The Psychological Spectrum: Political Orientation and its Origins in Perception and Culture

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Rightists need difference,
Leftists, similarity;
But both need culture.

In this paper I employ a simple methodological innovation to test the relationships between political orientation, perception and culture. Previous studies have indicated that right-wing policy stances are related to the wish to sustain order and hierarchy and to disgust sensitivity, and that left-wing policy stances reflect a need for novelty, equality and autonomy. This relationship is not universally constant, however, but varies between cultural environments. Previous literature is limited by its reliance on Western convenience samples, a bias against scrutiny of the political left, and a lack of cross-cultural and cross-situational comparisons. Use of representative survey data for this purpose has been hindered by the lack of psychological variables. I overcome this difficulty by producing a new psychometric measure, an average measure of the extent to which individuals provide polarised responses to Likert scales. Using this variable in an analysis of Wave 6 of the World Values Survey, I find evidence to support the claim that political opinions are intimately linked with classification of similarity and difference, and with cultural context.

Keywords: ideology; perception; politics; opinion; psychology; culture

Introduction

Politics is a tricky business, filled with dissension, division and often despair. I hope in this paper to explore just why that might be.

My aim is to investigate why different people adhere to different political orientations. By political orientation, I mean first and foremost policy preferences – normative desires for specific programmes of government action (Converse, 1964, p. 3). Perception, in the context of this paper, refers to the way in which the human mind sorts and classifies sensory information to construct a conscious experience of reality (Hoffman, 2005, p. 81; Merleau-Ponty, 2004, pp. 4, 9). Finally, I refer to culture as the process by which values and understandings are shared and ‘standardised’ between individuals to allow the growth of cohesive social networks (Bateson, 2005, p. 42; Barnard and Spencer, 2003, p. 136).

I will begin with an exposition of the importance of political opinion in general and the political spectrum in particular. I will then explain the ways in which previous studies indicate a relationship between support for right-wing policies and psychological needs, such as the cognitive Need for Closure (NFC). This relationship is muddied, however, by evidence that it is mediated by ideological and cultural affiliation: within certain cultures the relationship is reversed. I suggest that at heart the political spectrum is a normative index of similarity and difference: those who are psychologically inclined to perceive people as similar desire equal treatment of people, whereas those more sensitive to differences between people wish for government treatment to be stratified according to those differences. Different cultures present different policies as more or less effective means to these rival ends, which results in context-specific variations in policy support by egalitarians and inequalitarians.

Having outlined this argument, I proceed to summarise four key objections to its validity: that situational self-interest is not accounted for, that cultural background has not been controlled for effectively, that research has focused predominantly on the right of the spectrum and ignored the left, and that most studies have hitherto relied upon unrepresentative convenience samples. I propose that all four of these objections can be effectively countered by the use of representative social survey data. The results of my pilot study suggest that measuring the average strength of response to Likert scales makes this possible, by supplying an adequate substitute for detailed psychological scales not generally present within these data.

I then produce such a measure from Wave 6 of the World Values Survey. Comparing it with national and
political variables, I find that polarisation of Likert scale responses (or ‘response polarisation’) correlates positively and significantly with right-wing policy stances, and that whilst this relationship is positive in most cultures, it is significant and negative in others. I conclude that my research has strengthened the claims of extant studies by countering four objections to which they were vulnerable.

**The Importance of Opinion**

Politics is deeply – perhaps fundamentally – controversial. Attempts to rationalise or explain the radical differences in political belief that exist within and between societies have been the mainstay of political science for centuries (Cochrane et al., 2000, p. 179). Aristotle, for one, noted the curious paradox that whilst all aim for what is good, irreconcilable differences in conceptions of the good serve to produce factionalism, conflict and political disaster (1968, pp. 54, 296–297).

The question of where these beliefs, and differences in beliefs, come from is not a trivial one. As Hibbing, Smith and Alford declare, ‘politics is a blood sport’ (2014, p. 1). In the extreme, the dynamics of political opinions are intimately connected with racial hate crimes, anti-government insurrections and even wars (Benedict, 2005, p. 77; Zaller, 1992, p. 1). These things matter, and merit explanation.

Perhaps the single most widespread conceptual framework for understanding political beliefs and values is the political spectrum between ‘liberals’ on the left and ‘conservatives’ on the right (Block and Block, 2005, p. 2). A generic linear continuum of political dispositions, the political spectrum is believed by many scholars to represent an underlying commonality between numerous apparently distinct policy stances (Heywood, 2012, p. 17; Graham et al., 2009, p. 1029; Sidanis, 1993, p. 205). This bipolar division of policies has been strongly criticised, and yet scholars, politicians and journalists seem unable to do without it (Bobbio, 1997, xxiii).

Left and right are associated with a highly diverse range of policy areas, yet somewhere within the inky fathoms of the human mind they are intimately connected. But what is the likely nature of this psychological nexus?

**Relations Between Psychology and Politics**

Among the first modern social scientists to investigate the psychological basis of political orientations were Adorno, Frenkel-Brunswick, Levinson and Sanford in their classic work *The Authoritarian Personality* (Adorno et al., 1964; Carney et al., 2008, p. 810). Adorno and his colleagues found that individuals inclined towards right-wing beliefs are also likely to exhibit personal qualities such as fearfulness, rigidity of thinking, discomfort around strangers and obedience to persons in authority.

