

# Cultural scenes and contextual effects on political attitudes

Diana L. Miller\* and Daniel Silver

Department of Sociology, University of Toronto, 725 Spadina Avenue, Toronto, ON, Canada M5S 2J4

(Received 3 December 2014; accepted 18 January 2016)

Spatial variation in voting is well documented, but substantively meaningful explanations of how places shape individuals' politics are lacking. This paper suggests that local cultural 'scenes' exert a contextual effect – a spatial effect not driven by demographic differences between individuals in different places - on political attitudes and sensibilities. We measure the local 'scene' of Canadian electoral districts (EDs) through an original, national database of amenities, which we code qualitatively to describe those amenities' cultural attributes. We combine scenes measures with demographic Census data on each constituency, and individual-level data from a 2011 federal election exit poll. Using hierarchical linear models, we find that individuals' political sensibilities are correlated with the ED-level cultural context in which they reside, controlling for demographic factors at both levels. We find that EDs with self-expressive scenes are correlated with left-leaning political attitudes, while EDs with locally oriented scenes are correlated with right-leaning political attitudes. We hypothesize that the mechanism underlying these findings is that individuals' local cultural context subtly shapes their political sensibilities.

**Keywords:** political culture; contextual effects; neighbourhood effects; regionalism

Place-based ideological differences and voting patterns are a well-established fact of political life in many countries (Bishop, 2009; Blake, 1972; Gelman, 2008; Johnston, 1983). Still, there is considerable debate about the social dynamics underlying these spatial patterns. Researchers have suggested numerous explanations of why individuals in different places should vote differently, or subscribe to different political ideologies. These explanations fall into two broad categories, each with different implications for the role that spatial variation plays in political life: 'compositional effects' and 'contextual effects' (Johnston & Pattie, 1998).

<sup>\*</sup>Corresponding author. Email: diana.miller@mail.utoronto.ca

<sup>© 2016</sup> European Sociological Association

Compositional effects occur when voting patterns are driven by spatially based demographic differences, like university-educated and foreign-born individuals clustering in larger cities, while contextual effects occur when local area characteristics somehow shape individuals' political sensibilities (Books & Prysby, 1988; Cochrane & Perrella, 2012; Gidengil, Blais, Nadeau, & Nevitte, 1999). Compositional effects can operate without spatial context exerting any meaningful impact on politics, as individuals' demographic characteristics would purportedly influence their behaviour similarly regardless of where they were located (Cochrane & Perrella, 2012; Johnston & Pattie, 1998); in contrast, contextual effects operate when spatial context itself somehow helps to drive political outcomes.

Similar debates about context, composition and space are fundamental to the neighbourhood effects tradition in sociology (Sampson, 2012 reviews this literature back to its Chicago School origins and beyond). This tradition, unlike much of the political science tradition, focuses on smaller units like cities or neighbourhoods rather than larger states, provinces or regions such as the South or the Atlantic Provinces. This paper draws on and extends both lines of research – 'regionalism' from Political Science and 'neighbourhood effects' from Sociology – to investigate whether and how local area characteristics are correlated with individual politics in Canada. To both the literatures, we introduce a relatively understudied mechanism: the local cultural atmosphere – or 'scene' (Silver, Clark, & Navarro, 2010) – evinced by an area's organisational-makeup. The scene links cultural context and individual action and, we contend, clarifies the meaning-centred mechanisms through which contextual effects on voting behaviour and political attitudes occur.

By 'scene' we mean the characteristic styles of life embedded in the practices and organisations available in a given place (Silver, Clark, & Navarro, 2010). Such lifestyles can vary dramatically between different areas of a region, province or state, or even different neighbourhoods within the same city. Toronto's artsheavy Queen West offers strikingly different experiences and forms of engagement from many other Toronto neighbourhoods - but those experiences may resemble the ones offered by similar scenes in Vancouver, Ottawa or Montreal, as well as those in New York, Chicago, Seattle, Paris, London or Berlin. Scene variation cuts across provinces, traditional regions, cities and countries. At its core, the literature on contextual effects suggests that people's attachments to and involvement in local practices, institutions and interactions are connected with their attitudes and behaviours, political or otherwise. Developing this idea further, we suggest that the styles of life offered by a local scene - that is, whether the scene offers nightclubs or bowling alleys, art galleries or tattoo parlours - shape its residents' political sensibilities. We suggest that scenes are a mechanism through which contextual effects occur.

We measure scenes through an original data set of over 1800 types of amenities, most of which are organisations of one form or another, including restaurants, churches, museums, business associations, hospitals, antique dealers,

yoga studios and more. Although a local scene is not reducible to its amenities, amenities are useful indicators of scenes as they suggest the activities that regularly occur in that space; a locality with more Thai restaurants suggests more people eating Thai food. We transform these amenity-indicators into measures of the cultural content of local scenes through qualitative coding on 16 dimensions of meaning such as transgressiveness, formality, glamour, traditionalism and charisma. We combine these amenity-indicators with data on individuals' vote choice and political preferences from an exit poll following the 2011 Canadian federal election, and use hierarchical linear models to estimate the effects of local context on individuals' political attitudes. In focusing on the physical amenity infrastructure, we join with Sampson and McAdam (Sampson, 2012; Sampson, McAdam, MadIndoe, & Weffer-Elizondo, 2005; see also Knudsen & Clark, 2013) in treating local organisational characteristics as independent variables generating civic and political activism and attitudes.

Our analysis indicates that individuals living in local contexts that promote self-expression – spaces with higher-than-average concentrations of amenities like live theatres, art supply stores and yoga studios – are more likely to hold liberal (i.e. left-leaning) political attitudes. Conversely, individuals living in spatial contexts that promote locality – spaces with higher-than-average concentrations of amenities like microbreweries, churches and farmers markets – are more likely to hold conservative (i.e. right-leaning) political attitudes. These effects are net of traditional demographic drivers of political preference, like age, income and education; that is, they are not reducible to compositional effects. These observations are consistent with our expectation, informed by the literature on spatial context, that local cultural scenes exert a *contextual effect* on individuals' political sensibilities.

This paper contributes to our understanding of the cultural and contextual drivers of politics. We articulate a new mechanism linking place and politics, and demonstrate a new method for empirically evaluating its strength. Rather than assuming local area effects are due to vague, unnamed 'cultural differences' between places, we take a first step in identifying what those differences consist of: specific cultural dimensions such as self-expression or locality. We simultaneously validate new techniques – qualitative coding of large-scale listings of amenities – for measuring local cultural variations, and estimating their impact on individuals' political attitudes and sensibilities.

## The literature review: spatial context, culture and politics

Scholarship on regionalism and politics outlines at least two major ways in which space matters for voting and political sensibilities: through compositional and contextual effects (Cochrane & Perrella, 2012; Gidengil et al., 1999; Johnston & Pattie, 1998). Scholars of neighbourhood effects in sociology rely on a similar distinction in studies of crime, health, civic action, residential location decisions and more (Sampson et al., 2005; Wodtke, Harding, & Elwert, 2011). Compositional

244

effects occur when individuals within an area differ in their average demographic characteristics in ways that matter for a given outcome (e.g. voting). If highly educated people are more likely to vote for left-leaning parties, a region with more highly educated residents will likely vote for left-leaning parties at above-average rates; this is a compositional effect. Importantly, compositional effects trace regional political variation to the clustering of particular types of people in particular places. They do not depend on any specific type of spatial context; regardless of where, exactly, highly educated people cluster, the effect will be roughly the same. If compositional effects were the only mechanisms at work, then dispersing individuals randomly across space (or, adequately controlling for their demographic differences in a regression model) would eliminate regional differences in voting.

In contrast, contextual effects operate when local area characteristics influence individuals' behaviours or otherwise independently generate social outcomes. Contextual effects operate when demographically similar individuals who reside in qualitatively different communities have divergent experiences and life chances (Kirk & Papachristos, 2011; Sampson, 2012; Wodtke et al., 2011), or when political scientists find regional effects that are not reducible to demographic characteristics (Books & Prysby, 1988; Henderson, 2004; Johnston & Pattie 1998).

