was forthcoming in the subsequent two weeks, another copy of the questionnaire was sent. Completed questionnaires were returned by 1680 individuals, giving a response rate of 48%.

The sample comprised 49% men and 51% women ranging in age from 16 to 95 years ( $M = 45.48$ ,  $SD = 16.50$ ). Just over half were in paid work (58%) with a further 4% looking for paid work. The remainder were primarily home-makers (14%) or retired people (16%). The median personal income was \$20,000, with 15% earning below \$5,000 and 1% earning above \$100,000. In terms of education, 39% had left school at Junior/Year 10 or less, 38% completed high school or a diploma of some kind, and 23% had a tertiary degree or some other higher degree.

Sample statistics on age, income and sex corresponded closely to population parameters available from the Australian Bureau of Statistics census for 1991 (ABS, 1993). The biases that were apparent were associated with age and education. The sample over-represented 20-29 year olds (22% compared with an expected 16%) and under-represented 50-59 year olds (13% compared with an expected 17%). The sample over-represented those with a tertiary degree (14% compared with an expected 8%) (Blamey, 1995b).

### Measures

The National Forest Attitudes Survey (Blamey, 1995a) covered six broad topics presented in the following order: (a) general social policy issues for Australia, (b) the management of the south-east forests, (c) Australian forests in general, (d) the environment, (e) social attitudes and values, and (f) personal background information.

The environmental-development dilemma given to respondents in section (b) of the questionnaire, took the following form. Each respondent was asked to imagine that she/he had to vote in a referendum on a question of forest management. Respondents were given a map of south-east New South Wales and part of Victoria (two Australian States). The maps were shaded to show the areas set aside as conservation reserves and the areas set aside for wood production. Other areas were striped to indicate that they were potential conservation reserves. The dilemma facing respondents was to choose one of two options: to allow wood production to continue in half of the striped areas (Option A), or to convert all of the striped areas into conservation reserves (Option B). Overall, Option B proved the most popular with 54% of the sample favouring conservation.

To help in the decision making process, respondents were given information about the two options and what it would mean for the region and for the individual respondent in his/her role of citizen. This was the information that was varied across the sample. Three versions are described below<sup>1</sup>, and are used to test the hypothesis that dualists are sensitive to the nature of the information provided. The security oriented, harmony oriented and relativists were not expected to exhibit a pattern of informational sensitivity in their decision making.

Version 1 provided the basic case for wood production and for conservation. Respondents were given information about how logging could proceed in a socially responsible way, with awareness that there was always the possibility that the habitats of rare and endangered species might be disrupted. The case for conservation focused on the fact that some parts of the forests had never been logged, that some of the trees were over 150 years old, and that the forests were home to rare and endangered species. Respondents were reminded that if they chose option B (for conservation), there would be associated costs. The increased price of wood and the costs of

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<sup>1</sup> A fourth version involved the setting up of a trust with different response options. This dilemma, therefore, is not used in this analysis. A further feature of the design was that costs were varied across each dilemma, being estimated as \$50, \$100, and \$200 per person. This manipulation did not differentially affect the preferred option across value types and will not be used in the present study.

maintaining the new conservation reserves would have to be covered by a levy on each adult Australian.

Version 2 was identical to Version 1 with a further consideration. Opting for some wood production would be sufficient to maintain job opportunities in the region, but opting for conservation would result in fewer job opportunities. The costs of unemployment, including the costs of compensation where necessary, were added to the earlier costs of increased wood prices and increased maintenance. These costs, as in Version 1, would be passed on to adult Australians.

Version 3 provided the same information about wood production and conservation as Version 2, but in this version, the costs were not passed on. Instead, respondents were told that the costs would be met by redirecting government expenditure from other areas.