These early findings have set the tone for a string of relationships that have been discovered since. In their much-cited meta-analysis of almost 80 studies conducted between 1954 and 2002, Jost, Glaser, Kruglanski and Sulloway uncovered both a startling variety and a deep consistency in the relations between psychology and political beliefs (2003, pp. 352, 339). Focusing once again on conservatives, they report multiple significant correlations with intolerance of ambiguity (positive), complexity and flexibility in cognition (negative), imaginativeness and enjoyment of novelty (negative), preference for modern music and art (negative), and the psychological needs for order, structure and closure (positive) (Jost et al., 2003, pp. 354–355, 357–359). In all these varied phenomena, Jost and his colleagues discern two enduring dimensions underlying conservative belief: a resistance to change and a preference for social hierarchy (Jost et al., 2003, pp. 342–343, 351).

Carney, Jost, Gosling and Potter also suggest that political opinions may be the result of personal predispositions for openness or structure, novelty or predictability (2008, p. 817). In their own studies they found that conservatives are less open to new experiences than liberals, but are more conscientious in fulfilling what they see as their duty; that liberals are more likely to smile and engage in conversation with relative strangers; and even that conservatives tend to have tidier, better-organised and cleaner bedrooms than liberals (Carney et al., 2008, p. 824, 829, 832). They conclude that in general the right tends to support the principles of organisation, structure and limit, and that the left tends to question these same principles (Carney et al., 2008, p. 836).

Block and Block have conducted a longitudinal analysis of politics and personality in an attempt to discover whether childhood personality traits systematically precede adult political opinions (2005, p. 2). Children who later turned out to be left-wing were evaluated as confident, verbally fluent and open with their feelings, whereas children who grew up to be right-wing were characterised as fearful, mistrustful and prone to feelings of guilt (Block and Block, 2005, pp. 6–7).

The final psychological variable explored by Jost and his colleagues – Arie Kruglanski’s Need for Closure Scale (NFC) is perhaps the most fruitful of all known psychological predictors of political orientation (Kruglanski et al., 2013). NFC measures the extent to which individuals experience a need to rapidly ‘seize’ upon a clear explanation of their experience, and to ‘freeze’ this explanation by using it for as long as possible and resisting attempts to change it (Roets and Van Hiel, 2011, p. 90).

Thörisdóttir and Jost used experimental methods to discover that the recall of threatening situations tends to make participant policy preferences more conservative (2011, p. 794). What is more, this relationship is statistically mediated by the closed-mindedness facet of the Need for Closure scale, suggesting that some aspects of NFC motivate individuals to interpret threats as emotive prompts which necessitate actions intended to restore order and hierarchy (Thörisdóttir and Jost, 2011, p. 805).

De Zavala, Cislak and Wesolowska discovered that individuals with high NFC were significantly more likely to favour aggressive actions against other countries than those with low NFC. However, this relationship was only statistically significant among self-identified conservatives (2010, p. 529). Policy preferences, then, appear to emerge from an interaction between Need for Closure and a factor often confused with these preferences: political ideology.
The Social, Cultural Nature of Ideology

What, then, is the nature of political ideology? Too fluid to be meaningfully reduced to a set of policy preferences, the term requires a broader epistemological basis (Hibbing et al., 2014, pp. 42–43). Heywood describes ideology as ‘a veil of ingrained beliefs, opinions and assumptions’ which selectively filters raw sensory experience into a more palatable form of consciousness (2012, p. 2). This results in what Hoffman has described as the creative construction of the human experience, pieced together in a systematic, but nevertheless arbitrary, way by the brain’s sensory systems (2005, pp. 81, 85, 87). As a result, ideologies become self-perpetuating: individuals become more attentive to information that reinforces their existing opinions (Heywood, 2012, p. 12).

Ideologies or ‘belief systems’ are so cohesive, Philip Converse claims, because they are shaped by elites, shared through communication, and instilled in people to varying extents over time (1964, p. 9). They are social rather than individual structures; generally, individuals refer to their social group for opinion-forming guidance in preference to their own logic (Converse, 1964, pp. 14–15, 17).

Social anthropologists have for many years studied concepts very similar to that of ideology beneath a broader and more general label: culture (DeNora, 2014, p. 67; Bloch, 2003, p. 293). The idea of ‘culture’ has rarely been precisely operationalised, but an examination of the anthropological literature suggests that cultures can be seen broadly as a Conversian belief systems of intercorrelated beliefs and opinions, as ‘standardised’ versions of individual outlooks which cause people of the same culture to have more similar views to one another than would be expected by chance alone (Bateson, 2005, p. 42; Sperber, 2005, p. 311; Barnard and Spencer, 2003, p. 136). Social networks, as a source of cultural material which may be used by individuals to explain their experiences, are critical sources of meaning, political and otherwise (Benedict, 2005, p. 77). Just as Converse discovered, the content of these social beliefs is disproportionately influenced by elders, experts and elites (Keesing, 2005, pp. 260, 262), but in their implications they affect everyone. Because there are so many ideas available to choose from, different social groups with different elites develop very different cultures (DeNora, 2014, p. 87; Williams, 2000, p. 15).

Culture is not detached from psychology; rather, cultural conditions are able to activate or deactivate latent physiological dispositions (Toren, 2003, p. 94). Mary Douglas, for example, argued that human disgust reactions are wholly dependent upon cultural classification. There is no such thing as absolute dirt; ‘dirt’ is merely something which transgresses the expectations of the individual who beholds it (Douglas, 2003, p. 2). Culture leads humans to divide the world into a simplified system of categories, into which we attempt to fit the things which we experience with our senses (Hendry, 2008, p. 20). When we encounter something which refuses to be easily categorised – examples might include a mixed-race child or a transsexual person – then the person attempting to categorise them experiences disgust (DeNora, 2014, p. 59; Inbar et al., 2009, p. 2). Individuals within a culture which divides up experiences into a greater number of ‘chunks’ are more likely to encounter something which upsets that cultural viewpoint (Khare, 2003, p. 437), just as individuals with a higher Need for Closure are more likely to find the things which they experience unacceptably unpredictable or ambiguous (Hendry, 2008, p. 48; Kossowska and Van Hiel, 2003, p. 502).