Understanding contextual effects demands a meaning-centred explanation of why geographic location affects social and political processes (Cutler, 2007; Elkins & Simeon, 1979). In early research on spatial differences in politics, a common approach was to control for a number of individual-level variables and attribute any remaining unexplained variation to regionalism, or the effect of place (Elkins & Simeon, 1979; Johnston & Pattie 1998). Despite producing significant results, this approach leaves regions as empty vessels, simply that which we cannot account for otherwise. Without some meaningful account of why living in a certain place should inform a person's politics, regionalism looks like a placeholder waiting for some better explanation to fill the gap (Cutler, 2007). Meaning-centred explanations are particularly important in light of recent arguments about the 'death of distance' (Cairneross 2001), which suggest that technological advancements in communication and travel should minimize the importance of local context. Researchers in both the political science and neighbourhood effects traditions have outlined many such meaningful explanations.

Local areas have relatively stable characteristics, rooted in unique political histories, which produce ongoing collective norms, organisations and institutions (Bell, 1996; Lipset, 1991; Stewart, 1994; Wiseman, 2007). These local differences often endure for decades or longer, despite many individuals moving in and out, and shape residents' sensibilities and behaviours. Enduring differences between neighbourhoods are associated with sharply divergent outcomes in, for instance, health, crime and civic activism (Kirk & Papachristos, 2011; Morenoff, Sampson, & Raudenbush, 2001; Sampson et al., 2005; Wodtke et al., 2011).

Sampson et al., 2005 find neighbourhoods with higher organizational density (i.e. a locally rooted set of collective norms and organizations) have more 'civic action events', where residents mobilize for a collective purpose. And, Kirk and Papachristos (2011) find that neighbourhoods with collective cynicism about legal and policing systems have more incidences of violence.

Large-scale economic and political trends are also mediated and experienced locally, as people talk with neighbours, consume local media and interact with nearby institutions like churches, community service organizations, union branches and more (Bramlett et al., 2011; Johnston & Pattie, 1998). Johnston (1983), for example, finds that the strength of partisan opinion in local context shapes individuals' political sensibilities, and can either counteract or exaggerate national political trends. Cochrane and Perrella (2012) similarly find that individuals' political preferences are shaped not only by their personal economic situations, but also by the economic situations in their local constituencies. Individuals' spatial context also shapes their social networks, which in turn shape the kinds of political information that they receive (Bramlett et al., 2011; Huckfeldt & Sprague, 1987; Zuckerman, 2005).

Local spatial context can also draw particular people to particular places – that is, neighbourhood context can contribute to compositional effects. Individuals often base their location decisions on the qualitative characteristics of neighbourhoods. If recent university graduates have similar political sensibilities, their flocking to an urban centre might create a compositional effect. At the same time, if they were attracted there by a thriving arts scene or other unique local institutions, then the resulting compositional effect was also driven by a contextual effect. Although contextual and compositional effects are treated as separate phenomena in the literature, they are often related in practice.

Another plausible, but under-studied, mechanism through which local areas impact politics is through their cultural meanings. Indeed, a recognition that culture is a potentially important but poorly understood link in the chain of neighbourhood effects was one of the major lessons learned in the decades long Project on Human Development and Neighbourhoods in Chicago (Sampson, 2012). Neighbourhoods acquire distinct reputations as safe, gloomy, exciting, creative, dull, transgressive, warm, aloof and more. The opportunity to live in (or away from) these sorts of experiences pulls some people in and pushes others out – not necessarily along strict lines of age, education, income, race or national background – while exerting subtle normative pressure on area residents (Goffman, 1963; Kefalas, 2003).

While cultural differences across space are intuitively evident, translating such intuitions into a coherent research programme is difficult. We can list key neighbourhoods known for possessing certain cultural traits: 'Beacon Hill, The Tenderloin, Hollywood, Bed-Stuy, Kensington, and the Left Bank ... convey a distinctive meaning and sense of place. Neighbourhoods have reputations that may well be sturdier than individuals' (Sampson, 2012, p. 59). Going further requires systematic analysis of what these differences consist in, so that we can distinguish one

place from another in terms of their cultural symbolism. This in turn can organise the search for empirical indicators of local cultural differences that can inform contextual analyses, along with standard demographic variables.

An emerging body of research on local 'scenescapes' provides a useful reference point for linking culture, place and politics. This research grounds cultural analyses of place in concepts rooted in classical and contemporary cultural sociology, cultural studies, literature and aesthetics. Symbolic dimensions of place (Hunter & Janowitz, 1974; Suttles 1984) central to the neighbourhood effects tradition are important to consider, such as neighbourliness, tradition, egalitarianism, ethnicity, transgression or locality. Yet the cultural meanings of places extend beyond these characteristics; some offer experiences that stress more artistic, fashionable or 'bohemian' notions like glamour or exhibition or self-expression, others emphasize qualities stressed by sociologists from Weber and Tönnies to Bellah and Bell, such as rationalism, utilitarianism or corporateness.

Scenes research organises these cultural dimensions of place into a heuristic model that distinguishes between legitimacy, theatricality and authenticity (Silver & Clark, 2013; Silver, Clark, & Navarro, 2010). Dimensions of legitimacy, such as traditional or utilitarian legitimacy, define ways in which a place can affirm or reject grounds for normatively appropriate action (e.g. the authority of the past, or efficiency calculations). Dimensions of theatricality, such as glamorous or neighbourly theatricality, define ways in which a place can affirm or reject styles of appearance (e.g. being at the cutting edge of beauty and fashion, or being warm, friendly, and welcoming). Dimensions of authenticity, such as local or ethnic authenticity, define ways in which a place can affirm or reject sources of identity (in, e.g. being from a distinct place or connected to an ethnic heritage). Table 1 summarizes such a heuristic.

The goal of the heuristic codified in Table 1 is not logical completeness but rather to develop a wide-ranging but workable set of categories that can be used to compare and analyse the cultural meaning of places. It offers a pluralistic and syncretic vision of the cultural dimensions of localities. It also allows us to measure local culture empirically and systematically. Once distinguished analytically, one can investigate their sources and consequences separately, or ask about their tendencies to combine in distinct locales, and further examine why such clustering occurs, what the typical combinatorial patterns are, and what follows from them.

Sociologists routinely distinguish elements that define advantage and disadvantage, such as occupation, income or race (Massey & Denton, 1985), and Table 1 encourages us to treat culture similarly. We first treat, say, glamour as an analytical quality that may be strong in places like Rodeo Drive but present in different degrees elsewhere. But glamour is one quality among others. The boutiques, stylists, interior designers, fashion houses and galleries of Rodeo Drive might combine glamour with exhibition, self-expression and corporateness, while downplaying transgression and utility, to make one mix of dimensions. Measuring the mix of dimensions in any given space is a way to measure the

Table 1. Dimensions of scenes.

Dimension	Coding question	Example
Theatricality: ss	tyles of appearance supported or attack Does participating in the activity associated with this amenity promote in participants a sense that it is good, because it is pleasurable, to notice and/or be noticed by others	cked by a scene
Glamorous	as shining out, glittering, like gold, sparkling?	Standing on the red carpet at Cannes gazing at the stars going by
Formal	as conforming to formal codes of appearance (i.e. a jacket and tie in a restaurant or business, eating salads with the proper fork)	Going to the opera in a gown or white tie and tails
Transgressive	as looking offensive to mainstream culture and values and resisting rigid codes of appearance?	Watching a performance artist pierce his skin
Neighbourly	in terms of intimate, face-to-face relations where participants tend to have, desire, or establish personal relations with one another	Attending a performance by the community orchestra
Exhibitionistic	in a situation which is fundamentally anonymous (muscle beach, gay pride parade, voguing, pickup bars, wet t-shirt contest)?	Watching weightlifters at muscle beach
Authenticity: so	urces of genuine identity supported or	r attacked by a scene
	Does participating in the activity associated with this amenity promote in participants a sense that who they really are is [a genuine source of identity is]	
Local	grounded in their distinct local roots? (e.g.: sports teams allow you to realize yourself as a Chicagoan through expressing your allegiance to Da Bears)	Savouring local fruit and meat at a farmers' market or enjoying food produced according to local customs
Ethnic	realized in their [one's] ethnic roots?	Recognizing the Celtic influences in Atlantic folk music
Corporate	realized in the brand, and its capacity to define reality? For example: Nike is a 'real' shoe as opposed to generic shoes in virtue of the brand	Enjoying the real thing that is Coke or prizing Gucci bags over knockoffs

(Continued)

Table 1. Continued.