The integrative effort index involved summing responses to two items in the questionnaire. After making their decision in relation to the environmental-development dilemma, respondents were asked the extent to which they agreed or disagreed with the following statements: (a) "I thought a lot about the environmental impacts of logging when formulating my response" ( $M = 4.13, SD = .83$ ) and (b) "I thought a lot about the economic benefits that logging might bring when formulating my response" ( $M = 3.69, SD = 1.03$ ). Ratings were made on a five point strongly disagree to strongly agree scale. Scores were standardized so that relatively strong performers on environmental impacts were on a par with relatively strong performers on development benefits. Finally, the standardized scores were summed to reflect the degree to which the individual showed integrative effort in resolving the dilemma ( $M = -.08, SD = 1.50$ ). The higher the score, the greater the effort reported by the respondent to consider both environmental and development issues.

The differentiation index was calculated from the importance that individuals thought government should attach to a number of environmental and development factors when formulating forest management policy. Respondents were presented with 9 environmental issues and 7 economic issues. Responses were scored in terms

of whether the issue was considered important (1) or not (0). Differentiation was assessed through summing the number of environmental issues considered important from the following list: (a) preventing soil erosion, (b) helping to counter the Greenhouse effect, (c) providing areas for bushwalking/camping, (d) attracting tourists to the area, (e) protecting wildlife and plants, (f) allowing old, large trees to grow, (g) protecting water quality, (h) providing wilderness areas, and (i) protecting Aboriginal values ( $M = 7.90$ ,  $SD = 1.34$ ). The number of development issues considered important were then summed: (a) producing timber for house frames and furniture, (b) providing woodchips for export, (c) providing employment, (d) maintaining our forest industries, (e) reducing imports of timber and timber products, (f) supplying timber for sale overseas, and (g) maintaining logging communities ( $M = 4.34$ ,  $SD = 2.14$ ). The total scores for environmental and development issues were standardized before being summed to give a differentiation score ( $M = .01$ ,  $SD = 1.44$ ). Those who attached high importance to both environmental and development issues will have a higher score than those who attach importance to only one side of the argument, and both will have higher scores than those who consider none of the issues worthy of serious consideration in policy formulation. The standardizing procedure meant that scores reflected an individual's capacity relative to others to differentiate on environmental issues and development issues.

The Social Values Inventory was used to measure an individual's security value orientation and harmony value orientation. The inventory is part of the Goal, Mode and Social Values Inventories (Braithwaite, 1979) and requires respondents to read through a list of societal goals (see Appendix I) and to judge each as a standard that they might use to make judgments about world and community events and to guide their actions (eg. when voting). Responses are given on a seven point rating scale where 1 = I reject this, 2 = I am inclined to reject this, 3 = I neither reject nor accept this, 4 = I am inclined to accept this, 5 = I accept this as important, 6 = I accept this as very important, 7 = I accept this as of the utmost importance.

Individual scores on the harmony value scale were calculated through summing responses to the following items and dividing by the number of items in the scale: (a) a good life for others, (b) rule by the people, (c) international cooperation, (d) social progress and social reform, (e) a world at peace, (f) a world of beauty, (g) human dignity, (h) equal opportunity for all, (i) greater economic equality, and (j) preserving the natural environment. The mean for the harmony value scale was 5.61 with a standard deviation of .87. The alpha reliability coefficient was .85.

Individual scores on the security value scale were calculated through summing responses to the following items and dividing by the number of items in the scale: (a) national greatness, (b) national security, (c) the rule of law, and (d) national economic development. The mean for the security value scale was 5.54 with a standard deviation of 1.09. The alpha reliability coefficient was .79. The security and harmony value scales were positively correlated ( $r = .44, p < .01$ ).

The sample was split at the median on each of these scales to produce a high-high value orientation group (dualists,  $N = 546$ ), a high harmony-low security group (the harmony oriented,  $N = 269$ ), a high security-low harmony group (the security oriented,  $N = 260$ ) and a low-low value orientation group (relativists,  $N = 495$ ).

## Results

### Hypothesis 1

Greater integrative complexity will be evident among dualists making a decision over an environmental-development dilemma than among the harmony oriented, the security oriented, or relativists.

