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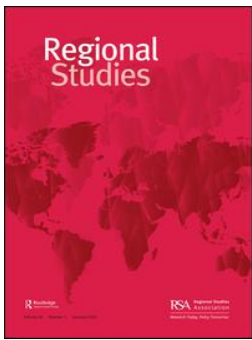
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Rural conservatism and the urban spirit of capitalism? On the geography of human values

Mikko Weckroth^a  and Teemu Kempainen^b 

ABSTRACT

This analysis makes an empirical enquiry into urban–rural and regional value differences in Europe. In this task we use the 7th Round of the European Social Survey (ESS) and Eurostat’s NUTS-level data and focus on four value orientations derived from the Human Values Scale: Self-enhancement, Self-transcendence, Openness to change and Conservation. Results show that the most distinct urban–rural differences lie in the Conservation versus Openness to change axis. Additionally, Conservation is associated with lower regional gross domestic product (GDP), whereas Self-enhancement, emphasizing a motivation for self-interest and interpersonal rivalry and hence behavioural dimension of capitalism, is positively associated with population density.

KEYWORDS

human values; behavioural economic geography; urban–rural relations; urban theory; behavioural capitalism

JEL D1, D63, D90, D91, R1, R11

HISTORY Received 30 March 2021; in revised form 14 November 2022

1. INTRODUCTION

The question of whether human behaviour and decision-making should be considered primarily universal or determined by institutional and cultural contexts is fundamental to the theory and practice of the social and political sciences. Due to its cardinal importance, the question remains contested and is debated between and within disciplines. The frontlines are usually drawn between the universal perspective (economics) and more contextual disciplines (e.g., sociology and anthropology). Thus, the question is salient to human geographers, who, due to the discipline’s self-image as a contextual discipline (Conradson, 2012), tend to favour the latter perspective. Therefore, in the geographical literature the role played by the geographical context (or so-called socio-spatial setting) in shaping individual behaviour and decision-making has been formulated as the ‘context–cognition nexus’ (Clark, 2019). The question on spatial behavioural patterns has implications for several sub-disciplines in human geography. For example, contemporary economic geography has suggested that concepts and measures from the behavioural sciences, such as psychology and social psychology, be applied in economic geography to better understand the spatio-temporal behaviour and agency of individuals

in different spatial contexts (Huggins & Thompson, 2015, 2019).

Once we have accepted the claim that cognitive processes show geographical patterns, and thereby could have place-based foundations, the question then becomes how to explain or interpret this variation. One insight could be derived from institutional geography, which rests on the idea that institutions define the norms and limitations under which firms and individuals – and the economy at large – operate (Rodriguez-Pose & Storper, 2006). On the other hand, recent empirical analyses conducted under the framing of Behavioural Economic Geography (BEG) have examined the role of spatial clustering of so-called Big Five personality traits that carry place-specific economic outcomes (e.g., Lee, 2017; Garretsen et al., 2019; Huggins & Thompson, 2019).

Within this disciplinary context, this analysis proposes the concept and measure of human values as an essential tool to be applied by quantitatively oriented human – and especially economic – geographers who have access to or collect geographically referenced survey data. The apparent relevance of the human value concept was described by Rokeach (1973, p. 3), who noted that ‘the value concept is able to unify the diverse interests of all the social sciences concerned with human behaviour’.

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This was further elaborated by Schwartz (2012), who explored the idea that human values incorporate both normative and interpersonal dimensions that are used to evaluate the behaviour and decision-making of both individuals and others. Thus, the study of human values captures more profound cognitive, motivational and (informal) institutional traits than the analysis of geographical patterns of personality traits (cf. Garretsen et al., 2019). In other words, while personality traits represent the behavioural pattern of thinking and feeling without explicit judgement, values represent more normative claims regarding beliefs about what is right and just behaviour for the self and others.

Despite its relevance to human geography, the empirical literature within the discipline has conducted remarkably little quantitative analysis on the spatial variance of the value concept. The few exceptions that have taken advantage of geographically referenced survey data on human values include analyses by Weckroth and Kempainen (2016), Morrison and Weckroth (2018), Bruna (2022) and Hanell (2022). This is not to say, however, that local culture, norms and institutions have not been thoroughly discussed and examined by human geographers. For example, cultural geographers, often inspired by methodological approaches in postcolonial studies and anthropology, have produced nuanced descriptions of the relationship between cultural values and space in various settings (e.g., Rose, 2021). Additionally, in the context of planning studies, researchers have considered the processes by which place-based development is influenced by human values that are rooted in local culture (Horlings, 2015). Furthermore, the geographical variance in public attitudes towards various sociopolitical processes has been continually analysed and mapped by geographers and other social scientists. Examples of such lines of research include Huddart-Kennedy et al. (2009), who analysed urban–rural differences in environmental attitudes, and a recent analysis by Gimpel et al. (2020) which enquired into the ‘urban–rural gulf’ in political party identification in the US context.

However, as described by earlier studies, human values are defined as the ultimate end that intermediate attitudes, norms, or opinions depend upon or contribute to (Rokeach, 1973; Schwartz, 2012). The value concept can thereby be considered a more profound and defining concept for human behaviour than reported attitudes on selected sociopolitical issues. In other words, the distinction between values and attitudes suggests that attitudes reflect more immediate and context-specific responses to more profound permanent values (e.g., Rokeach, 1973; Bergman, 1998). Also, values reflect acquired social and cultural norms, whereas attitudes are based more on personal experiences. To this end, we argue that there is a need in the current literature on human geography for a more thorough examination of geographical patterns of value orientation on populations emerging on different spatial scales.