Dimension	Coding question	Example		
State	realized in being a citizen, a member of a nation and participant in civic life?	Visiting the Gettysburg Battlefield or singing the Marseillaise		
Rational	realized in free, rational thought, regardless of their time, nation, ethnicity, tribe, creed or colour?	Celebrating the power of human reason at a planetarium or before a university library or laboratory		
Natural	One's natural or spontaneous passions and impulses, free from wilful planning or social intervention?	Rediscovering a connection with nature and the natural part of oneself, unrestrained by civilization, on a hunting trip or hike		
Legitimacy: ba	ses of moral authority supported or at Does participating in the activity associated with this amenity promote in participants a sense that the right way to do something is	tacked by a scene		
Traditional	according to heritage and/or the models provided by exemplary figures from the past?	Hearing Mozart performed in the Vienna State Opera or church bells call one to worship		
Utilitarian	to pursue rational self-interest, produce positive outcomes or seek efficient means to an end/ use of time?	Savouring the value of efficient production at a museum of industry, well-designed plant or consulting firm		
Egalitarian	determined by universal, reciprocal respect for all persons and peoples (including the consumer herself)?	Enjoying the democratic implications of a crafts fair or fair trade coffee		
Self- expressive	to do it in your own way rather than the way it has always been done or by following a present rule? A sense of the importance and value of originality, of innovation or of the opportunity to experience unique and non-repeatable expressions of individual creativity?	Hearing a jazz musician improvise a solo		
Charismatic	determined by a charismatic leader or star of any sort (e.g. connect to a famous designer through buying their clothes)?	Crowding to be near Wayne Gretzky		

'scene' (which, recall, we have conceptualised as the characteristic lifestyles embedded in the practices and organisations available in a given place). A different, more bohemian, scene could join self-expression with transgression and anti-corporateness, in indie galleries and cafes, punk music venues, second hand

clothing stores and the like. Such an approach lets us examine cultural dimensions separately, trace out their typical (and atypical) combinations, and pursue theories of their sources and consequences. In sum, scenes research offers a way to make cultural analysis a standard variable in neighbourhood and regional analysis.

Scenes researchers use a variety of indicators to quantify the cultural, meaningful aspects of places. Some research focuses on a handful of local amenities such as juice bars and chain vs. independent cafes or yoga studios, karate clubs and Evangelical churches (Clark, 2004; Yi & Silver, 2015); other research uses large data sets of hundreds of amenities (Silver, Clark, & Graziul, 2011; Silver, Clark, & Navarro, 2010). Scenes research links cultural aspects of places to outcomes such as economic growth (Navarro, Mateos, & Rodriguez, 2014; Silver & Miller, 2013), residential patterns (Silver & Clark, in press; Navarro, 2012a), local political conflict and policy (Lee & Anderson, 2012; Navarro, 2012b; Silver, 2012; Silver & Clark, 2013), crime rates and more.

Local scenes, we suggest, are also relevant to understanding broad political cleavages. We conceptualize them as mechanisms through which contextual effects operate. One pathway is through shaping residential patterns and location decisions. Amenities and scenes signal what lifestyle a place has to offer. Different people are attracted to different signals (Falck, Fritsch, & Heblich, 2010; Kaufman & Kaliner, 2011, Silver & Clark, in press). To the extent that taste for certain scenes is correlated with distinct political attitudes, such attitudes become clustered according to scenes. Scenes provide contextual cues that form the political composition of an area. Bishop's (2009) *The Big Sort* outlines a similar process for US counties, suggesting that increasing local landslides are an outcome of individuals sorting themselves residentially by taste (e.g. for gay-friendly artistic communities or God-fearing and gun-loving communities). The reputational dynamics Sampson (2012) identifies in Chicago neighbourhoods operate according to similar principles, which he demonstrates are not reducible to demographic compositional factors.

A second process through which scenes potentially shape politics is by defining local norms of political sense-making. Through noticing and interacting with practices characteristic of local scenes – whether their neighbourhood offers bookstores or pool halls, Thai restaurants or pubs – people may develop a Bourdieusian 'practical sense' (Bourdieu, 1998) of what sorts of lifestyles and attitudes are valued in their local contexts. Different scenes carry different normative messages and encourage different modes of ambition. Some say, 'you should be richer', others say 'you should be hipper', others say 'you should be smarter', others say 'you should be friendlier' (Graham, 2008).

In this way, we can think of scenes as embodying shared styles of attention and judgement that influence which types of candidates and parties 'feel right' to voters (Green, Palmquist, & Schickler, 2004). As Kant argued, our subjective judgements are validated when we observe others responding as we do – this is perhaps why the strength of partisan opinion in a neighbourhood shapes the political opinions of voters in that neighbourhood (Johnston, 1983). Similar reasoning

led Hannah Arendt to make the aesthetics of the *The Critique of Judgment* the basis of her political theory (Arendt, 1992). Scenes may similarly function as mechanisms through which individuals observe others' subjective political judgements (or at least, indirectly develop a sense of them), and have their own political judgements validated or invalidated (Millie, 2008). A neighbourhood filled with art galleries, women's organisations and farmer's markets communicates and validates different political values than a neighbourhood filled with truck dealers, business associations and camping supply stores. The values communicated by the local scenescape are part of the local context through which national political events are mediated. Metaphorically, we view the scene or local cultural context as analogous to a low-level hum in the background; it provides a context for action and decision-making, resonating more strongly at some moments and with some people than others.

Some research already finds connections between scenes and politics at the aggregate level. Silver & Clark (in press) show that in the US counties with more self-expressive and transgressive scenes tended to be more Democratic, that zip codes with numerous 'blue blood' amenities (golf courses, yacht clubs and the like) tend to make political contributions to Republican candidates, and that zip codes with more self-expressively legitimated scenes tend to have more 'New Social Movement' organisations (e.g. human rights, environmental and social advocacy organisations). Similarly, Silver and Miller (2014) find that in Canada between 2004 and 2011, electoral districts' (EDs) cultural characteristics are related to their aggregate-level voting patterns, accounting for a host of variables capturing major Canadian political cleavages (income, region, religion, language, as well as a decade of fairly dramatic national political change).

These aggregate results are important in their own right, especially in the case of voting. We often want to know which party in an area received the most votes, since these local aggregates determine the make-up of national legislative bodies. Although such local aggregate patterns change gradually over time, they are often remarkably stable, maintaining recognisable differences even amidst large-scale social change. For instance, our preliminary analyses show that in Canada the 2001 and 2011 Liberal Party Electoral vote shares are correlated around .65 and the 2004 (the CPC's first year on the ballot) and 2011 Conservative Party of Canada vote shares are correlated .84. In the USA, the 1996 and 2012 Republican vote shares are correlated .72. The research cited above show that scenes are key factors in which such enduring differences consist.