Just as disgust, a psychological phenomenon, is fundamentally cultural, so also is it political. As Douglas established, inherent in the disgust reaction is a tendency toward hierarchy (2003, p. 82). Cultures which draw stricter boundaries between right and wrong, acceptable and unacceptable, tend to become more hierarchical (Béteille, 2003, p. 303; Kingsolver, 2003, p. 445). A social order emerges to mirror the cultural one, with ‘disgusted’ elites at the top and ‘disgusting’ transgressors at the bottom (Khare, 2003, p. 438).

This model of culture fits in well with the work of Converse, who found that more powerful individuals possessed more elaborate political schemata, which in turn generally corresponded to right-leaning policy preferences favouring the continued existence of hierarchy (Converse, 1964, pp. 2, 56; Kossowska and Van Hiel, 2003, p. 502). Similar findings are apparent in the work of Pierre Bourdieu, who suggests that individuals perceive reality through the lens of a habitus, a series of perceptual schemata which are instilled in the individual through social communication (Bourdieu, 2010, p. 95; Toren, 2003, p. 459). Furthermore, Bourdieu claims that the habitus produces systematic inequalities between social classes, with dominant classes reaping the rewards that come from a definition of these categories that is biased in their favour (2010, p. 251). Less powerful classes, in contrast, adopt a far less coherent system of beliefs which leads them to transgress upper-class categories due to its very imprecision, entrenching the inferior social standing of these habitus-holders (Bourdieu, 2010, p. 420). It is this which led Adorno to conclude that the authoritarian personality is first and foremost the product of intense categorisation (Adorno, 1981, pp. 361–362; DeNora, 2014, pp. 8–9).

Disgust does indeed appear to be related to policy preferences. Inbar, Pizarro and Bloom have discovered that in the United States, right-wing individuals systematically score higher on the Disgust Sensitivity Scale (DSS) than left-wing individuals (2009, p. 5). Though this relationship was strongest with ‘purity’ issues such as abortion, it was even significant in relation to some economic issues such as tax cuts (Inbar et al., 2009, p. 7). Conversely, exposure to disgusting physical stimuli, and cleaning supplies, has been shown to prompt a rightward shift in policy preferences (Hibbing et al., 2014, pp. 21–23).

Graham, Haidt and Nosek, in their studies of the ‘moral foundations’ of Christian ministers and others, discovered that liberals invoke notions of reciprocity and the prevention of harm to justify their beliefs, whereas conservatives also invoke notions of in-group loyalty, respect to authorities and the need to maintain purity in the face of pollution (Graham et al., 2009, p. 1031). This
supports Douglas' notion that hierarchy is a conservative defence against danger, disorder and degradation (Douglas, 2003, p. 104; Grillo, 2003, p. 327). It also helps to clarify why Carney et al., might have discovered that the bedrooms of conservatives are both tidier than those of liberals and contain more cleaning products: physical hygiene is an indicator of a general tendency to be disgusted, and thus to value the symbolic hygiene offered by right-wing policies of separation and hierarchy (Dion et al., 2014, p. 567; Bourdieu, 2010, p. 47).

What specifically these policies may involve is culturally variable. Just as De Zavala and her colleagues discovered that the relationship between Need for Closure and political orientation in Poland and in the Netherlands, two countries which over the past hundred years have experienced very different political histories (2003, p. 502). They found that whilst Need for Closure correlated with support for right-wing economic policies (tax cuts, spending cuts and deregulation) in their Flemish sample, the correlation was negative in the Polish sample (Kossowska and Van Hiel, 2003, p. 512). In Poland, the policy ‘for’ order and hierarchy was that of state involvement.

This possibility was investigated further by Fu, Morris, Lee, Chao, Chieu and Hong in their comparison of participants from the US and from China (2007, p. 192). Fu and her colleagues were interested in discovering why the influence of culture on beliefs and behaviour is not uniform across all individuals, but heavily motivates some and has a negligible effect on others (Fu et al., 2007, p. 191). They found that high-Need for Closure individuals tended to value equity over equality in the United States, but equality over equity in China; in both cases, high-NFC individuals were more likely to conform to culturally dominant values than low-NFC individuals (Fu et al., 2007, pp. 197, 202). This confirms their suggestion that Need for Closure represents the degree to which individuals feel disposed to follow, or resist, the cultural patterns which they witness around them (Benedict, 2005, p. 77). Whether or not this tendency translates into desires for specific government policies depends on the extent to which the dominant culture characterises these policies as hierarchical, or as a threat to the stability of an elaborate belief system (Zaller, 1992, p. 128).

The Core of the Matter: Similarity Versus Difference
We have seen how left and right may have their origins in psychological perception and culture. I would like to suggest that all of the above findings point to one single, underlying definition for the political spectrum: it is a matter of similarity versus difference.

Despite the tremendous variety thrown into questions of orientation by historical, cultural variations, a ‘basic set of underlying currents’ connecting left and right throughout the ages is apparent (Hibbing et al., 2014, p. 45). Classification is necessary for perception of the world; we must draw more or less arbitrary divisions in a continuum of sensory experience in order to generate a sense of distinction between one object or person and others (Durkheim and Mauss, 2009, vii; Ellen, 2003, p. 103; Merleau-Ponty, 2002, p. 27).