After acknowledging that knowing the geography of human values is important, there remains the question:

On which geographical scale should the spatial differences in value orientations be examined and understood? Regional scientists have established a methodological niche for themselves (Paasi & Metzger, 2017) by focusing explicitly on interregional differences within-countries as distinct from the between-countries analyses that are often applied by default in comparative social and political sciences. Our empirical strategy acknowledges the potential role of regional-level attributes but theoretically the analysis is focused on one of the classic themes in human geography, namely the urban–rural gradient or continuum. This analytical focus is inspired by the classic literature in urban geography and sociology that examines the question whether urbanity, as a specific socio-spatial form of society and ‘way of life’, sets certain conditions on human behaviour and socialization (Savage et al., 2003).

The early literature considering the relationship between the spatial form of a society and human behaviour can be traced back to Durkheim (1893), who noted that population density, which is inevitably associated with the urban context, increases social isolation and individualism. Furthermore, Simmel (1903) and Wirth (1938) argued that interpersonal rivalry and the values of self-interest associated with an urban way of life are the root causes of ‘urban malice’. Reading these classic theses from the perspective of values studies, the assumption is that urban living is related to individually oriented values that favour self-enhancement, a culture of competition and pressure on upward social mobility, whereas rural environments are characterized by more communal values, such as conformity, tradition and conservation. Hence, theoretical notions on the differences between rural–urban ‘cultures’ and as such value orientation provide a theoretical foundation to this empirical analysis.

As an empirical scrutiny of these theoretical claims, we investigated individual- and regional-level determinants on value orientations with geographically referenced European Social Survey (ESS) data from 2014, with close to 34,000 respondents from 18 European countries. We examine the urban–rural differences in four value orientations derived from the Human Values Scale (Schwartz, 2012) included in ESS: Self-enhancement, Self-transcendence, Openness to change and Conservation. In addition to the self-reported domicile of the respondent, we include regional population density and gross domestic product (GDP) within each national setting as objective contextual measures of urbanity, modernity and economic production. This selection of variables, together with a hierarchical data structure in which individuals are embedded in regions, enables us to examine the association of urbanity with value orientations at both micro (domicile) and macro (NUTS) levels.¹

The paper is structured as follows. In the following section we review the theoretical literature examining the linkages between urbanity, modernity and development. Consequently, we present the human values concept in greater detail and provide a description on Schwartz’s (2012) Human Value Scale. The following section sums

up our analytical strategy of the present study. The paper then proceeds with descriptions of the data, method and results, and closes with a discussion and conclusions.

2. THEORETICAL CONSIDERATIONS ON THE RELATIONSHIP BETWEEN URBANITY, MODERNIZATION AND DEVELOPMENT

We begin our theoretical narrative by reviewing the classic theories on the emergence of modern societies and the role of the urban realm as the primary locus of this transformation. The history of social science provides us with the well-known theoretical ideas that initially motivated our study. First, in his foundational doctoral thesis on the division of labour, Durkheim (1893) provided one of the earliest views on modern urban mentality. Durkheim described how urbanization, in the form of growing population density, makes individuals compete to find their place in the economic sphere. This competition eventually leads to division of labour and the emergence of organic solidarity. According to Durkheim, the changed form of social life, based on mutual interdependence and differentiation, dominates the previous form, mechanical solidarity, which stemmed from similarities rather than differences. Another classic source of inspiration is the work of Weber (1930) on the spirit of capitalism. Weber strongly highlighted the role played by culture – especially religious beliefs – in the birth of capitalism, a process that is central to Western societies. Most importantly, he described the genesis of a rational life conduct that is characterized by a consistent orientation towards future and success. Notably, Weber's analysis emphasizes the concept of action, that is, a conscious form of behaviour oriented towards given aims or ends. In sum, Weber represents a rationalist ethos of achievement, thus providing another early depiction of a modern capitalist and, by implication, urban mentality. Hence, our analysis provides a geographical analogy to Weber's central thesis by asking whether there is empirical evidence of the 'urban spirit of capitalism' (cf. Smiley & Emerson, 2020).

Another classic study in early urban sociology and geography was formulated by Simmel (1903), who constructed a detailed critique of the social consequences of urban living. At the heart of his work lies the question of how human agency is affected by urban surroundings characterized by dense populations and highly specialized divisions of labour, as described by Durkheim (1893). Simmel (1903) also claimed that, in an urban environment, human agency is pierced by rational decision-making. He argued that the fixation of urban dwellers on individual rationality and utility is associated with and catalysed by the monetary exchange economy, which is another main feature of the urban context. According to Simmel, these preconditions result in relationships between individuals in cities becoming highly artificial. This artificiality fails to satisfy the social needs of human living and thus negatively affects the well-being of urban residents. A parallel interpretation of the social consequences of urbanism as a 'way of life' was launched by

Wirth (1938), who described the city from a sociological perspective as a large, dense, and permanent settlement composed of heterogeneous individuals and professions leading to the 'relative absence of intimate personal acquaintanceship, the segmentalization of human relations which are largely anonymous, superficial, and transitory' (p. 1).