Yet aggregate relationships are only one type of local area process. Also crucial are relationships between aggregate area characteristics and individual behaviour. Unfortunately, direct tests of how local spatial context impacts individuals' politics are difficult and rarely done because they require data that associates each individual with a low-level geographic identifier, such as a city block, neighbourhood, postal code or ED. Such information is often unavailable due to concerns about anonymity. Or, when it is collected (e.g. by Statistics Canada in the Census of Population), the geographic data is often redacted. This type of research

also requires a large data set, with enough survey respondents in each local spatial unit to permit statistical generalization. Due to these methodological difficulties, previous research on spatial context and politics focuses heavily on the aggregate characteristics of spaces, and less on how context impacts the individuals in those spaces (see Oliver, 2001; Sellers, 2013; Silver & Miller, 2013), or examines political contextual effects of this type at higher geographic levels, such as US states (Gelman, 2008). On the whole we know too little about how spatial context shapes individual-level outcomes.

## Methods

## Data

Our individual-level data come from an exit poll from the 2011 Canadian federal election conducted by IPSOS, a private polling firm. This poll is an internet-based opt-in survey of 39,236 Canadians, selected from a standing panel of over 200,000 members, who are nested within 307 EDs.<sup>2</sup> These data are useful for our purposes because every respondent is associated with an ED, which allows us to link respondents to our original scenes data set and to data from Statistics Canada on the aggregate socio-demographic characteristics of each riding. The sample also covers the entire country, and is large enough to permit multilevel modelling.

There are certainly drawbacks to using internet opt-in surveys (cf. Chang & Krosnick, 2009). However, we have taken precautions to minimise those drawbacks. Wherever possible we have verified that the aggregate characteristics of the survey sample resemble those obtained from other sources. For example, when respondents' reports of who they voted for are aggregated at the ED level, they are highly correlated with the actual proportion of votes each major national party received in each riding as reported by Elections Canada (Conservative Party = .945, Liberal Party = .922, New Democratic Party = .938).

There are some limitations of the IPSOS sample. First, all respondents reported that they had voted, either on Election Day or in an advance poll; non-voters were not surveyed. Our results thus describe active voters, and should not be generalized to non-voters or the politically disengaged. The online nature of the survey likely also excludes people without easy access to computers, or who are not web-literate. A final limitation is that visible minorities and immigrants may be under-represented; only 7.3% of respondents identify as visible minorities, and 12% identify as immigrants. According to the 2011 National Household Survey (NHS), the actual proportions of visible minorities and immigrants in Canada are approximately 19.1% and 20.6%, respectively (Statistics Canada, 2013). Because we do not analytically focus on ethnicity and immigration in this paper, and because voters are more likely than the general population to be white and non-immigrants (suggesting that this may be partially a feature of the population, rather than a limitation of the data), we do not consider this a significant setback. Despite these limitations, we believe that this IPSOS survey can

produce valid and important results, and join with other researchers (cf. Cochrane & Perella, 2012) who have used this same data source with similar methodological precautions. However, we caution that those results do not describe the general Canadian population, but *web-literate Canadian voters*.

Our data on spatial context come from multiple sources. The amenities data come from the 2011 Canadian Census of Business, and business listings from the Yellow Pages Canada online directory, downloaded in 2009. Both data sources provide information about for-profit businesses (e.g. restaurants, retail stores, banks, graphic designers), non-profit organisations (e.g. churches, charities), and some natural amenities (e.g. public parks). We use approximately 300 categories from the Census of Business and 1500 categories from the Yellow Pages to get a holistic read on the overall scene in a given ED.

Our raw data is a count of how many amenities in each category are present in each ED; for example, how many art galleries are located in Scarborough-Rouge River. We transform this raw data into meaningful summary measures of a scene through qualitative coding. For each amenity category, we assigned a score of 1–5 on 16 dimensions of meaning that resonate with themes from classical sociological theory, as well as art and literature, as discussed above in Table 1.3 These 16 dimensions are not meant to be an exhaustive list of the values or lifestyles that a scene could affirm or oppose; rather, they provide a flexible yet stable heuristic for empirically measuring the qualitative characteristics of a space. Certainly, others may be interested in different qualities of local spaces, and could add or subtract scenes dimensions according to their research questions. For the purposes of this analysis, an advantage of these dimensions is that they tap into broad cultural themes that are related to long-standing political cleavages. For example, corporateness and utilitarianism are characteristically conservative values, while selfexpression, egalitarianism and the importance of the state are often associated with liberalism.

A score of 1–2 indicates that the amenity *opposes* the dimension, a score of 3 indicates neutrality, and a score of 4–5 indicate that the amenity *affirms* the dimension. We minimised subjectivity in the coding process by using two coders (the two authors) who followed a clear decision tree in assigning scores. Each author coded the data independently, and our codes were generally correlated at .7 or higher. We discussed discrepancies and 'hard cases', to clarify our coding rationales and ensure consistent logics (similar to Abend et al., 2013).

After coding was complete, we calculated a 'performance score' for each ED for each dimension. We did this by multiplying the number of amenities in a given category by that category's score on each dimension, then summing all of the scores from one dimension and dividing by the total number of amenities in that ED. The resulting performance score ranges from 1 to 5, and provides an overall measure of how strongly a space affirms or opposes a particular dimension. Because performance scores are divided by the total number of amenities, they facilitate comparisons between ridings of different sizes, producing measures of per amenity glamorousness, similar to *per capita* wealth.

To be sure, it might be possible to dispute the assignment of particular codes to particular amenity categories. Still, we made over 28,000 coding decisions (1800 amenity categories × 16 dimensions), so any single decision has a minimal impact on the overall scores. We validated this by altering several coding decisions and recomputing our scores, consistently finding minimal differences.

Our data on the sociodemographic aspects of spatial context (e.g. median income, per cent ED population with a bachelor's degree or higher) come from the 2011 NHS. These data include information about the aggregate characteristics of each ED, such as average rent, average education level, median income and more.

## **Variables**

Our dependent variable is a scale that provides a summary measure of the conservatism or liberalism of each respondent's overall political attitudes. We constructed this scale using five variables from the IPSOS poll (described in Table 2), including four general questions about the respondent's political attitudes and a concrete question about what party he or she voted for in the 2011 federal election. We include indicators of both opinion and behaviour in our dependent variable to

Table 2. Construction of the dependent variable.

Item	Question	Response options and coding	
1	Which candidate did you vote for today?	CPC = 2, Liberal = 1, Bloc or New Democratic Party = 0, other = missing	
2	On most political issues, do you consider yourself to be on the 'left', 'right' or 'centre'?	Right = 2, centre = 1, left = 0, don't know = missing	
3	Which comes closer to your view?	Government is doing too many things that should be left to business = 2	
		Government should do more to solve problems = 0	
		Don't know/Not sure = 1	
4	Do you favour or oppose the death penalty	Yes, for all convicted murderers = 2	
	for people convicted of murder?	Under most circumstances = 2	
		Under very rare and extreme circumstances = 1	
		No, capital punishment should never be applied in Canada = 0	
		Don't know/Not sure = 1	
5	What is your view on same-sex marriage?	Favour same-sex marriage = 0	
		Oppose same-sex marriage, but would accept same-sex civil unions = 1	
		Oppose entirely same-sex marriage = 2	
		Don't know/Not sure = 1	

increase the robustness of our measure.<sup>4</sup> For individuals with missing values on one item, we used mean substitution to minimise missing data. Individuals with missing values on two or more items were assigned missing values on the scale, and excluded from analysis. Cronbach's alpha for this scale is .733.

Our independent variables are scores for two scenes dimensions: self-expressive legitimacy and local authenticity. For each dimension, we average the ED scores generated by our Census of Business and Yellow Pages data. Although our qualitative coding produced 16 dimensions, we focus on self-expression and locality because exploratory analysis indicated that they had the strongest and most consistent impacts on our dependent variable. Table 3 lists key amenities that are highly empirically correlated with the ED-level self-expression and locality variables, and the EDs with the highest scores on each dimension. Our 'self-

Table 3. Two scenes dimensions.