In general, conservatives are more sensitive to the perception of difference than liberals, who in turn are better-suited to detecting patterns of similarity. This translates into political predispositions in a manner best understood by Aristotle: people tend to desire equality for equals, and inequality for unequals (1968, p. 195). If one person is more deserving than others, then it follows that they should be rewarded above others (Rawls, 2001, p. 77). Political contention and controversy stem not from this principle, but from the fact that every person’s perception of similarity and difference is unique. It follows that those who perceive greater differences between people will desire greater social inequality through hierarchy, whereas people who perceive greater similarities between people will favour treating people the same (Kingsolver, 2003, p. 445).

It is for this reason that Norberto Bobbio and others conclude that on a philosophical level, left and right are all about equality and inequality (Bobbio, 1997, p. 60; Jost et al., 2003, p. 342; Mitchell, 2006, pp. 9, 17). Differences in policy preference between left and right within a society are due to differential perceptions of how equal, or unequal, people are to one another (Bobbio, 1997, p. 66). Differences in policy preference within left and right, between societies and throughout history, are due to differences in how equally or unequally people are already being treated. Few people on the right now support slavery, for example, because over the centuries human societies have generally equalised until slavery becomes perceived as an extreme rather than a moderate inequality (Bobbio, 1997, pp. 62–65, 85–86). What’s more, it is the role of a national culture to suggest which policies may best bring about inequality or equality, so that different policies in different situational contexts may be aimed at the same ideals (Alvarez and Brehm, 2002, p. 9; Bobbio, 1997, p. 98).

In conclusion, and caveats aside, I suggest that the essence of left and right can be summed up neatly by the following dialogue:

**Liberal: Those people are the same as us! Stop treating them differently to us!**

**Conservative: No, those people are different to us! Don’t treat them the same as us!**

Limitations of Methodology: the Need for Further Study
The thesis outlined above is a contentious one and has been criticised on multiple levels. In this section I will summarise four key counter-arguments questioning its validity. Each counter-argument highlights a shortcoming in the established research methodology and is thus accompanied by a statement of need for further research, all four of which, I argue, will be met by my subsequent data analysis.
Objection 1: policy preferences derive from individual self-interest

According to this objection, individuals do not develop policy preferences in order to satisfy latent psychological needs, or in response to socially instilled cultural values. Rather, they simply favour the policies which they expect will best improve their own material welfare (Jost et al., 2003, p. 341). Associated strongly with rational choice theory, this approach has been powerfully applied to the question of political orientation by the economist Anthony Downs. Downs suggests that individuals respond to government policies as we do to products sold by businesses: we consider the available alternatives and choose the one which will supply the greatest gain for the least cost (1957, p. 36). However altruistic actions may seem to be, they are ultimately aimed at benefiting their actors in one way or another (Downs, 1957, p. 37).

Individuals should not have any interest in how equally or unequally other people are being treated. They should seek only to accumulate as much benefit to themselves as possible.

The rational choice criticism implies that individuals in the same situation will make more or less the same policy choices, regardless of personal psychology. In many of the studies above, data on the situational factors affecting individuals were not gathered, so it is difficult to determine whether this objection is accurate (Carraro et al., 2011, pp. 2–3; Thörïsðottir and Jost, 2011, p. 793). More research is needed which gathers data on individual circumstances such as gender, age and social class so that these factors can be statistically controlled for (Carney et al., 2008, p. 823).

Objection 2: political beliefs are too varied for a single dimension

The political spectrum itself has often come under frenzied criticism for being too narrow and one-sided to represent people’s beliefs to a satisfactory extent (Adorno et al., 1964, p. 152; Converse, 1964, p. 12). The essence of this objection is that politics is too messy to be encapsulated by a single continuum running from left to right. As evidence of this, writers have pointed out that extreme left- and extreme right-wing beliefs are very similar (Heywood, 2012, p. 17), that the policies up for debate are context-specific and thus change markedly between societies and across time (Hibbing et al., 2014, p. 101). This is, Hibbing, Smith and Alford suggest, the result of an over-politicised, generally left-wing research programme which at times descends into sheer name-calling (2014, p. 7). Studies from that of Adorno and his colleagues onwards have focused primarily on the right of the spectrum, discovering a large number of potentially unfavourable psychological connections (Adorno et al., 1964, p. 1; Jost et al., 2003, p. 340; De Zavala et al., 2010, p. 522).

However, as Carney et al., point out, there is no reason to suppose that liberal beliefs are any more rational, or any less psychological, than conservative ones (Carney et al., 2008, p. 809; Inbar et al., 2009, p. 2). These too could be painted in disparaging tones by their opponents, and these too are worthy of study. More research is needed which will study individuals at all positions of the political spectrum, and therefore will not focus merely on one side or another, or merely on the extremes (Cooper et al., 2000, p. 179).

Objection 4: inadequate sampling and measurement methods

As Henrich, Heine and Norenzayan complain, the social science research literature overflows with studies on a rather strange and unusual section of the human race: the Western undergraduate (2010, p. 5). Despite their situation within ‘WEIRD’ (White, Educated, Industrialised, Rich and Democratic) societies, these usually American students are frequently used by academics to generalise results to the whole of homo sapiens (Henrich et al., 2010, p. 6). In Jost et al.’s meta-analysis, for example, 60% of the samples were composed entirely of undergraduates and 75% of participants were drawn purely from the United States (Jost et al., 2003, p. 352). A good number of studies...
cited above, in fact, are also based on small, nonrandom convenience samples which may not even be fully representative of Western undergraduates (Carraro et al., 2011, p. 2; Thórisdóttir and Jost, 2011, p. 793; De Zavala et al., 2010, p. 526; Matthews et al., 2009, p. 927; Carney et al., 2008, pp. 818–819; Fu et al., 2007, pp. 194–195; Kossowska and Van Hiel, 2003, p. 504). Were these studies to be repeated on a large scale with randomly-selected people from across the world, their findings would be more convincing (Matthews et al., 2009, p. 935; Rokeach, 2000, p. 54; Zaller, 1992, p. 293).