Yet another (German) classic on the social structure related to urbanism is the *Gemeinschaft* (community) and *Gesellschaft* (association or society) typology of Tönnies (1887). Within Tönnies's thinking, the principles under which social life in rural and urban settings are organized are similar to those in the theses listed above: social life in rural villages is characterized by community (*Gemeinschaft*) united by strong and close ties within family (kinship) and neighbourhoods, and a shared sense of meaning, purpose and tradition, whereas a big city living functions more as a mechanical aggregate tied together by different associations (*Gesellschaft*) built on individualism, rationality, and thereby institutional and formal interdependencies.

As a summary, the literature reviewed above argues that the processes of urbanization, modernization and capitalism are deeply intertwined. This argument is also echoed and revised by Savage et al. (2003) in their *Urban Sociology, Capitalism and Modernity*. In their view, the city is the product of both capitalist economic forces fuelled by a search for profit and tensions and contrasts between the experiences of modernity and more traditional, conventional and constant ways of life. In other words, 'the ambivalent experience of modernity contrasts with traditional ways of life, which were more secure and predictable because less open and manipulable' (p. 4). Furthermore, Savage et al. apply the view originally formulated by the Chicago School of Sociology, noting that the urban can be seen as a 'social laboratory' to study experiences of modernity. In concurrence with these arguments, this analysis proposes that a study looking into the interaction between urbanity, modernity and capitalism is inevitably connected to the question of place-based human behaviour or, as coined by Huggins and Thompson (2015, 2019), 'spatially bounded rationalism'. Hence, it is argued that human values are *the* unifying concept in studying the complex relationship and tensions between modernity and the traditional along the rural-urban gradient.

However, within the social and political sciences there is a rich literature on the linkages between economic and cultural development at the societal or national level. For example, the most explicit attempt to connect the processes of modernization, economic development and change of prevailing values in societies was made by Inglehart and Welzel (2005), who suggested that societies have developed in a consistent and path-dependent manner regarding both the level and form of economic production and prevailing societal and cultural values. Inglehart and Welzel argue that as societies develop and go through the transition from industrial to knowledge-intensive societies, they systematically experience a shift from so-called survival values, emphasizing economic and physical security, to self-direction values that emphasize individual

agency and self-determination. Welzel and Inglehart (2010) further elaborated this process through the notion that when societies develop in terms economic production and level of affluence, people place a stronger emphasis on emancipative and self-transcendence values as a response to the widening opportunities of life. Hence, as a geographical analogy to Welzel and Inglehart's thesis, this analysis proposes that the study of human values on the urban–rural continuum is in fact a study of a modernization process at a subnational scale. From the perspective of human geography and regional studies, it is clear that modernization proceeds and manifests itself differently within national borders and not just between countries. In line with this argument, Fischer (1975) has noted that the cultural and social differences between the urban and the rural are rather persistent and reproduced over time within societies. Thus, in any given national context, and regardless of a country's level of (economic) development, cities are considered more 'modern' and 'developed' than rural areas and peripheries.

Within the context of this rich theoretical literature, it is surprising that the recent empirical work examining the spatial patterns of human behaviour has mainly not been conducted by geographers but by psychologists. For example, Rentfrow et al. (2013) approached the topic with the framing of 'psychological regions' in the United States and their political, economic, social and health correlates. Similarly, Rentfrow et al. (2015) showed that, in the UK context, the spatial concentrations of high Openness personality trait appeared mainly in metropolitan areas. However, it can be said that the above-mentioned analyses have treated the spatiality of behavioural traits mainly as a result of short-term personality clustering caused by selective migration without the broader historical–theoretical framing that serves as the point of entry and *raison d'être* for the analysis at hand.

To conclude, the modernization and urbanization framework presented in this section is combined with an interest in analysing the existence of 'spatially bounded rationality' (Huggins & Thompson, 2015, 2019) and in parallel whether there exists an 'urban spirit of capitalism' (Smiley & Emerson, 2020). In this context, we have argued that under such scrutiny the concept of human values serves as a highly applicable concept, since it is inherently connected to profound theoretical discussions on the linkages between modernization, urbanization and capitalism.

3. HUMAN VALUES

As noted, the concept of value is central to the social sciences, but there is no commonly agreed way to measure human values. Currently, three of the best-known classifications and metrics are those by Inglehart (1990), Schwartz (1992, 2012) and Hofstede (1991). Despite the obvious overlap between the three, it is the Schwartz's Human Values Scale that has emerged as the most commonly used measure for individual value orientations across cultures² and especially in a subnational context. In sum, Schwartz's value theory identifies 10 motivationally distinct types of values and

describes the dynamic relations between them. A key feature of Schwartz's value theory and its operationalization, the Human Value Scale, is that it identifies universal values recognized across cultures. The value scale has been tested across culturally diverse groups, suggesting that a universal organization of human motivations does exist. Schwartz's (1992) original theory defined 10 basic values in terms of the broad motivational goals that they express as follows:

- Conformity: restraint of actions, and intentions that could upset or harm others and/or violate social norms and expectations.
- Tradition: respect for, commitment to, and acceptance of the customs and ideas that one's culture or religion provides.
- Benevolence: preserving and enhancing the welfare of those with whom one is in frequent personal contact.
- Universalism: understanding, appreciation, tolerance, and protection for the welfare of all people and for nature.
- Self-direction: independent thought and action – choose one's own goals, create, explore.
- Stimulation: excitement, novelty and challenge in life.
- Hedonism: pleasure, doing things that bring gratification to oneself.
- Achievement: personal success through demonstrating competence according to social standards.
- Power: social status and prestige, control or dominance over people and resources.
- Security: safety, harmony and stability of society.