### Hypothesis 2

Relativists will be least likely to demonstrate integrative complexity in arriving at a decision.

One-way analysis of variance was used to compare the security oriented, the harmony oriented, dualists and relativists in terms of their differentiation scores.

These scores (standardized in Table 1) reflected how many of the 16 environmental and development issues respondents believed were important considerations in designing forest management policy. From Table 1, a one-way analysis of variance produced a significant *F* statistic, indicating that at least two means were significantly different. Differences between the means in Table 1 were examined for statistical significance using Scheffe tests. The Scheffe test identified dualists as the only group that differed significantly from other groups. As hypothesized, dualists considered more environmental and development issues important in designing forest management policy than the security oriented, the harmony oriented and relativists.

#### INSERT TABLE 1

A one-way analysis of variance comparing the value orientation groups on integrative effort also produced a significant *F* statistic overall, but when group means were compared using the Scheffe test, support was not found for the hypothesis that dualists would expend most effort in resolving their dilemma. Instead, relativists stood apart from the rest. Relativists reported engaging in significantly less integrative effort than either the security oriented, the harmony oriented or dualists.

The final set of analyses addressed the question of whether or not dualists were sensitive to the information in the scenarios. In contrast, there was no reason to expect the security oriented, the harmony oriented and relativists to be sensitive to this same information. Chi-square tests of independence were conducted for each value orientation group, to find out if, for any group, there was a statistically significant relationship between the version of the dilemma that the respondent was given (Versions 1, 2 or 3) and their final decision (Option A or Option B). The percentages in Table 2 show the greatest inconsistency in response across scenarios among dualists with the majority favouring conservation under versions 1 and 3, and favouring some logging under version 2. As a group, relativists moved from Option A to Option B across scenarios as well. Only in the case of dualists, however, was the

relationship sufficiently strong to be statistically significant (see Table 2). Thus, Hypothesis 1, that dualists would be the value orientation group that was sensitive to different scenarios in evaluating their dilemma was supported. Other value orientation groups did not appear to be sensitive to any significant degree to changes in information in the scenarios.

#### INSERT TABLE 2

As a precautionary step, a chi-square test of independence was calculated to check that versions 1, 2 or 3 of the social dilemma were randomly distributed across the four value orientation groups as expected. The breakdown of the three versions within each values orientation group was in all cases within 5% of the expected 33.3%. A chi-square test of independence testing for a relationship between version of the social dilemma and value orientation group was not significant.

#### Discussion

These results support the first hypothesis that dualists show greater integrative complexity than the security oriented, the harmony oriented and relativists when asked to identify important issues for policy formulation on forest management (differentiation) and when required to make a decision that involves integrating divergent pieces of information (integration). They did not report devoting more effort to the task, however, than the security oriented and the harmony oriented. Thus, the greater integrative complexity on the part of dualists, inferred from the tasks they performed, did not translate into the self-perception that they had put more thought into resolving the dilemma than others.

Hypothesis 2, proposing that relativists would show least integrative complexity because they were least motivated to do the task was not supported by these data. The descriptive statistics show relativists performing in much the same way as the security oriented and the harmony oriented on differentiation and

integration tasks. Relativists, however, were distinctive in reporting that they devoted least effort to thinking about the issues raised by the dilemma. Possibly, the task needed to be a more demanding one to differentiate relativists from the security oriented and the harmony oriented on task performance.

## STUDY II

Commitment is defined as a verbal and behavioral expression of obligation showing an individual consistently pursuing certain beliefs and actions, restricting her/his own freedom of choice in the process. Commitment ideally would have been measured in this context in terms of beliefs and actions to preserve the south-east forests. This approach would maximize correspondence between the integrative complexity measures in Study I and the commitment measures in Study II. The National Forest Attitudes Survey, however, was based on a random sample of Australians. Asking respondents about their beliefs and actions in the south-east corner of Australia would have been too contextualized to elicit a meaningful response from the vast majority of those sampled. As a consequence, commitment was measured in relation to broader conservation issues that were not geographically bounded. The context for measuring commitment was behaving in an environmentally friendly way.