	Self-expressive legitimacy	Local authenticity
Top-scoring EDs	Laurier-Sainte Marie (Montreal), Toronto-Danforth, Parkdale- High Park (Toronto), Vancouver East, Beaches-East York (Toronto), Outrement (Montreal), Avalon (Newfoundland)	Cardigan (PEI), Desnethé– Missisippi–Churchill River (Saskatchewan), Avalon (Newfoundland), West Nova (Nova Scotia), New Brunswick Southwest, Cypress Hills– Grasslands (Saskatchewan)
Highly correlated amenities	Independent Artists, Writers, and Performers, Sound Recording Studios, Musical Groups and Artists, Agents and Mangers for Artists and Entertainers, Theatres, Graphic Design Services, Dance Companies, Drinking Places – alcoholic beverages, Art Dealers, Civic and Social Organizations, Motion Picture Producers and Studios, Commercial Photographers, Arts and Cultural Organizations, Bicycle Dealers, Restaurants, Cafes Terraces, Talent Agencies, Sex Therapists, Designers-Apparel, Records, CDs, and Tapes – retail, Massage Therapists, Interior Decorating Services, Opera Companies, Natural and Organic Foods, Boutiques, Artists' Materials and Supplies, Discotheques, Incense, Used and Rare Book Dealers	Museums (except Art Museums and Galleries), Home Centres, Golf Courses and Country Clubs, Religious Organizations, Recreational Vehicle Parks and Camps, Historical and Heritage Sites, Bed and Breakfasts, Nursery and Tree Production, Recreation Centers, Tourist Information, Clubs, Campgrounds, Credit Unions, Libraries, Greenhouses, Gift Shops, Monuments, Meat Dealers, Chamber of Commerce, Tourist Attractions, Swimming Pools, Funeral Homes, Bowling, Garden Centres, Farming Equipment and Supplies, Trail Rides, Community Care Facilities, Resorts, Arts and Craft Supplies, Cottages – rental, Parks, Boat Dealers, Canoes and Kayaks, General Stores,

expressive' dimension tends to be strongest in the arts districts of large cities (West Toronto, East Vancouver, Montreal's Plateau district), while 'locality' tends to be strongest in small towns and rural areas (Saskatchewan, the Atlantic Provinces), suggesting that our measures have considerable face validity.

Our individual-level control variables include the respondent's gender, age, household income, education, visible minority status, number of children, religiosity, political engagement on social media and place of residence (urban vs. rural). Gender, visible minority status and urban residence are coded as dummy variables, where female = 1, visible minority = 1 and urban residence = 1; male, non-minority and rural residence are the reference categories. Age is a continuous variable, measured in years. Income is an ordinal variable measured in \$10,000 increments. Education is coded as an ordinal variable with eight categories: (1) primary school or less; (2) some high school; (3) completed high school; (4) some college or trade school; (5) completed college or trade school; (6) some university; (7) university undergraduate degree and (8) university graduate degree.

We measure respondents' religiosity using a scale constructed from five IPSOS questions on religious beliefs and practices (e.g. self-reported religious commitment, frequency of attendance at religious services). The scale has a minimum value of 0 and a maximum value of 9. We measure political engagement on social media using a second scale, constructed from 11 IPSOS questions asking whether the respondent engaged in specific behaviours on social media (e.g. writing, commenting on, sharing links to or reading political and public policy information online). Each IPSOS question is a dummy variable (0 = no, 1 = yes). The social media index adds all 'yes' values, and has a minimum value of 0 and a maximum value of 11. The questions used in scale construction and values assigned to the response options are described in Appendix 1.

All individual-level control variables are from the IPSOS survey and, except for dummy variables, are group mean centred, so the coefficient for each of these controls is relative to the average level in that ED. For example, the 'age' coefficient measures the effect of being older or younger than the average resident in a respondent's constituency.

Our control variables at the ED level are average rent, per cent of the ED population identifying as a visible minority population, per cent of the ED population with a bachelor's degree or higher, per cent of the ED population reporting no religious affiliation and the per cent of dwellings in an ED that are rented as opposed to owned. All of these variables are from the 2011 NHS, and all are standardized (i.e. grand mean centred).

## Analysis

We analyse the impact of local spatial context on individuals' political preferences using two-level hierarchical linear models, where individuals are level 1 and EDs are level 2. Provincial context clearly matters for Canadian politics (Blake, 1972).

However, we include provincial context in our models by using dummy variables at level 2, rather than including provinces as a 3rd level, because our purpose is to model relationships between local context, not provincial context, and political attitudes. Our primary interest in provinces is to control for them to ensure that the results for our ED variables are not merely reflections of some residual provincial culture. We allow age, education, religiosity and political engagement on social media to have random as well as fixed effects, as our early analyses indicated that these effects were present and significant.

# **Findings**

We begin by estimating an intercept-only model to determine the proportion of variance explained at the individual and constituency levels. As shown in Model 1 of Table 4, most of the variation in voters' political preference exists at the individual level. Eleven per cent (.675/(.675 + 5.440)) of the variation can be explained by differences between constituencies, and the remaining 89% of the variance is due to differences between individual voters. This provides an important counterpoint to work on place and politics at the aggregate level, where spatial context matters very much for collective patterns in voting and voter turnout (Oliver, 2001; Sellers, 2013; Silver & Miller, 2014). Our findings show that spatial context does indeed matter, but less so than individual characteristics. Still, in this case any effect of spatial context is notable as it provides empirical evidence consistent with a phenomenon that has often been theoretically assumed, but is difficult to observe. Moreover, as our data is cross-sectional rather than longitudinal, we can model neither long-term effects of living in a certain area nor individual selection into particular neighbourhoods, which, as we have noted, is a social process deeply rooted in local context (Sampson, 2012; Wodtke et al., 2011). Finally, EDs are fairly large areas that may mask contextual processes that are stronger at the truly neighbourhood level. Our results may therefore be a conservative estimate of the role of local spatial context in Canadian voting that may be enhanced by further research.

Models 2 and 3 of Table 4 add the level-2 variables. Model 2 includes the scenes dimensions (our independent variables) on their own, and Model 3 includes the scenes dimensions with a battery of variables that control for aggregate demographic characteristics of the local ED. We show the scenes dimensions independently, and then with controls, to demonstrate that their statistically significant associations with political attitudes persist with demographic controls, rather than emerging only when controls are added. Model 3 clearly shows that the local context in which voters live is correlated with their political ideologies. Being surrounded by highly educated people, by non-religious people and by renters as opposed to homeowners is associated with tendencies towards liberal political attitudes. Interestingly, the presence of visible minorities or the average rent of a constituency – a proxy for an area's wealth – do not significantly relate to residents' political attitudes.

Table 4. The impact of spatial context on individuals' political attitudes.

	Model 1	Model 2	Model 3	Model 4	Model 5
Regression coefficients (fixed	effects)				
Intercept	4.351**	4.356***	5.208***	4.991***	5.857***
Individual controls (Level 1)					
Female				-0.775***	
Age				0.018***	0.018***
Household income				0.042***	0.041***
Education				-0.193***	
Visible minority				-0.019	-0.024
Number of children				0.125***	0.125***
Religiosity Index				0.203***	0.203***
Urban environment				-0.208***	
Social Media Index				-0.105***	-0.105***
Contextual controls (Level 2)	)				
Visible minorities as % of			0.008		0.018
ED population					
Per cent ED population with			-0.094*		-0.100*
a bachelor's degree or					
higher					0.050
Average ED rent			0.057		0.063
Per cent ED population			-0.110*		-0.097
reporting no religion			0.202***		0.202**
Per cent ED dwellings			-0.283***		-0.282***
rented BC			0.607***		0 (22**
			-0.607*** -0.630***		-0.622*** -0.641***
Saskatchewan					
Manitoba Ontario			-0.254 $-0.730***$		-0.281 $-0.763***$
			-0.730***		-0.763*** -1.639***
Quebec New Brunswick			-0.844***		-0.849***
Nova Scotia			-0.844 -1.056***		-0.849 -1.090***
Prince Edward Island			-0.668*		-0.690*
Newfoundland			-0.003 -1.545***		-0.090 -1.601***
Independent variables (Level	(2)		-1.545		-1.001
Self-expressive legitimacy	2)	-0.726***	-0.286***		-0.273***
Local authenticity		0.633***	0.167**		0.140*
Variance components (rando	m offects)	0.033	0.107		0.140
Residual (individual level)		5.441***	5.440***	4.644***	4.644***
Variance of Intercept (ED	0.675***		0.095***	0.684***	0.097***
level)	0.075	0.517	0.075	0.001	0.057
Age (individual level)				0.000***	0.000***
Education (individual level)				0.005***	0.005***
Religiosity Index				0.002**	0.000
(individual level)					
Social Media Index				0.001*	
(individual level)					

(Continued)

Table 4. Continued.