A second main attribute of the Human Value Scale is that the circular structure of values captures the motivational conflicts and similarities between each value. Hence, the circular (often referred to as 'circumplex') structure of values expresses the conflict and congruence among different values and related motivational traits. The circular structure of the Human Value Scale is presented in Figure 1.

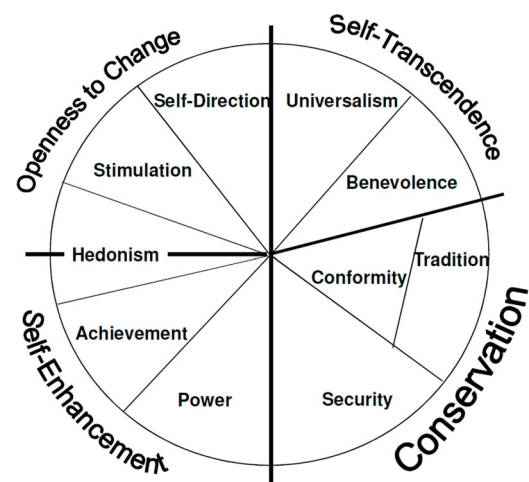


Figure 1. Theoretical model of relations among 10 motivational types of value.

Source: Schwartz (2012, p. 5). Licenced under CC BY-NC-ND.

Here the adjacent values in the circumplex structure represent similar motivational traits. For example, the values of power and achievement share a motivational emphasis on social superiority and esteem (Schwartz, 2012, p. 4). In addition to describing the relationship between each of the 10 values, the organization of the values in the circumplex also describes the four broader value dimensions positioned at opposing sides of the circle. Hence, the circular structure of 10 values can also be aggregated into such conflicting dimensions as: Openness to change versus Conservation and Self-transcendence versus Self-enhancement. For example, the adjacent power and achievement values together form broader value dimensions of Self-Enhancement that emphasize the pursuit of self-interest through relative success and dominance over others.

The universal feature of Schwartz's Human Value Scale makes it useful for cross-cultural or geographical analysis and comparative design, as it arguably lists value orientations that are recognized in different cultures. Although the Human Values Scale proposes that the nature of values and their structures are universal, individuals and groups differ in the relative importance they ascribe to the values, meaning that different individuals, socio-economic or cultural groups (here regions or locations) exhibit different value priorities as well as different hierarchies.

4. CURRENT STUDY: HUMAN VALUES–URBANITY LINK AND ANALYTICAL STRATEGY

This section reviews the above theories of urbanity and relates them to the behavioural and motivational principles described in the Human Values Scale by (Schwartz, 2012). In order to relate the theoretical discussions of urbanity to empirical scrutiny on the spatial patterns of human values, we formulate four specific hypotheses on the assumed urban–rural difference or gradient for each value orientation. Additionally, the hierarchical data structure of the ESS data enables us to distinguish between the individual level and contextual level determinants for the value orientations. However, concerning the question of on which level indicators (domicile or regional) of urbanity presumably have stronger relevance for value orientations, this analysis remains explorative by nature.

4.1. Self-enhancement

Self-enhancement apparently has both economic and sociological or socio-psychological foundations. Concerning the social dimension, one is more likely to encounter strangers in the urban public space than in rural villages. This may predispose one to feel less responsible and caring for others, since the sanction mechanism based on the attribution of honour is weakened by fewer repeated social contacts. As *Self-enhancement* emphasizes the pursuit of self-interest at the expense of others, the direction of the presumed urban–rural gradient in this value orientation is apparent.

However, as stated in the theoretical section, Self-enhancement has a direct connection with individual behaviour that carries economic outcomes. When capitalism is understood as a behaviour stimulated by individualism and persistent motivation towards wealth accumulation, it seems apparent that Self-enhancement feeds on, or even requires, an urban environment. According to Simmel, the city is *the* site of interpersonal rivalry, where social relations are transformed by the modern money economy, pierced by rationalist ethos of achievement and (monetary) utility. Similarly, Okulicz-Kozaryn and Valente (2018) note that the 'lure to great cities is due in part to people's desire for power and status' (p. 209) and in parallel Smiley and Emerson (2020) claimed that the spirit of capitalism is per se urban.

By definition, *Self-enhancement* emphasizes the pursuit of one's own interests and relative success and dominance over others (Schwartz, 2012). Therefore, the city is not only an arena for interpersonal rivalry but also a platform where relative success in this competition can be put on display. In other words, a city with a dense population, varied lifestyles, and presence of all social classes serves as an arena in which to demonstrate one's relative success by providing opportunities for the consumption of luxury goods and services that serve as a means of distinction from the masses (Veblen, 1899).

Hence, from the social and economic perspectives the assumption of the direction of urban–rural gradient is rather clear: *we expect that urban context is associated with higher Self-enhancement (Hypothesis 1).*

4.2. Self-transcendence

Within the Human Value Scale, *Self-transcendence* represents a motivation for securing the welfare of those with whom one is in frequent personal contact (i.e., in-group), but also has a more universalist dimension in motivation for the protection of the welfare of all people (including out-groups). It seems evident that both in- and outgroup affiliation exists in both urban and rural contexts; only the sphere and scope of one's in-group might be different. Therefore, of the four value orientations, *Self-transcendence* is the most difficult to position along the urban–rural gradient. In addition, the emergence of so-called urban villages (assumably a source of ingroup affiliation, close ties, and familiarity) has been well documented in urban studies (Jacobs, 1961). In line, the 'planetary urbanization' thesis (Brenner & Schmid, 2014) argues that urbanism (hence modernization and capitalism) as a spatial process has spread to affect directly or indirectly even those individuals who reside in inherently rural and peripheral locations.