The level of belief commitment was operationalized using belief possession theory as a framework (Abelson, 1986). Abelson specifies a number of conditions for belief ownership, two of which are particularly relevant in this context. The first is making a public commitment to a belief, operationalized in the current study as an expression of obligation to demonstrate environmentally friendly behavior in the community.

The second indicator of belief ownership taken from Abelson (1986) is being aware of the value of a belief, in this case, being prepared to accept the costs associated with holding the belief. Respondents were aware of the costs associated

with conservation from the social dilemma that they were given earlier. Commitment was inferred from their responses to a further set of questions about who should pay for the preservation of the environment. Individuals who expressed personal responsibility and a willingness to pay were regarded as committed to conservation.

In addition to measuring commitment as belief, this study measured commitment as action. Respondents self-reported on whether or not they engaged in actions that reflected a commitment to conservation that was voluntary, and entailed special effort. The behavior chosen for analysis because of its relevance to the broadest spectrum of Australians was the purchase of environmentally friendly products.

## Method

The data analyzed in Study II were taken from the same source as Study I, the National Forest Attitudes Survey (Blamey, 1995a).

### Measures

The public expression of “personal obligation” in relation to conservation was measured through summing responses to the following four questions answered by respondents on a four point "not at all" (scored 1) to "a great deal" (scored 4) rating scale: (a) How personally obligated do you feel to purchase environmentally friendly products? (b) If a representative from an environmentally friendly group were to approach you in the street tomorrow, how obligated would you feel to donate some amount of money? (c) How personally obligated do you feel to take into account the environmental policies of different political parties? and (d) How personally obligated do you feel to recycle papers, plastics and glass? The items were scored so that a high score indicated high personal obligation ( $M = 11.84$ ,  $SD = 2.23$ ).

The value of the environment to the respondent was assessed through a four item “willingness to pay” scale. Respondents used a five-point scale from strongly

disagree (scored 1) to strongly agree (scored 5) to answer the following: (a) As a consumer of products such as paper, plastics and wood, I am in part responsible for some environmental impacts, (b) I am prepared to bear some of the costs of cleaning up and rehabilitating forests or waterways damaged by logging, (c) I am prepared to bear some of the costs of managing conservation reserves, and (d) I am prepared to bear some of the costs of compensating loggers for jobs lost due to preservation decisions. Scores were summed with high scores indicating greater willingness to pay ( $M = 13.38, SD = 3.13$ ).

Action commitment was measured through one question, “Which of the following statements comes closest to your shopping behavior?” The response options were: (a) I have never purchased environmentally friendly products such as detergents or toilet paper, (b) I have tried some such brands but do not generally purchase such items, or (c) I usually purchase environmentally friendly products. The percentage of the sample circling (c) was 64%, with a further 34% circling (b).

## Results

### Hypothesis 3

Dualists and the harmony oriented will show higher commitment to environmental issues than either the security oriented or relativists because they own the issues.

### Hypothesis 4

The harmony oriented are likely to have higher commitment to environmental issues than dualists because their commitment is less likely to be undermined by new information being introduced to change their decisions from one context to another.

One-way analysis of variance was used to compare the security oriented, the harmony oriented, dualists and relativists in terms of their personal obligation scores. From Table 3, a one-way analysis of variance produced a significant  $F$  statistic overall. Scheffe tests were used to compare means. Dualists and the harmony oriented showed significantly higher levels of personal obligation than the security oriented

and relativists (see Table 3). Hypothesis 3 was confirmed in relation to the measure of personal obligation. Furthermore, Scheffe tests also showed the harmony oriented to be significantly higher on personal obligation than dualists, in accordance with Hypothesis 4.