	Model 1	Model 2	Model 3	Model 4	Model 5
Fit statistics Akaike information criterion (AIC)	,	175,567	175,293	170,102	169,653
Bayesian information criterion (BIC)	175,756	1/5,584	175,310	170,153	169,704

Notes: This table summarizes results of five multilevel regression models, where individuals are level 1 and EDs are level 2. Model 1 is the empty model, Model 2 adds our independent variables (scenes dimensions) at level 2, Model 3 adds all level 2 variables, Model 4 includes only level 1 variables, and Model 5 is the full model that joins all level 1 and level 2 variables. N = 39,236 individuals nested within 307 Canadian EDs.

Together, Models 2 and 3 also show that the scenes dimensions – the cultural characteristics of neighbourhoods, measured by amenity-indicators – are correlated with voters' political sensibilities. Being surrounded by amenities that promote self-expression (e.g. art galleries, live theatres, music studios) is associated with liberal political attitudes, while being surrounded by amenities that emphasize locality (e.g. monuments, campgrounds) is associated with conservative attitudes. As these associations remain consistent when individual-level controls are added in Model 5, they are not reducible to individual demographic characteristics; they are consistent with the proposition that individuals are responding to subtle cues in their local contexts about what sorts of attitudes, experiences and practices are valued.

These results suggest intuitive affinities between these particular scene dimensions and political orientations. A self-expressive scene, for instance, likely indicates a broadly culturally liberal environment, open to mixing, pluralism and tolerant of new and different ideas and practices. Inglehart and Welzel (2005) argue that such self-expressive values foster liberal ideologies at the cross-national level, and our results suggest that similar processes occur within nations as well. Likewise, the small-town community feel indicated by local authenticity seems strongly culturally resonant to a conservative worldview. Simmel's (1971) classic contrast of metropolis and village, for instance, associated the latter with a slower pace of life, discomfort with change, and rootedness in ways of life conserved through generations. The small town continues to hold a significant place in the conservative imagination. For example, a recent Pew Research survey found that 76% of consistent conservatives chose small towns or rural areas as their ideal place to live, compared to just 31% of consistent liberals. Our results are consistent with these survey results, and indicate that residents of areas with scenes that embody the idea of local small-town community do indeed tend to be more conservative.

Our independent variables remain clearly significant in Model 5, and are consistent with the hypothesis that the cultural characteristics of local spaces exert a

contextual effect on individual voters. Although individuals with different demographic characteristics do choose where to locate in patterned ways (e.g. high-income individuals locating near financial centres, and immigrants living in ethnic enclaves), compositional effects are not the only way that spatial context matters for politics. We show empirical evidence consistent with contextual effects.

Model 4 shows results for the individual-level demographic factors that are well established as predictors of voting behaviour and political attitudes. Note that at the individual level, our results align with well-documented political trends. Women, urban dwellers and voters with more education hold more liberal political attitudes, while religious, higher income and older voters hold more conservative political attitudes. Furthermore, as shown in Model 5, these correlations are not explained by contextual controls. Individual-level and contextual-level factors such as scenes/amenities appear to matter alongside each other. As a predictor of political attitudes, cultural context supplements rather than replaces individual-level explanations; in other words, contextual and compositional processes both matter.

Our findings take on added importance in light of other cultural dimensions we explored in preliminary analyses, which were statistically insignificant. For instance, areas with high proportions of amenities that affirm the values of equality and the state – immigrant resource centres, welfare services, public hospitals, public libraries and public schools – did not (as we might expect) correlate with more liberal individual attitudes. Such spaces are more liberal at the aggregate level (Silver & Miller, 2014), but our preliminary analyses (data not shown<sup>7</sup>) did not indicate a clear relationship to individuals' political sensibilities.

This non-finding was surprising given that a cornerstone of modern liberal attitudes is support for government intervention to promote social and economic equality between people and groups. Yet the historically powerful dimensions of state and equality seem less politically salient in contemporary Canadian society, whereas the more recently diffused values of personal self-expression and the search for local authenticity seem to be more politically salient. These national-election results mirror recent urban research showing how the arts and related expressive activities have become hot political issues and galvanizing forces for local political activism in Canada, and elsewhere (Grodach & Silver, 2012).

#### Discussion and conclusion

In this paper, we have offered empirical evidence consistent with a specific type of contextual effect on voting: individuals responding to subtle cultural cues in their local 'scenes' that promote particular values and styles of life. We have measured indications of these subtle cues and made them comparable across the country through systematically coding the qualitative, meaning-laden aspects of over 1800 types of amenities, including pubs, bookstores, gyms, schools, office supply store, parks and more. We show that areas with scenes that promote self-

260

expression are associated with liberal political attitudes among individuals, while scenes that promote locality are associated with conservative attitudes, and that these correlations are not reducible either to individual demographic characteristics or aggregate demographic characteristics of localities.

This is one of the only empirical tests of the relationship between qualitative dimensions of local cultural context and individual political attitudes of which we are aware. Our findings are therefore important, even though the effect of cultural context is small relative to the effect of individual demographic characteristics (recall the 11% level-2 vs. 89% level-1 variation). And, as we have noted, other types of analyses that we cannot perform here due to data limitations may reveal stronger effects of local context; for example, analysis of smaller geographical units such as neighbourhoods, or longitudinal analyses that model the effect of cultural context on self-selection into particular neighbourhoods. The extent to which individuals' political sensibilities affect the neighbourhoods they choose to live in – particularly relative to other considerations, such as affordability or proximity to family and job opportunities – is still an open question.

Future longitudinal analyses could also investigate how individuals shape neighbourhood cultural context. In this paper, we have focused on how neighbourhoods' mix of cultural amenities shape individuals' political sensibilities. Yet, individual sensibilities also shape the amenities available in a neighbourhood. An influx of a demographic group with particular political sensibilities (e.g. artists, immigrant entrepreneurs or seniors) might encourage particular sorts of amenities (e.g. independent coffee shops, local business associations or pharmacies). We view the relationship between individual political sensibilities and local cultural context as reciprocal rather than unidirectional, although we have investigated only one direction of the relationship here. However, we caution against assuming that both sides of this relationship are symmetrical. Neighbourhoods' reputations and cultural character often remain stable over decades, despite many individual residents moving in and out in that time. In cases where the cultural character of a neighbourhood changes, this process often occurs over years as business owners, local governments and community organisers notice the changing population, and adapt by opening appropriate businesses, non-profit organizations and service agencies. Sometimes such changes can be quite contentious (see Grodach & Silver 2012). Fully understanding how, precisely, individual' attitudes shape neighbourhood context thus requires dedicated analysis.

Future analyses on the effect of local spatial context may also wish to consider how long individuals have lived in a particular scene, other scenes in which they have lived, and others scenes to which they are regularly exposed (e.g. scenes where they do not live, but in which they work or spend significant leisure time). These sorts of analyses are only recently being conducted in the literature on neighbourhood effects (see Wodtke et al., 2011), and are quite promising for understanding spatially based political variation.

Future research should also investigate the possibility that different types of individuals might be more or less sensitive to cultural aspects of their

surroundings. If cultural scenes resemble a low-level hum in the background, it is worth asking what sorts of people are more likely to hear and respond to that hum, and who is likely to maintain a relative degree of personal autonomy across scenes. Erickson (2015), for example, finds that individuals of different ethnic groups have different levels of sensitivity to information about music taste passed on through their social networks. She argues that members of some ethnic groups are continually seeking out and receptive to information about new musical artists and tastes, while members of other ethnic groups are systematically less attuned to this information.