Nonetheless, Tönnies (1887) made direct reference to urban and rural contexts in his *Gemeinschaft* (community) and *Gesellschaft* (society) thesis, where the previous is a characteristic of rural surroundings and small villages. Hence, it can be concluded that, compared with an urban way of life, rural social dynamics are in theory characterized by stronger familiarity and in-group affiliation as, by definition, one rarely encounters strangers in

a country village. *Therefore, despite the abovementioned complexity, we assume (Hypothesis 2) that residence in a more rural area is associated with a higher value orientation for Self-transcendence.*

4.3. Openness to change

The open-mindedness of urban residents, in comparison to their rural counterparts, is well expressed in vernacular and throughout popular culture. An academic analogy for these stereotypes was already sketched in the Rokeach (1960) classic *The Open and Closed Mind*. More recently, empirical examinations have provided support for such claims by showing that concentrations of high Openness personality traits appear mainly in metropolitan areas (Rentfrow et al., 2015). As the ‘Openness to change’ value orientation is founded on a motivational trait that promotes independent thought and action, choosing one’s own goals, and creating, exploring it relates closely to the highly influential literature in urban and economic geography on ‘creative cities’ stimulated by Florida (2005). In Florida’s thinking, a fundamental trait of a city is a combination of both openness and tolerance, stimulating creativity and thus innovation. Despite the apparent flaws in Florida’s thesis (e.g., omission of any meaningful definitions for ‘creativity’ or ‘class’) it is apparent that a city functions as a primary location for practicing the so-called cognitive-cultural capitalism (Scott, 2007) within the post-Fordist economy. *Hence, we assume the value orientation for (Hypothesis 3) Openness to be higher in a more urban context.*

4.4. Conservation

As the counterpart to Openness to change within Schwartz’s circumplex (Figure 1), it can be assumed that Conservation is fundamentally a more rural trait. As defined by Schwartz (2012, p. 8), Conservation values emphasize ‘order, self-restriction, preservation of the past, and resistance to change’. In parallel, Savage et al. (2003) note that the city is founded on constant change and stimulation, whereas the rural is a place for more traditional, conventional, and constant ways of life. In other words, ‘rurality is a mindset and location that is more secure and predictable because being less open and manipulable’ (p. 4). *Thereby, we assume value orientation for (Hypothesis 4) Conservation to be higher in a more rural context.*

We examine these four hypotheses in a multilevel modelling (MLM) context that enables us to disentangle the individual (domicile) and contextual (regional) level determinants for each value orientation. These measures tap into different dimensions of urbanity as the domicile variable focuses on the neighbourhood-level (micro) scale, while regional population density and GDP touch upon a wider geographical (macro) level entity. The first of these measures is subjective as it is based on respondents’ own evaluation, while the latter is an objective indicator. The importance of including both subjective (micro) and objective (macro) dimensions of urbanity in empirical analysis – especially with ESS data – has been discussed in

detail in recent analyses by Weckroth and Kempainen (2021, pp. 211–213) and Sørensen (2021) while focusing on urban–rural differences in subjective well-being.

5. DATA AND METHODS

5.1. Data

This study uses survey data from the 7th Round European Social Survey (ESS) data, edition 2.2 (ESS, 2014), combined with corresponding register data on NUTS regions obtained from Eurostat. The collection of the survey data took place in 2014 and 2015 in 21 countries. The data include two kinds of weights: post-stratification weights that adjust for variations in selection and response probabilities; and population weights that adjust the countries’ relative weights to their population size. The post-stratification process used information on age, gender, education and region (ESS, 2020). Since our study has a regional focus, we constructed regional weights by dividing the population of each region by the respective count of respondents and scaled the average weight to one.

We combine these data with the population density and level of economic development (GDP) measured on the NUTS scale from the Eurostat regional database. The 7th Round of the ESS data included regional NUTS classifications, ranging from NUTS-1 (Germany and the UK) to NUTS-3 (e.g., Sweden, Slovenia and Ireland). For this analysis, the data from the ESS and Eurostat were merged based on the smallest possible common denominator at the respective NUTS level.³ Due to missing data in some countries concerning these regional-level indicators, we narrowed down the number of countries included in this data to 18, resulting in a dataset with 34,037 respondents.

5.2. Indicators

The construction of value indicators followed Schwartz’s (2015) instructions for computing scores for value orientations. First, as individuals and cultural groups differ in their use of the response scale, the relative importance of each value item was obtained first by centring the variables around the individual mean in the entire value section. We then calculated the means for four broader value orientations,⁴ as described in the circumplex (Figure 1).

The indicator Domicile refers to perceived urbanity of the residential area of the respondent. The response options consisted of five categories along the urban–rural continuum: (1) ‘A big city’, (2) ‘The suburbs or outskirts of a big city’, (3) ‘A town or a small city’, (4) ‘A country village’ and (5) ‘A farm or home in the countryside’.