Another problem with many studies is their reliance on asking participants to divulge information about their psychological predispositions – a feat which they may be unwilling, or unable, to accomplish. Self-reported survey and interview methodology has been associated with a number of respondent biases, their responses influenced by the nature of their interviewer and the framing of questions as much as by their content (Bloch, 2003, p. 362; Searing, 2000, p. 166; Zaller, 1992, p. 34, 76).

Carney, Jost, Gosling and Potter suggest that recording participants’ actual behaviour, rather than asking them to describe their behaviour, provides a more valid measure of individual psychology (2008, p. 826). Their study of the contents of participant bedrooms is one such example of this type of methodology. However, as they themselves make clear, the complexity of numerically coding an entire bedroom, and the relatively small number of bedrooms considered, threatens the validity of this procedure (Carney et al., 2008, p. 833). Future research should aim to harness behavioural measures of psychology whilst maintaining a relatively simple measure across a relatively large number of cases.

Introduction to the Data Analysis
My quantitative analysis is intended to respond effectively to the four criticisms above, and thus to bolster the existing literature in areas in which it is weak. The basic premise is to analyse a large, randomly selected cross-cultural dataset, Wave 6 of the World Values Survey (WVS6). The World Values Survey is the largest publicly available social survey ever executed, aggregating questionnaire responses from samples selected at random from participating countries. Wave 6 is the latest currently available, summarising a detailed 430-variable profile of the beliefs and values of over 86,000 individuals from 60 countries (World Values Survey, 2014).

Response Polarisation: A Proxy Psychometric Measure
The chief drawback of using mass survey data to investigate the link between politics and perception is the absence of sophisticated psychological measures such as the Need for Closure Scale in these data. Due to their specialised uses, and the large number of questions needed to record these measures, NFC and similar scales are generally only administered to small convenience samples gathered specifically for individual projects.

My desire to use representative survey data thus necessitated one key methodological innovation: the invention of a new variable which can be computed using commonly-asked survey questions, and yet which also serves as a plausible indicator of the psychological need to make clear, unambiguous decisions. The variable which I devised to this end is called ‘response polarisation’.

Response polarisation is to be computed from survey data using Likert scale responses. Likert scales are an extremely common survey instrument, inviting participants to agree or disagree with various statements to differing degrees of intensity. All well-designed Likert scales are symmetrical, with equal numbers of ‘agree’ and ‘disagree’ options, and occasionally a ‘neither agree nor disagree’ option in the middle (Dillman, 2007).

My reasoning was that individuals who frequently either ‘strongly agree’ or ‘strongly disagree’ with Likert scale statements exhibit a greater preference for decisiveness and a greater intolerance of ambiguity than individuals who frequently ‘neither agree nor disagree’. If, then, the average ‘strength’ of a respondent’s Likert scale responses were computed, with the direction of response (agree or disagree) removed, the result could be seen as a generic index of decisiveness and intolerance of ambiguity. This raises the potential for basic psychological dispositions to be measured in virtually all social survey data.

I propose calculating response polarisation using the following process:

1) Make a list of all ‘agree or disagree’ items present within the data of interest. Exclude items with fewer than three response options. Also exclude items which have asymmetrical or leading response options.

2) Recode a new variable for each item in the list. First, erase the directionality of responses by assigning the centremost option with a value of 0 (omit the zero if there is no middle option), the surrounding pair of options in both directions with a value of 1, et cetera, so that the most polarised possible responses – perhaps ‘strongly agree’ and ‘strongly disagree’ – share the highest value.

3) Convert these scores into percentages. As different Likert scales have different numbers of response options, standardise polarisation scores by dividing each number by the highest possible score for that item, then multiplying the result by 100. For example, imagine a Likert scale with five response options. ‘Neither agree nor disagree’ receives a score of zero, ‘slightly agree’ and ‘slightly disagree’ each receive a score of one, and ‘strongly agree’ and ‘strongly disagree’ each receive a score of two. If a person slightly disagrees with whatever the statement happens to be, their score of one would be divided by the maximum possible value of two, and their response would be defined as 50% polarised.

4) Compute a new variable as the simple mean of the total list of percentage scores. Assess scale consistency by calculating Cronbach’s alpha.
The result will be a continuous variable expressed as a percentage. A respondent who selected the middle option(s) for every item would receive a response polarisation score of zero percent, and a respondent who selected the most extreme option(s) for every item would receive a score of one hundred percent. These scores are not objective assessments of individual psychology – their precise value is an artefact of questionnaire design – but they may be considered meaningful when making comparisons between groups.

My pilot study, which consisted of an online questionnaire sent to a random sample of 1,020 University of Exeter students shortly before the 2015 UK general election, allowed me to measure response polarisation in addition to a number of political variables and a shortened 15-item version of the Need for Closure scale (after Roets and Van Hiel, 2011, pp. 90–93; dataset available upon request). Both response polarisation and NFC positively predicted right-wing policy preferences, but these effects were non-significant, perhaps due to the low response rate of 20.4%. However, response polarisation and NFC were positively, strongly and significantly correlated. This provides limited evidence to support my case that individuals higher in Need for Closure are more prone to provide polarised Likert scale responses.

One additional advantage of response polarisation measures over the Need for Closure scale is their nature as a behavioural scale, and arguably as a breed of paradata. It will not be at all obvious to most survey respondents that the polarisation of their Likert scale responses is being measured. It is therefore plausible that response polarisation will be less susceptible to social desirability bias and other forms of dishonesty (Carney et al., 2008, p. 826). At the same time, response polarisation is simpler and easier to quantify than most other behavioural measures.