This insight into the variability of contextual effects suggests that future analysis of the association between spatial context and politics should investigate whether some individuals are more or less attuned than others to the political values that are affirmed or opposed by their local spatial contexts. In particular, we expect that people with different levels of education might have different levels of sensitivity to the cultural aspects of their neighbourhoods. Where politics are concerned, higher education might expose individuals to different ideas, and promote critical thinking skills and a willingness to 'go against the grain'. Among people with a university-level education, we might therefore expect greater individualization of personal beliefs from those typical of one's cultural contexts, or a reduced sensitivity to the political effect of scenes.

Political attitudes, however, are only one type of outcome, and future research would do well to examine how contextual effects do or do not operate in a number of arenas. In less politicized situations, for example, we might equally expect that education would actually *increase* individuals' sensitivity to scenes; for example, in deciding where to live and work, people with more education (and presumably, a higher income) might have the luxury of choosing to live in scenes whose cultural characteristics resonate with them. For other social outcomes, other individual factors might matter entirely. In sum, neither local contexts nor individual characteristics are likely fundamental across all situations, and where and how one or the other predominates is a topic worth pursuing in its own right.

A major goal of the current paper, however, has been to illustrate the value of a 'scenes perspective' for the study of regionalism in political science and neighbourhood effects in sociology. We advance the political science literature by elaborating an undertheorized mechanism through which we argue that local contexts influence political attitudes: through individuals responding to subtle cultural cues in their local scenescapes. We advance the neighbourhood effects literature by articulating and empirically specifying a way to measure local cultural dimensions of scenes, showing that these dimensions have significant socio-political consequences, and suggesting that political sensibilities be included among the outcomes that neighbourhood effects scholar usually focus on, in addition to health, crime, community activism and education. We advance both bodies of research by suggesting possible points of contact between the two literatures that have much to learn from one another.

## Acknowledgements

The authors extend sincere thanks to Matt Patterson, Chris Cochrane, Terry Nichols Clark and Clemente Navarro for useful comments on earlier drafts of this article.

## Disclosure statement

No potential conflict of interest was reported by the authors.

## **Funding**

This work was supported by the Social Sciences and Humanities Research Council of Canada.

## Notes

- Sampson reviews these levels of explanations and others, including individual to collective (i.e. how individual behaviour generates aggregate patterns), individual to individual (i.e. how individual behaviours influence other individual behaviours) and 'birds-eye' processes that link neighbourhoods to one another and to the broader world around them.
- 2. We exclude one electoral district, Malpeque, from our analysis due to data limitations that prevented us from obtaining an accurate count of the amenities there.
- 3. A full discussion of the 16 scenes dimension, and the rationale behind them, is not possible here due to space limitations. However, such a discussion is available in Silver, Clark, and Rothfield (2007) or Silver and Clark (in press).
- 4. We also ran analyses using only the question on voting, and using only the questions on attitudes, to explore whether a dependent variable focused purely on behaviour or on opinion would produce different results. As these analyses produced substantively similar results, we chose to use the measure that combined behaviour and attitude, as we considered it more robust.
- 5. We experimented with multiple independent variables, including: all 16 scenes dimensions, in various combinations; summary measures of typical configurations in which scenes dimensions cluster, generated by factor analysis; and, indexes of specific amenities that we considered to typify particular scenes dimensions. In all of these analyses, we found that local spatial context had an impact on our dependent variable, even though some scenes dimensions faded in and out of significance depending on what other scenes dimensions and controls were added to the models.
- 6. We treat place of residence as an individual-level variable rather than an ED-level characteristic because it varies by respondent, not ED; it comes from a variable in the IPSOS poll that asked each respondent whether the area in which they lived was urban or rural.
- Please contact the corresponding author to obtain a copy of these or other preliminary results.

#### References

Abend, G., Petre, C., & Sauder, M. (2013). Styles of causal thought: An empirical investigation. *American Journal of Sociology*, 119(3), 602–654.

Arendt, H. (1992). *Lectures on Kant's political philosophy*. Chicago, IL: University of Chicago Press.

- Bell, D. (1996). The cultural contradictions of capitalism. New York, NY: Basic Books.
- Blake, D. E. (1972). The measurement of regionalism in Canadian voting patterns. *Canadian Journal of Political Science*, 5(1), 55–81.
- Bishop, B. (2009). The big sort: Why the clustering of like-minded America is tearing us apart. Boston, MA: Houghton Mifflin Harcourt.
- Books, J., & Prysby, C. (1988). Studying contextual effects on political behavior: A research inventory and Agenda. American Politics Quarterly, 16(2), 211–238.
- Bourdieu, P. (1998). The logic of practice. Stanford, CA: Stanford University Press.
- Bramlett, B. H., Gimpel, J. G., & Lee, F. E. (2011). The political ecology of opinion in big-donor neighborhoods. *Political Behavior*, *33*(4), 565–600.
- Cairncross, F. (2001). The death of distance: How the communication revolution is changing our lives. Cambridge, MA: Harvard Business Review Press.
- Chang, L., & Krosnick, J. A. (2009). National surveys via RDD telephone interviewing versus the internet: Comparing sample representativeness and response quality. *Public Opinion Quarterly*, 73, 641–678.
- Clark, T. N. (2004). The city as an entertainment machine. Research in Urban Policy 9. Boston, MA: Elsevier.
- Cochrane, C., & Perrella, A. (2012). Regions, regionalism, and regional differences in Canada. *Canadian Journal of Political Science*, 45(4), 829–853.
- Cutler, F. (2007). Context and attitude formation: Social interaction, default information, or local interests? *Political Geography*, 26(5), 575–600.
- Elkins, D. J., & Simeon, R. E. (1979). A cause in search of its effect, or what does political culture explain? *Comparative Politics*, 11(2), 127–145.
- Erickson, B. (2015, June). *An illustrated theory of capital conversion: How and when do social capitals become cultural capitals?* Paper presented at the Canadian Sociological Association 2015 Annual Meeting, Ottawa.
- Falck, O., Fritsch, M., & Heblich, S. (2010). The phantom of the opera: Cultural amenities, human capital, and regional economic growth (IZA Discussion Paper No. 5065).
- Gelman, A. (2008). Red state, blue state, rich state, poor state: Why Americans vote the way they do. Princeton, NJ: Princeton University Press.
- Gidengil, E., Blais, A., Nadeau, R., & Nevitte, N. (1999). Making sense of regional voting in the 1997 Canadian federal election: Liberal and reform support outside Quebec. *Canadian Journal of Political Science*, 32(2), 247–272.
- Goffman, E. (1963). Behavior in public places: Notes on the social organisation of gatherings. New York, NY: Free Press.
- Graham, P. 2008. Cities and ambition. Retrieved July 23, 2014, from http://paulgraham. com/cities.html
- Green, D. P., Palmquist, B., & Schickler, E. (2004). *Partisan hearts and minds: Political parties and the social identities of voters*. New Haven, CT: Yale University Press.
- Grodach, C., & Silver, D. (Eds.). (2012). The politics of urban cultural policy: Global perspectives. London: Routledge.
- Henderson, A. (2004). Regional political cultures in Canada. Canadian Journal of Political Science, 37(3), 595–615.
- Huckfeldt, R., & Sprague, J. (1987). Networks in context: The social flow of political information. *The American Political Science Review*, 81, 1197–1116.
- Hunter, A., & Janowitz, M. (1974). Symbolic communities: The persistence and change of Chicago's local communities. Chicago, IL: University of Chicago Press.
- Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change and democracy: The human development sequence*. Cambridge: Cambridge University Press.
- Johnston, R. J. (1983). Spatial continuity and individual variability: A review of recent work on the geography of electoral change. *Electoral Studies*, 2(1), 53–68.