#### INSERT TABLE 3

A one-way analysis of variance comparing the value orientation groups on willingness to pay also produced a significant *F* statistic overall. Scheffe tests revealed that the security oriented were significantly less willing to personally meet the costs of conservation than any other group and the harmony oriented were significantly more willing. Relativists and dualists did not differ significantly from each other, occupying the middle ground between the security oriented and the harmony oriented. Findings using willingness to pay as a measure of commitment supported Hypothesis 4, that the harmony oriented would be the most committed. They did not support Hypothesis 3, however, that dualists would be more committed than both relativists and the security oriented.

#### INSERT TABLE 4

A chi-square test of independence was used to find out if dualists and the harmony oriented could be differentiated from the security oriented and relativists through their behavioral commitment to buying environmentally friendly products. The overall chi-square statistic was significant ( $\chi^2 (df = 6) = 41.40, p < .01$ ). The row percentages in Table 4 show that most individuals in each group reported purchasing environmentally friendly products, but that this percentage was notably higher for one group, the harmony oriented. Dualists behaved in much the same way as relativists though they were more environmentally conscious in their purchasing behavior than the security oriented. Thus when a behavioral measure of commitment was used

(albeit self-report), Hypothesis 4 was supported, putting the harmony oriented at the top of the commitment ladder. Hypothesis 3, however, was not supported. On the behavioral index, dualists were not significantly more committed than relativists.

## Discussion

The results of Study II provided only limited support for the notion that dualists would behave like the harmony oriented when attention turned away from integrative complexity in decision making and toward commitment to the broader social issue of conservation. Dualists followed the harmony oriented in expressing personal obligation to behave in an environmentally friendly manner in public. They felt obligated to recycle, buy environmentally friendly products, donate to environmental groups, and evaluate political parties in terms of their environmental policies. At the level of personal obligation they appeared to own the social issue. Their enthusiasm was reined in, however, when commitment was measured through accepting responsibility for costs and buying environmentally friendly products. When the measures of commitment involved self-initiated actions of responsibility, dualists lagged behind the harmony oriented, behaving more like relativists.

## General Discussion

These two studies demonstrate compatibilities between the value pluralism model (Tetlock, 1986) and the value balance model (Braithwaite, 1998a). Tetlock's (1986) theoretical propositions regarding the relative importance of values and their implications for decision making can be extended to a level of analysis where security and harmony value orientations are the focus of attention rather than specific values. This is not to suggest that value orientations should be substituted for single values in a general sense. Value orientations have their place when social issues have been publicly debated and the force of both sides of the argument is augmented by political

institutions. When individuals make decisions privately about idiosyncratic issues, one should not assume that value connections are necessarily made to such an extent that value orientations are implicated. In private contexts, the importance of specific values to the individual may provide a more fine grained and sensitive understanding of decision making than aggregated value orientations.

While the usefulness of the value balance model is likely to be restricted to understanding the trade offs made by individuals within political institutions, the value balance model adds to the value pluralism model in one important respect. It provides a means of analysis for differentiating those who Tetlock (1986) identifies as integratively complex from those who are politically uninterested. Both groups occupy the centre ground of the right-left continuum. Through conceiving of political debates in terms of two separate value dimensions, one representing the overarching goal of security, the other of harmony, the value balance model differentiates those with balanced and strong value ties (dualists) from those with balanced but weaker value ties (relativists). While these two groups often converge on a similar trade off position on the right-left continuum midway between the security oriented and harmony oriented, they differ in some significant ways (Blamey & Braithwaite, 1997b; Braithwaite, 1994, 1998a). Previous work has shown that compared to other value groups, relativists are more consequentialist in their outlook, assign lower priorities to social as opposed to personal values, are less preoccupied with left-right political identification, and are more in tune with self-interest voting.