Eurostat data were used to indicate regional GDP and population density as objective indicators of urbanity. Population density indicates the population per km² and dates from 31 May 2014, and the regional GDP dates from 30 March 2014. Regional GDP calculation involved a logarithmic form. To control for country-specific fixed effects, country dummies were included and Austria was set as the reference category.

The sociodemographic individual-level variables included gender, age, education, main activity and household income in deciles. Table 1 provides descriptive statistics on all individual and regional-level variables used in the analysis. Multicollinearity appears not to be a source of concern in our analysis. In general, the variance inflation factors (VIF) are well below 3. Only the regional GDP has slightly higher VIF (7.26), as it naturally correlates with the country variable. However, even there the effect on SE estimates is limited.

5.3. Methods

Our analytical design is hierarchical, with individuals nested in regions, which are in turn nested in countries. We specify a random intercept model with individuals nested in regions to obtain correct standard error estimates for the regression coefficients. Moreover, we use country fixed effects to control for all country-level variation.

Our full model (model 3 in the tables) may be expressed in the following form for individual i in region j :

$$\begin{aligned} \text{Value}_{ij} = & \text{domicile}_{ij} + \text{gender}_{ij} + \text{age}_{ij} + \text{age}_{ij}^2 \\ & + \text{education}_{ij} + \text{main activity}_{ij} \\ & + \text{household income}_{ij} + \ln(\text{gdp } 2014)_j \\ & + \text{density}_j + \text{country} + u_j + e_{ij} \end{aligned}$$

where u_j and e_{ij} refer to the regional and the individual-level residuals, respectively. All explanatory variables are treated as categorical, except for age and GDP and density.

Models were estimated in Stata 15.1 with the procedures 'meglm' and 'svy', a combination that enables the correct weight specification for both the individual and regional levels.

6. RESULTS

6.1. Multilevel regression results

Table 2 presents the results from linear multilevel regression models for Self-enhancement. Concerning the domicile variable, model 1 in Table 2 shows signs of a gradient where more rural domiciles are associated with lower Self-enhancement compared with a Big city. Including regional (NUTS)-level indicators (model 3) and sociodemographic variables (model 4) gradually weakens this pattern but eventually in the full model (model 4) living in a farm or home in countryside is associated with lower Self-enhancement ($B = -0.182$; $p = 0.008$). Concerning regional (NUTS)-level indicators, Table 2 shows that higher population density is associated with higher Self-enhancement and it retains statistical significance ($B = 0.060$; $p = 0.000$) also when including sociodemographic variables in model 4. In sum, our first hypothesis (Hypothesis 1) receives support with both micro (domicile) and macro (regional) indicators of urbanity. However, a large share of domicile related differences in Self-enhancement is explained by individual level sociodemographic factors, that is, the composition effect.

Concerning the socio-economic variables, the higher levels of education differ from ES-ISCED I or lower, but with no clear pattern or gradient. Interestingly, the top (10th) income decile ($B = 0.226$; $p = 0.001$) is a significant positive predictor for higher Self-enhancement. This result is in line with the studies documenting the attitudinal divergence between wealth elites and the rest of the population (e.g., Kantola, 2020; Savage, 2015).

The value orientation for Self-transcendence does not show marked differences between different domiciles in Table 3. However, concerning the regional level measures, results shows that the level of economic development in a region is positively associated with Self-transcendence. Thus, we did not find evidence to support the second hypothesis (Hypothesis 2), but the results however show that higher macroeconomic productivity (GDP) is associated ($B = 0.160$; $p = 0.015$) with stronger orientation to Self-transcendence also when acknowledging the sociodemographic variables in model 4.

Regarding individual-level sociodemographic variables, the level of education shows signs of a gradient where association with the Self-transcendence orientation increases together with higher levels of education. Concerning the level of household income, similar to the case in Self-enhancement, also here the highest (10th) decile differs from the lowest (1st) decile at 0.10 significance level ($B = -0.095$; $p = 0.065$). Additionally, education level also shows a sign of a gradient where higher level of education is associated with higher orientation for Self-transcendence.

Table 4, model 1 shows that Openness to change in all other domiciles except 'Farm or home in countryside' differ from Big city and models 3 and 4 shows that differences are statistically significant at 0.10 level while accounting also regional (NUTS) level indicators and individual-level sociodemographic indicators. Concerning regional level indicators models 2 and 3 show a positive association between regional GDP and Openness to change but in models 4 this association loses its significance after including the individual-level sociodemographic factors. Hence, the empirical analysis provides empirical support for Hypothesis 3 with an exception for the most rural domicile: Farm or home in countryside.

Concerning the socio-economic variables, education emerges as an important predictor for Openness to change with a rather distinct gradient, where Openness to change increases with level of education.

Finally, Conservation shows the most distinct differences between different domiciles, with a gradient where more rural domiciles are associated with higher Conservation. These differences are robust after accounting for regional level NUTS variables (model 3) and individual-level sociodemographic factors with and exception of Farm or home in countryside which loses it significant at model 4.

Concerning the regional level NUT variables Table 5 shows that higher regional GDP is associated with lower Conservation. This result is in accordance with positive relationship between Openness to change and regional

Table 1. Descriptive statistics.