Research Hypotheses

I now present two central hypotheses for my analysis of the WVS6 data:

Hypothesis 1: that overall, response polarisation (‘perception’) is positively and significantly related to self-indicated support for right-wing policy stances (‘orientation’).

Hypothesis 2: that the magnitude of the relationship between response polarisation (‘perception’) and self-indicated support for right-wing policy stances (‘orientation’) varies significantly by national sample (‘culture’).

The following analysis does not presume to discover a causal relationship between psychology and politics, but merely an interesting and surprising correlation. Why, if political opinions are simply a matter of self-interest, or simply an expression of endlessly diverse value systems, should they vary systematically across cultures with so obscure a measure as response polarisation?

My hypotheses, if confirmed, should at least imply that politics is a deeply psychological affair.

Data Management

I analysed WVS6 using the software package IBM SPSS Statistics 23 (IBM Corp, 2014). I first produced a series of composite variables, following the lead of Block and Block and others by producing composite scales to increase the breadth and validity of my measures (Block and Block, 2005, p. 4; Matthews et al., 2009, p. 926). Details of the ways in which these variables were recoded and computed are available in the appendix.

I first created a variable to represent response polarisation. 72 Likert scale variables presented no obvious political implications. Examples include ‘People over 70 are seen as friendly’, ‘I see myself as someone who is reserved’, and ‘One of my main goals in life has been to make my parents proud’. I recoded these variables using the instructions listed above. The resulting scale achieved a Cronbach’s alpha of 0.913, demonstrating very high internal consistency, though this was doubtless inflated by the sheer number of items.

The variable to represent the political spectrum was the mean of seven 10-point explicitly political Likert scales (values from 1 to 10). The seven items included a simple self-placement scale and items on the benefits of competition and the degree of state involvement in the economy.

I also computed the following secondary composite variables.

‘Neighbourly Composite’: a mean of nine dummy variables indicating whether respondents would not want to have certain people – for example, drug addicts, unmarried couples, or homosexuals – as neighbours (1 = mentioned; 0 = did not mention). Intended to measure discomfort with socially ‘deviant’ groups.

‘Trust Composite’: a mean of six variables indicating the extent to which the respondents trust groups such as their family, people of a different religion and people of a different nationality (1 = do not trust at all; 4 = trust completely). Intended as a measure of overall individual trust.

‘Trust Deviation Composite’: the standard deviation of the Trust Composite for each respondent. Intended as a measure of variation in the allocation of trust between various groups.

‘Schwartz Composite’: a mean of the eleven items of the Schwartz Scale, which ask respondents how strongly they identify with hypothetical characters such as a creative person, an adventurous person, or a hedonist (1 = not at all like me; 6 = very much like me). Intended as a measure of how strongly respondents refer to external role models to guide their own conduct.

The measurement of culture, particularly in a quantitative analysis, is a difficult affair. For the purposes of this study, I decided to utilise a categorical variable referring to the country from which the respondent was selected as a broad indicator of respondents’ cultural identity. Use of an ethnic group variable would carry more validity, as ethnic
groups are considerably more likely to contain one single coherent belief system than nation-states. In the case of the World Values Survey, however, there were simply too many categories for ethnic group to make analysis of these categories practical. One key advantage of country categories is that Ronald Inglehart and Christian Welzel, leading voices in the World Values Survey Association, have produced two quantitative measures – survival-self-expression values versus traditional-rational-secular values – by which they compared the average positions of WVS-participating countries in their cultural map of the world (World Values Survey, 2014). They then classified countries into one of nine ‘culture zones’: clusters of countries with similar average value combinations, which could be understood as having similar cultures in some ways. This allows me to create ‘culture zone’ categories using the national sample categories, and thus to compare differences between just nine cultural groups.

Before initiating my data analysis, I weighted the WVS6 dataset using the weighting variable provided for this purpose.

**Descriptive Statistics**

A large majority of respondents – 85.6% of those who provided valid responses – did not belong to a political party at the time they were interviewed. A further 9.9% were inactive members of a party. Interest in politics, however, was far more evenly distributed. Whilst only 12.4% were ‘very interested’ in politics, about 34% were ‘somewhat interested’.

When asked to place themselves along a 10-point scale between left and right, respondents provided a fairly even distribution of responses, though these were generally skewed to the right. The most popular position on the political spectrum by far was number 5, attracting 29% of valid responses. This could be due to its perceived status as the political ‘centre ground’, although it was in fact intended to indicate slight left-wing tendencies.

Most respondents believed themselves to be free and in control of their own lives: when presented with a 10-point scale from 1 (not free at all) to 10 (completely free), the majority were at the top end of the scale. The mean age was 41.68 years, with an approximate normal distribution.

The national sample in which respondents were located was distributed fairly evenly. Countries provided samples of at least a thousand individuals each, though some countries, such as South Africa (3,531), offer considerably more. What this reveals is that the national distribution of respondents within WVS6 is nowhere near proportional to the populations of the countries concerned. An important caveat in the usage of this data is thus that whilst WVS6 data may be representative of each participating country taken individually, they are unlikely to be fully representative of the world as a whole.

The mean value for response polarisation is 65.75%, though it must be noted that many WVS6 Likert scales have just four points and no middle option, resulting in an automatic minimum polarisation of 50%. Consequently, this figure is fairly arbitrary until differences between respondents are measured. The composite showed a near-to-normal distribution, with a median value of 65.15%, a skewness of 0.23 and a kurtosis of −0.20. The secondary composites all exhibited similar normal distributions around arbitrary means.