This paper focuses attention on dualists and uses Tetlock's (1986) value pluralism model to identify some of their special characteristics. Dualists are more integratively complex than relativists or those with monistic ideologies (the security oriented and the harmony oriented). They identify more issues from both sides of the environmental-development debate as important in policy formulation and are more sensitive to additional information when they are asked to make a decision. Interestingly, greater differentiation and integration does not translate into perceptions of effort devoted to the task. Dualists, the security oriented and the harmony oriented

perceive themselves as giving the same amount of consideration to both sides of the environmental-development issue. Relativists differed from others, and reported giving less thought to the issues at hand. This finding is consistent with earlier analyses which suggest that the political engagement of dualists, the security oriented and the harmony oriented is significantly higher than relativists who identify themselves as politically disengaged (Braithwaite, 1998a).

Political engagement and subsequent commitment to social issues was the central issue addressed in Study II. One argument put forward earlier in the paper was that those who show integrative complexity may be politically engaged and effective at one level, but may lack the certainty required to commit to ideas and actions after making a decision. Equally plausible is a reversal of this causal sequencing. Commitment to a social issue may prevent an individual from engaging in an integratively complex fashion with that social issue. Either way, from this perspective, integrative complexity in decision making and commitment in relation to the issue are unlikely to both characterize dualists.

The other side of the argument is a conceptual one. There is no reason to assume that the strategies employed to make a decision carry over to the domain of implementation. This argument is based on the assumption that individuals have multiple selves, multiple identities, or multiple roles. While integrative complexity and commitment may be connected from an individual difference perspective, the capacity to be integratively complex or committed is also likely to be responsive to the demands of the situation, in particular to role expectations within political institutions.

The results of Study 2 suggest that both arguments may be relevant to understanding how dualists resolve social problems. Dualists expressed feelings of personal obligation to conservation which were comparable to those expressed by the harmony oriented. At this level, dualists appeared to own beliefs about conservation in the same way as the harmony oriented did, and in a way that was significantly different from the conservation beliefs of the security oriented and relativists.

Integrative complexity in decision making did not seem to interfere with dualists' capacities to feel strong obligation to behave in pro-conservation ways in public.

This ownership, however, appeared to be restricted to how people felt about various actions, that is, to elements of the belief system. As the operational definition of commitment approached the domain of behavior, the commitment of dualists seemed to lag behind that of the harmony oriented. Personal willingness to pay for conservation and the adoption of environmentally friendly shopping habits represented types of commitment that were more problematic for dualists. These findings are a reminder of the pervasiveness of the attitude-behavior divide in social psychology. Even when the object of inquiry is commitment, words and deeds must be dealt with as separate constructs. In this research context, feelings of personal obligation represent a different kind of commitment to the behavioral indicators of willingness to pay and the practice of purchasing environmentally friendly products.

Having obtained this difference between commitment attitude and commitment action, the challenge is to understand the pressures that dualists experience in these two contexts that can result in divergent outcomes. One way of interpreting these findings draws on traditional attitude theory and the distinctions that have been made between attitude and action. Commitment through action is not only a function of attitudes but of reference groups, subjective norms and identities (Ajzen, 1991). The harmony oriented with a strong preference for one side of the political spectrum are likely to find themselves with reference groups, norms and identities for action that are compatible with their dominant value system. Engaging in politics in a committed way is less likely to be complicated for groups with monistic ideologies: Reference groups are more likely to present a consistent and cohesive package of norms and expectations. Political engagement might be expected to be harder for dualists. They are more likely to have varied reference groups on political matters, offering competing norms and identities, and providing dualists with conflicting messages on how they should act in relation to social issues. The diversity

of these influences may weaken any action imperative that might be felt from any one source.

This interpretation suggests that a post hoc analysis of the data would reveal a stronger correlation between belief and action commitment for the harmony oriented than for dualists. This was not the case. Personal obligation correlated .40 with willingness to pay and .35 with purchasing behavior for the harmony oriented. For dualists, the correlation coefficients were much the same, .36 and .36 respectively. What this means is that the relative positioning of individuals on belief commitment has as much predictive power in relation to action commitment for dualists as it has for the harmony oriented.