Categorical variables	Frequency	%	Cumulative
Individual level variables			
Domicile			
Big city	6413	18.9	18.9
Suburbs or outskirts of big city	4057	11.9	30.8
Town or small city	11,187	33.0	63.8
Country village	9891	29.1	92.9
Farm or home in countryside	2402	7.8	100
Gender			
Male	16,104	47.3	47.3
Female	17,911	52.7	100.0
Highest level of education, ES-ISCED			
ES-ISCED I, less than lower secondary	3725	11.0	11.0
ES-ISCED II, lower secondary	6012	17.7	28.7
ES-ISCED IIIb, lower tier upper secondary	6160	18.2	46.9
ES-ISCED IIIa, upper tier upper secondary	5789	17.1	64.0
ES-ISCED IV, advanced vocational	4625	13.6	77.6
ES-ISCED V1, lower tertiary education,	3589	10.6	88.2
ES-ISCED V2, higher tertiary education,	3904	11.5	99.7
Other	108	0.3	100.0
Household's total net income			
1st decile	2787	8.2	8.2
2nd decile	3072	9.0	17.2
3rd decile	3030	8.9	26.1
4th decile	3111	9.1	35.3
5th decile	3051	9.0	44.2
6th decile	2978	8.8	53.0
7th decile	2915	8.6	61.5
8th decile	2848	8.4	69.9
9th decile	2360	6.9	76.8
10th decile	2519	7.4	84.2
Missing	5366	15.8	100.0
Main activity during the last 7 days			
Paid work	16,771	49.5	49.5
Education	2924	8.6	58.1
Unemployed, looking for job	1361	4.0	62.1
Unemployed, not looking for job	555	1.6	63.7
Permanently sick or disabled	887	2.6	66.3
Retired	8819	26.0	92.3
Community or military service	11	0.0	92.4
Housework, looking after children	2215	6.5	98.9
Other	371	1.1	100.0
Country			
Austria	1795	5.3	5.3
Belgium	1769	5.2	10.5
Czech Republic	2148	6.3	16.8
Germany	3045	9.0	25.7

(Continued)

Table 1. Continued.

Categorical variables	Frequency	%	Cumulative		
Denmark	1502	4.4	30.1		
Spain	1925	5.7	35.8		
Finland	2087	6.1	41.9		
France	1917	5.6	47.6		
Great Britain	2261	6.6	54.2		
Hungary	1698	5.0	59.2		
Ireland	2390	7.0	66.2		
Latvia	2250	6.6	72.8		
Netherlands	1919	5.6	78.5		
Norway	1436	4.2	82.7		
Poland	1615	4.7	87.4		
Portugal	1265	3.7	91.1		
Sweden	1791	5.3	96.4		
Slovenia	1224	3.6	100.0		
Continuous variables	Observations	Mean	SD	Minimum	Maximum
Individual level variables					
Self-enhancement	33,259	-1.42	1.49	-7.40	5.43
Self-transcendence	33,288	1.31	1.08	-3.81	6.00
Openness to change	33,263	-0.31	1.36	-7.20	5.14
Conservation	33,242	0.30	1.90	-8.07	8.86
Age	33,969	49.43	18.64	14.00	114.00
Regional level variables					
Population density, 2014	34,037	405.39	916.26	2.00	7393.40
GDP(ln), 2014	34,037	10.16	0.58	8.43	11.27

GDP in Table 4 given their opposing position in Schwartz's circumplex (Figure 1). In sum, Hypothesis 4 receives rather strong support concerning the individual-level perceptions of urbanity (domicile) but also highlights the connection between the Conservation value and regional macroeconomic performance (GDP).

Concerning the socio-economic variables, the level of education shows a gradient where orientation to Conservation decreases rather linearly with levels of education. Also, the level of household income is associated with Conservation values, showing a gradient where the highest income deciles are less associated with conservation.

As a robustness check for the domicile variable, we estimated OLS models with NUTS-level fixed effects to control for all between-region differences. The results reported above were fully robust. Moreover, we estimated a full unweighted mixed model for each outcome, which mainly replicated the results for the domicile and density variables; the exceptions were Openness to change, where also Town or small city gained a statistically significant result ($B = -0.059$; $p = 0.008$); and Conservation, where also Farm or home in the countryside received a statistically significant estimate ($B = 0.218$; $p < 0.0005$) (available from authors). Additional robustness check was conducted by running the models separately for those counties using either NUTS-2 or -3 classifications.⁵

This analysis shows that results of universal analysis controlling country-level fixed effects are not fully robust when applied to smaller country groups (obviously having smaller N and thus less explanatory power). The results showed inconsistency between the universal models presented in Tables 2–5 and NUTS-2 and -3 groups throughout domicile and regional-level predictors but the main insight from this exercise could be summed up by noting that the urban–rural gradient in Conservation presented Table 5 is driven by the NUTS-3 countries (full results available from authors). However, we believe this inconsistency does not reflect incommensurability issues caused by merging NUTS-2 and -3 regions in single analysis but due to fact that there exists country-group specific variation in the urbanity/human values relationship in different parts of Europe (e.g., Weckroth & Kemppainen, 2016).

Finally, there exists a valid reason to assume that the effect of density may not be linear but that Self-enhancement may be a specific trait of only the largest urban agglomerations in Europe (e.g., Dorling, 2010; Morrison & Weckroth, 2018). Hence, we briefly tested this assumption by dividing population density to seven categories and including it to the full model on Self-enhancement (model 4 in Table 2). The results show that the positive effect of population density is in fact not linear but driven by the most densely populated region (category 7: coefficient =

Table 2. Self-enhancement.