The mean score for the political spectrum composite is 5.91, confirming my earlier observation that the WVS6 dataset leans slightly to the right. This variable is also close to normal in distribution; the median is 5.86, the skewness −0.06 and the kurtosis 1.05.

**Bivariate Relationships**

Active political party members have a significantly higher mean response polarisation (67.73%) than inactive members (65.30%) and non-members (65.52%), whereas the latter two did not differ significantly. What is more, respondents who identified as ‘very interested’ in politics scored significantly higher on response polarisation (68.65%) than those who claimed to be ‘somewhat interested’ (64.82%) or ‘not at all interested’ (64.18%). The differences are small, but statistically significant across a wide range of cultures.

A t-test for response polarisation along the self-placement political scale is the basis for Figure 1. As this bar chart shows, there is no simple linear relationship between the two variables, but rather a curvilinear one. I suggest that this is because the self-reported political scale is itself a Likert scale, and thus subject to response polarisation. Individuals with a high response polarisation could therefore indicate extreme left- or right-wing positions on the scale even if their actual policy preferences are mild by comparison.

Within this effect, however, a subtler one is visible. Observe how in nearly every case the right-wing column has a significantly higher mean response polarisation than its left-wing mirror image. This suggests that overall, rightists exhibited a significantly higher response polarisation than leftists.

Considerable differences in response polarisation existed between national samples, ranging from Qatar, at 76.97%, to Singapore, at 57.04%. A t-test of culture zones shows that, in general, individuals within African-Islamic countries tend to have the highest response polarisation (68.36%), and those within Confucian countries the lowest (59.22%).

I repeated the t-tests above, this time using the political spectrum composite as my continuous variable. As with response polarisation, individuals who were active party members and identified as being ‘very interested’ in politics were significantly more right-wing than individuals who were not. In general, respondents who
believed themselves to be more free and more in control of their lives were significantly more conservative. Those who welcomed a future increase in respect for authority were significantly more conservative on average. The same applies to the employed and self-employed, those with a larger income, those from ‘higher’ social classes, and males.

The national samples were quite as varied in mean position on the political spectrum as they were in response polarisation. The most left-wing national sample is that of Russia (4.84), with other notably leftist nationalities including India (5.41), Germany (5.54) and Japan (5.62). It should be noted, however, that all countries other than Russia and the Ukraine reported an average score significantly greater than 5, and thus almost all national samples were more right-wing than left-wing on average.

Prominent examples at the rightward extremity include Mexico (6.27), Qatar (6.37), the United States (6.55) and Trinidad and Tobago (6.96). All of the scores listed here are significantly different from one another. At the culture zone level, English-speaking and African-Islamic countries provided the most right-wing participants, and Baltic, Catholic Europe and Orthodox countries provided those furthest to the left.

Response polarisation correlated significantly with political conservatism (0.145***), supporting my conjecture regarding the implications of Figure 1, and with the Neighbourly Composite (0.098***). Rightward political orientation, in turn, correlates positively with neighbourly discomfort (0.013***), and negatively with feelings of trust towards others (–0.014***). Conversely, political conservatism correlates positively with the Trust Deviation Composite (0.030***), suggesting that left-wing individuals could differentiate less between in-groups and out-groups when deciding who to trust. Conservatism is also correlated positively with Schwartz scale scores (0.103***), suggesting that more right-wing people are more comfortable referring to role models to guide their identity. Both response polarisation and conservatism correlate negatively with age (–0.049*** and –0.030*** respectively).

There are two reasons why the above coefficient of 0.145*** may not do justice to the correlation between response polarisation and the political right. Firstly, Figure 1 shows a skewed horseshoe-shaped relationship between the two variables, suggesting that, as in Figure 2, the relationship has been weakened by the Likert format of the political items.

The second reason is the subject of the next stage of my investigation: the possibility that the relationship is stronger in some cultures than others, and that in certain cultures may even be negative (Kossowska and Van Hiel, 2003, p. 511; Fu et al., 2007: 191). These local differences may partially cancel each other out, making the overall relationship appear deceptively weak. To test this, I repeated the Pearson test above, splitting the dataset first by national sample and then by culture zone.

This revealed distinct differences in the relationship between political conservatism and response polarisation by cultural environment. In some countries, such as China and the Philippines, the correlation coefficients are as high as 0.207*** and 0.242*** respectively. In others, such as Armenia and Kyrgyzstan, the coefficients are close to the overall figure of 0.145***. The coefficients of countries such as Belarus, Rwanda and Egypt are significantly positive but very small, whereas the coefficients of many countries, such as Turkey, Spain, Cyprus and Poland, are not significant at all. Finally, in just three cases – Uruguay, Russia and India – the coefficient is significantly positive.

**Figure 1:** Response polarisation along the self-placement political scale.
both significant and negative (−0.072*, −0.094*** and −0.225*** respectively).

Table 1 and Figure 2 show the same distribution on a larger scale, with most culture zones experiencing a moderate positive correlation, Baltic and English-Speaking zones a weak positive one, Catholic Europe no significant relationship, and South Asia a moderate negative one.

**Discussion**

My research aimed to bolster the case of previous scholars for the cultural and psychological roots of political belief, by demonstrating that perception of similarity and difference and culture remain intimately connected with political orientation even when four key methodological objections are remedied. In this I believe I have been successful.

I have found that across the world, individuals have a more or less stable tendency to provide responses to Likert scales at a given average level of polarisation. I have also found that, across the World Values Survey’s national samples as a whole, a variable representing this tendency correlates significantly with the tendency to indicate support for right-wing political stances. This supports the findings of numerous scholars who have concluded that the political right is associated with greater intensity of classification, of ideas and of people, and hence with a greater desire for social inequality, than the left (Carney et al., 2008, p. 817; Jost et al., 2003, p. 346; Bobbio, 1997, p. 60).