How then can we explain the way in which dualists fall behind the harmony oriented when action is required rather than feelings of commitment? A second explanation draws on the notion that values frame decision making, and that when dualists are required to consider issues that make sense only within one value orientation frame, they have no problems establishing commitments to social issues. When the act of commitment primes the second value orientation, however, dualists are in a bind, and their capacity to commit is lowered.

In the present research, expressed feelings of obligation to conservation are well ensconced in harmony value discourse. When acts of commitment move to willingness to pay and shopping for environmentally friendly products, however, there are a number of ways in which the security value orientation can be primed. Wealth, status and competitive advantage are at the heart of the security value system, and the actions of commitment to conservation asked of respondents could be interpreted as potential threats to these values. Specific norms and identifications associated with respectability and social status may pull dualists back from non-conventional practices. The more general hypothesis stemming from this argument would be that the commitment of dualists will be high as long as the focus of the commitment does not evoke security-harmony conflict. Further research is necessary to examine this hypothesis.

A number of other issues arising from the current study warrant investigation. First and foremost, the major hypotheses need to be examined in other contexts, particularly where issues are owned by the right or where ownership is contestable. In addition, the measures of integrative complexity used in this broadly based survey need to be further developed and expanded. Differentiation seemed to be well captured in the current survey instrument, but the conceptual integration measure could not be used for individual difference analyses. It should be noted that conceptual integration was inferred in this study from group differences in response to between subject manipulation of information. This indirect measurement strategy was particularly useful for testing the hypothesis at this stage. Previous debate concerning the value balance model has focused on the effect of response bias on the classification of relativists and dualists (Braithwaite, 1994; Schwartz, 1994). The between subject design used to examine integrative complexity discounts the response bias explanation. Having served its purpose, however, greater analytical capacity would be achieved through devising a measure of integration that provides each individual with a conceptual integration score. It would then be possible to examine the relationship between integrative complexity and commitment, and the connections that each has to value orientations.

While pointing to new directions, this research clarifies some old questions. It has always been tempting to see dualists as yea-sayers, as people who sit on the fence, and who do not think too deeply about the issues at hand. Over the years, there has been some evidence to encourage this line of thinking. In both 1975 and 1995, dualists were less well educated than other value groups (Braithwaite & Blamey, 1998). With small positive correlations between acquiescent response bias and security values and between social desirability and harmony values (Braithwaite, 1994), there has been a concern that the responses of dualists may have not been as substantively interesting as those of other groups. The two studies reported in this paper suggest that the political engagement of dualists may be of much greater interest and relevance to understanding the opinions of mass publics than we

originally thought. Dualists want to engage with the political process, without being captured by available monistic ideology of the left or right. They take on board left and right positions without constraint, that is, without behaving in a way that is consistent with any recognizable ideological position. While failing to conform to our preconceptions of ideological consistency, they are more able and willing to appreciate different points of view and to take these perspectives into account in their decision making than any other value group.

In short, dualists fit the description offered by Tetlock et al. (1994) of a group who are reasonable and flexible, but perhaps also weak and hypocritical. This paper offers an explanation for why this is so. From a value balance perspective, dualists bring to political debate the gift of integrative complexity in decision making. This gift, however, may lose its appeal as the focus of interest moves from analysis within one value frame to action that is framed by both value orientations. Commitment to action can thereby be more difficult for dualists than commitment to belief. The adage, “actions speak louder than words” has both bite and irony in the case of dualists. The harmony oriented and the security oriented may justifiably argue with dualists that words are not enough. To move dualists to action, however, the harmony oriented and security oriented may have to silence the competing voice, the other value orientation urging balance.