- Johnston, R. J., & Pattie, C. J. (1998). Composition and context: Region and voting in Britain revisited during Labour's 1990s revival. Geoforum, 29(3), 309–329.
- KaufmanJ., & Kaliner, M. E. (2011). The re-accomplishment of place in twentieth century Vermont and New Hampshire: History repeats itself, until it doesn't. *Theory and Society*, 40(2), 119–154.
- Kefalas, M. (2003). Working-class heroes: Protecting home, community and nation in a Chicago neighborhood. Berkeley: University of California Press.
- Kirk, D. S., & Papachristos, A. V. (2011). Cultural mechanisms and the persistence of neighborhood violence. *American Journal of Sociology*, 116, 1190–1233.
- Knudsen, B. B., & Clark, T. N. (2013). Walk and be moved: How walking builds social movements. *Urban Affairs Review*, 49(5), 627–651.
- Lee, J. Y., & Anderson, C. (2012). Cultural policy and the state of urban development in the capital of South Korea. In C. Grodach & D. Silver (Eds.), *The politics of urban cultural policy: Global perspectives* (pp. 69–80). London: Routledge.
- Lipset, S. M. (1991). Continental divide: The values and institutions of the United States and Canada. New York, NY: Routledge.
- Massey, D. S., & Denton, N. A. (1985). Spatial assimilation as a socioeconomic outcome. American Sociological Review, 50, 94–106.
- Millie, A. (2008). Anti-social behaviour, behavioural expectations, and an urban aesthetic. *British Journal of Criminology*, 48(3), 379–394.
- Morenoff, J. D., Sampson, R. J., & Raudenbush, S. W. (2001). Neighborhood inequality, collective efficacy, and the spatial dynamics of urban violence. *Criminology*, 39(3), 517–558.
- Navarro, C. J. (2012a). Do 'creative cities' have a dark side? Cultural scenes and socioeconomic status in Barcelona and Madrid (1991–2001). *Cities*, 35, 213–220.
- Navarro, C. J. (2012b). Governing the entertainment machine: Urban cultural policy in Spain. In C. Grodach & D. Silver (Eds.), *The politics of urban cultural policy:* Global perspectives (pp. 221–235). New York, NY: Routledge.
- Navarro, C. J., Mateos, C., & Rodriguez, M. J. (2014). Cultural scenes, the creative class, and development in Spanish municipalities. *European Urban and Regional Studies*, 21 (3), 301–317.
- Oliver, J. E. (2001). Democracy in Suburbia. Princeton, NJ: Princeton University Press.
- Sampson, R. J. 2012. The great American city. Chicago, IL: University of Chicago Press.
- Sampson, R. J., McAdam, D., MacIndoe, H., & Weffer-Elizondo, S. (2005). Civil society reconsidered: The durable nature and community structure of collective civic action. *American Journal of Sociology*, 111(3), 673–714.
- Sellers, J. M. (2013). Place, institutions and the political ecology of U.S. Metropolitan areas. In J. M. Sellers, D. Kübler, A. Walks, & M. Walter-Rogg (Eds.), *The political ecology of the metropolis: Metropolitan sources of electoral behaviour in eleven countries* (pp. 37–85). New York, NY: Columbia University Press.
- Silver, D. (2012). Local politics in the creative city: The case of Toronto. In C. Grobach & D. Silver (Eds.), *The politics of urban cultural policy: Global perspectives* (pp. 249–264). New York, NY: Routledge.
- Silver, D., & Clark, T. N. (2013). Buzz as an urban resource. *Canadian Journal of Sociology*, 38(1), 1–32.
- Silver, D., & Clark, T.N. (in press). *Scenescapes: How qualities of place shape social life*. Chicago, IL: University of Chicago Press.
- Silver, D., Clark, T. N., & Graziul, C. (2011). Scenes, innovation and urban development. In D. E. Andersson, A. E. Andersson, & C. Mellander (Eds.), *Handbook of creative cities* (pp. 229–258). Cheltenham, UK: Edward Elgar.
- Silver, D., Clark, T. N., & Navarro, J. C. (2010). Scenes: Social context in an age of contingency. *Social Forces*, 88(5), 2293–2324.

- Silver, D., Clark, T. N., & Rothfield, L. (2007). *A theory of scenes*. Unpublished manuscript. Retrieved from http://scenes.uchicago.edu/theoryofscenes.pdf
- Silver, D., & Miller, D. (2013). Contextualizing the artistic dividend. *Journal of Urban Affairs*, 35(5), 591–606.
- Silver, D., & Miller, D. (2014). Cultural scenes and voting patterns in Canada. *Canadian Journal of Political Science*, 47(3), 425–450.
- Simmel, G. 1971. On individuality and social forms. Chicago, IL: The University of Chicago Press.
- Statistics Canada. 2013. *Immigration and ethnocultural diversity in Canada: National Household Survey 2011*. Analytical document, Catalogue number: 99-010-X2011001.
- Stewart, I. (1994). All the King's horses: The study of Canadian political culture. In *Canadian politics: An introduction to the discipline* (2nd ed., pp. 75–92). Peterborough: Broadview.
- Suttles, G. D. (1984). The cumulative texture of local urban culture. *American Journal of Sociology*, 90(2), 283–304.
- Wiseman, N. (2007). In search of Canadian political culture. Vancouver: UBC Press.
- Wodtke, G. T., Harding, D. J., & Elwert, F. (2011). Neighborhood effects in temporal perspective: The impact of long-term exposure to concentrated disadvantage on high school graduation. *American Sociological Review*, 76(5), 713–736.
- Yi, J., & Silver, D. (2015). God, Yoga and Karate. Journal for the Scientific Study of Religion, 54(3), 596–615.
- Zuckerman, A. S. (Ed.). (2005). *The social logic of politics: Personal networks as contexts for political behaviour.* Philadelphia, PA: Temple University Press.

# Appendix 1. Religiosity index.

Item	Question	Response options and coding
1	In your life, would you say religion is VERY important, SOMEWHAT important, NOT VERY important, or NOT IMPORTANT at all?	Very important = 3, somewhat important = 2, not very important = 1, not important at all = 0, don't know = 0
2	Which of the following best describes your religious identity?	Identified with any listed religion = 1, atheist/don't know = 0
3	How often do you attend church, temple, mosque services at your place of worship?	More than once a week = 3, once a week = 2, less than once a week but more than once a month = 1, less than once a month = 0, don't know = 0
4	Do you believe in a God that answers prayer?	Yes = 1, $no/don't know = 0$
5	Do you believe that the holy book of your religion (Bible, Quran, or other holy book) is the revealed word of God?	Yes = 1, $no/don$ 't $know = 0$

Appendix 2. Political engagement on social media index.

Item	Question	Response options and coding
fol	it comes to public policy and political issues which of the lowing best describes your activities on social media or line media news sites? (select all that apply)	
1	Start conversations or write original ideas about public/political issues	Selected = 1, Not selected = 0
2	Comment on what others have written or posted about public/political issues	Selected = 1, Not selected = 0
3	Share links to articles or information about public/political issues	Selected = 1, Not selected = 0
4	Read what others have posted about public/political issues	Selected = 1, Not selected = 0
you	in the past seven days which of the following activities have u personally engaged in on social media or online media ws sites? (select all that apply)	
5	Start conversations or write original ideas about public/ political issues	Selected = 1, Not selected = 0
6	Comment on what others have written or posted about public/political issues	Selected = 1, Not selected = 0
7	Share links to articles or information about public/political issues	Selected = 1, Not selected = 0
8	Read what others have posted about public/political issues	Selected = 1, Not selected = 0
	ugh which of the following means have you been getting ur information about Canada's upcoming federal election?	
9	Through the online websites of traditional news media	Selected = 1, Not selected = 0
10	Through online news websites such as MSN or Yahoo	Selected = 1, Not selected = 0
11	Through social media websites such as Facebook or Twitter	Selected = 1, Not selected = 0