The fact that this relationship varies significantly with national sample, and in some cases is significantly negative, supports the theory that culture mediates the relationship between psychological perception and support for specific policies (Hibbing et al., 2014, p. 45; Jost et al., 2003, p. 343; Goffman, 1974, p. 29). In particular, I have provided some evidence that within relatively left-wing environments, individuals with a greater tendency to classify intensively tend to support left-wing policies rather
than conservative ones (Fu et al., 2007, p. 194; Kossowska and Van Hiel, 2003, p. 502). What is more, despite the manifest influence of multiple varied cultural interpretation (Bateson, 2005, p. 42; Kroger, 2005, p. 39), I have uncovered a relationship between politics and psychology which transcends cultural variation and points to a generic human tendency to classify ideas in the same way that we classify people (Cochrane et al., 2000, p. 189; Bobbio, 1997, p. 60).

I thus consider both of my hypotheses confirmed. A number of interesting secondary findings also confirm previous scholarship. Liberals sustain less of an in-group out-group contrast than conservatives (Sidanius, 1993, p. 188), tending to trust people more often and distinguish less between groups in the allocation of trust (Block and Block, 2005, p. 7). Conservatives are more frequently members of an elite of ‘political sophisticates’, active party members and very interested in politics (Zaller, 1992, p. 16; Converse, 1964, p. 56). They are also apparently more often socially and economically advantaged, in terms of work, income and social class, suggesting that Bourdieu may have been right to describe right-wing politics as a product of upper-class culture (Bourdieu, 2010, p. 482).

My results verify some of the broader claims made about conservative beliefs: that they entail positive attitudes towards order and authority (Jost et al., 2003, p. 343); that they place emphasis upon role models and adherence to conventional, stereotypical behavioural ideals (Carney et al., 2008, p. 810; Lieberman et al., 2005, p. 722; Kossowska and Van Hiel, 2003, p. 502); and that they are associated with discomfort around marginal groups such as immigrants and drug addicts (Carraro et al., 2011, p. 2; Kossowska and Van Hiel, 2003, p. 506). All of these reinforce the view of conservatives as intensive categorisers with a narrow view of boundary-breakers. However, my consideration of individuals on both sides of the spectrum also provides a broader view of political orientation which suggests that the liberal tendency to question and overrule boundaries is just as cultural, just as psychological, and just as political, as the conservative tendency to reinforce them (Hibbing et al., 2014, p. 4; Carney et al., 2008, pp. 812, 817; Block and Block, 2005, p. 12).

**Conclusion**

This paper has, in the main, utilised a simple methodological innovation to support the case for an existing theory. This theory holds that the political spectrum is in fact a psychological spectrum, relying upon differing perceptions of similarity and difference, and upon the prevailing system of cultural classification, to match individuals to the policies which best satisfy their notions of right and wrong.

I first outlined the details of this theory, and the various theoretical and empirical scholars who have contributed to it. I then interjected with four key criticisms of this edifice of thought, each of which demanded a response using a different set of research methods. All four of these demands, I contend, were met by the WVS6 dataset, my analysis of which confirmed and substantiated the results of previous research. The effect sizes were small, but they were derived from a highly diverse and inclusive dataset, they were highly significant statistically, and they pointed in the direction that would be expected based on the existing literature. Left-wing people, it seems, are generally and genuinely less willing to classify than right-wing people.

This is not terribly surprising to anyone familiar with Theodor Adorno, John Jost and Mary Douglas. Nevertheless, it is edifying that the conclusions of these individuals, and many others, are supported by data from a large, randomly selected, culturally inclusive dataset. This would imply that they are on to something.

Naturally, my research has as many limitations as it has innovations. Firstly, my variables representing response polarisation and culture are somewhat blunt instruments compared to sophisticated psychological indices and detailed anthropological investigations. The response polarisation composite is incapable of telling us why individuals provide more or less extreme survey responses: whether they are conscious of doing so, how much discomfort they may experience when presented with Likert scale statements, and whether they rationalise their choices by a process of reasoning similar to political decisions to allocate resources evenly or unevenly. The country and culture zone variables tell us only what country respondents were interviewed in, not whether they were born in that country, identify with its mainstream cultures or its sub-cultures, and participate actively in reproducing meaning within the social networks of these communities.

The World Values Survey has many strengths, but cannot claim to be representative of the world human population. Consequently, it remains dangerous to assume that my analysis paints a complete portrait of human political classification. Furthermore, non-experimental survey data are peculiarly ill-suited to the investigation of causal relationships. My research, is thus unable to substantiate the scholarly argument that psychological mind-set precedes and produces political opinions. At best, my analysis shows that around the world the two are connected. It does not show which one precedes the other.

I have several recommendations for future research to address these and other shortcomings. To combine the cross-cultural focus of my research with the level of detail attained by many studies in the existing literature, I would suggest repeating the latter in a variety of novel cultural contexts which so far have escaped such an examination. For example, a study of political opinions, Need for Closure and disgust sensitivity in an environment such as India would be a worthwhile addition to the literature. In order to establish causal direction, I would suggest a combination of longitudinal and experimental studies to the specifications above.

The journey to the explanation of political orientation is long and arduous, and far from over. I hope to have advanced this cause one small step further. We all of us inhabit a psychological spectrum: left and right, moderate and extreme, across the dizzying range of human cultures.
We have it in common, it seems, to be different to one other (Toren, 2003).

Additional File
The additional file for this article can be found as follows:

- Appendix. Variable Recoding Syntax for SPSS. DOI: https://doi.org/10.5334/ujpir.25.s1

Competing Interests
The author has no competing interests to declare.

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