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## Appendix I

### *International harmony and equality:*

a good life for others (improving the welfare of all people in need)

rule by the people (involvement by all citizens in making decisions that affect their community)

international cooperation (having all nations working together to help each other)

social progress and social reform (readiness to change our way of life for the better)

a world at peace (being free from war and conflict)

a world of beauty (having the beauty of nature and the arts: music, literature, art, etc.)

human dignity (allowing each individual to be treated as someone of worth)

equal opportunity for all (giving everyone an equal chance in life)

greater economic equality (lessening the gap between the rich and the poor)

preserving the natural environment (preventing the destruction of nature's beauty and resources)

### *National strength and order:*

national greatness (being a united, strong, independent, and powerful nation)

national economic development (having greater economic progress and prosperity for the nation)

the rule of law (punishing the guilty and protecting the innocent)

national security (protection of your nation from enemies)

Table 1. Means (SDs) and F statistics from one-way ANOVAs comparing the security oriented, relativists, dualists and the harmony oriented on differentiation and integrative effort.

| Index              | <i>M (SD)</i>  |                             |                            |                | <i>F</i> |
|--------------------|----------------|-----------------------------|----------------------------|----------------|----------|
|                    | Security       | Relativist                  | Dualist                    | Harmony        |          |
| Differentiation    | -.15<br>(1.46) | -.30<br>(1.57)              | .36 <sup>a</sup><br>(1.27) | -.04<br>(1.38) | 18.08**  |
| Integrative effort | .00<br>(1.37)  | -.53 <sup>a</sup><br>(1.48) | .10<br>(1.49)              | .30<br>(1.46)  | 21.25**  |

\*\*  $p < .01$

<sup>a</sup> This group was significantly different from all other groups at the .01 level using the Scheffe test.

Table 2. The percentage of respondents choosing Option A/Option B in each version of the social dilemma among the security oriented, relativists, dualists and the harmony oriented ( $N = 1157$ )

| Values group | Social dilemma |           |           | $\chi^2$ (df = 2) |       |
|--------------|----------------|-----------|-----------|-------------------|-------|
|              | Version 1      | Version 2 | Version 3 |                   |       |
| Security     | Option A       | 63        | 69        | 68                | .46   |
|              | Option B       | 37        | 31        | 32                |       |
| Relativist   | Option A       | 44        | 50        | 54                | 2.30  |
|              | Option B       | 56        | 50        | 46                |       |
| Dualist      | Option A       | 44        | 59        | 46                | 6.86* |
|              | Option B       | 56        | 41        | 54                |       |
| Harmony      | Option A       | 21        | 32        | 27                | 2.01  |
|              | Option B       | 79        | 68        | 73                |       |

\*  $p < .05$

Table 3. Means (SDs) and F statistics from one-way ANOVAs comparing the security oriented, relativists, dualists and the harmony oriented on personal obligation and willingness to pay.

| Index               | <i>M (SD)</i>                |                 |                              |                              | <i>F</i> |
|---------------------|------------------------------|-----------------|------------------------------|------------------------------|----------|
|                     | Security                     | Relativist      | Dualist                      | Harmony                      |          |
| Personal obligation | 10.90<br>(2.05)              | 11.21<br>(2.10) | 12.26 <sup>a</sup><br>(2.08) | 13.17 <sup>b</sup><br>(2.08) | 74.73**  |
| Willingness to pay  | 12.33 <sup>a</sup><br>(3.11) | 13.25<br>(2.77) | 13.20<br>(3.12)              | 15.11 <sup>b</sup><br>(3.01) | 40.08**  |

\*\*  $p < .01$

<sup>a</sup> This group were significantly different from all other groups at the .01 level using the Scheffe test.

<sup>b</sup> This group was significantly different from all other groups at the .01 level using the Scheffe test.

Table 4. The percentage of respondents who had never, not generally or usually purchased environmentally friendly products among the security oriented, relativists, dualists and the harmony oriented

| Values group | Environmentally friendly purchasing behavior |               |         |
|--------------|--|---------------|---------|
|              | Never  | Not generally | Usually |
| Security     | 3  | 42            | 55      |
| Relativist   | 3  | 38            | 59      |
| Dualist      | 2  | 33            | 65      |
| Harmony      | 1  | 20            | 79      |