	Model 0		Model 1		Model 2		Model 3		Model 4	
	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>
Geographical variables										
<i>Domicile</i>										
Big city			Ref.				Ref.		Ref.	
Suburbs or outskirts of big city			-0.046	0.365			-0.043	0.393	-0.025	0.581
Town or small city			-0.077	0.069			-0.059	0.179	-0.027	0.523
Country village			-0.116	0.011			-0.098	0.039	-0.060	0.173
Farm or home in countryside			-0.251	0.002			-0.234	0.003	-0.182	0.008
<i>Regional level indicators (NUTS)</i>										
Population density (thousands)					0.077	0.000	0.068	0.000	0.060	0.000
Regional GDP (ln)					-0.019	0.817	-0.043	0.613	-0.099	0.225
Sociodemographic variables										
<i>Gender</i>										
Male									Ref.	
Female									-0.397	0.000
Age									-0.036	0.000
Age ²									0.000	0.000
<i>Education level</i>										
ES-ISCED 1 or lower									Ref.	
ES-ISCED II									-0.232	0.000
ES-ISCED IIIb									-0.366	0.000
ES-ISCED IIIa									-0.272	0.000
ES-ISCED IV									-0.321	0.000
ES-ISCED V1									-0.259	0.000
ES-ISCED V2									-0.136	0.016
Other									-0.20	0.246

(Continued)

Table 2. Continued.

	Model 0		Model 1		Model 2		Model 3		Model 4	
	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>
Main activity										
Paid job									Ref.	
Education									-0.001	0.987
Unemployed, looking for job									-0.113	0.093
Permanently sick or disabled									-0.084	0.471
Retired									-0.424	0.000
Community or military service									-0.152	0.000
Other									0.174	0.304
									-0.225	0.000
									-0.283	0.005
Household income										
1st decile									Ref.	
2nd decile									-0.078	0.184
3rd decile									0.058	0.477
4th decile									-0.036	0.583
5th decile									-0.023	0.754
6th decile									-0.059	0.382
7th decile									0.053	0.476
8th decile									-0.021	0.751
9th decile									0.030	0.693
10th decile									0.226	0.001
Missing									0.140	0.038
Observations	33,259		33,194		33,259		33,194		32,961	
Variance component: region	0.234		0.024		0.0220		0.020		0.017	
Variance component: individual	2.073		2.073		2.0740		2.072		1.886	

Note: Country fixed effects (country dummies) are included in models 1–4. Estimates with *p*-value < 0.10 are shown in bold.

Table 3. Self-transcendence.

	Model 0		Model 1		Model 2		Model 3		Model 4	
	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>
Geographical variables										
<i>Domicile</i>										
Big city			Ref.				Ref.		Ref.	
Suburbs or outskirts of big city			0.010	0.763			0.010	0.767	0.007	0.833
Town or small city			-0.029	0.365			-0.026	0.439	-0.020	0.527
Country village			-0.008	0.780			-0.006	0.856	0.009	0.753
Farm or home in countryside			0.040	0.490			0.044	0.459	0.048	0.321
<i>Regional level indicators (NUTS)</i>										
Population density (thousands)					-0.026	0.170	0.028	0.153	-0.028	0.102
Regional GDP (ln)					0.175	0.010	0.167	0.017	0.160	0.015
Sociodemographic variables										
<i>Gender</i>										
Male									Ref.	
Female									0.340	0.000
Age									0.030	0.000
Age ²									0.000	0.000
<i>Education level</i>										
ES-ISCED 1 or lower									Ref.	
ES-ISCED II									0.077	0.089
ES-ISCED IIIb									0.083	0.110
ES-ISCED IIIa									0.173	0.000
ES-ISCED IV									0.183	0.000
ES-ISCED V1									0.261	0.000
ES-ISCED V2									0.289	0.000
Other									-0.08	0.439

(Continued)

Table 3. Continued.

	Model 0		Model 1		Model 2		Model 3		Model 4	
	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>
Main activity										
Paid job									Ref.	
Education									0.063	0.171
Unemployed, looking for job									0.012	0.805
Unemployed, not looking for a job									0.047	0.441
Permanently sick or disabled									0.114	0.047
Retired									-0.071	0.058
Community or military service									-0.397	0.237
Housework, looking after children									0.138	0.001
Other									0.185	0.035
Household income										
1st decile									Ref.	
2nd decile									0.014	0.762
3rd decile									-0.004	0.946
4th decile									0.022	0.733
5th decile									0.049	0.378
6th decile									0.008	0.872
7th decile									-0.004	0.937
8th decile									0.037	0.462
9th decile									0.056	0.251
10th decile									-0.095	0.065
Missing									-0.095	0.091
Observations	33,288		33,223		33,288		33,223		32,990	
Variance component: region	0.116		0.016		0.015		0.015		0.013	
Variance component: individual	1.026		1.027		1.027		1.027		0.948	

Note: Country fixed effects (country dummies) are included in models 1–4. Estimates with *p*-value < 0.10 are shown in bold.

Table 4. Openness to change.

	Model 0		Model 1		Model 2		Model 3		Model 4	
	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>
Geographical variables										
<i>Domicile</i>										
Big city			Ref.				Ref.		Ref.	
Suburbs or outskirts of big city			-0.111	0.034			-0.110	0.036	-0.087	0.077
Town or small city			-0.110	0.016			-0.102	0.034	-0.074	0.081
Country village			-0.189	0.000			-0.181	0.000	-0.107	0.011
Farm or home in countryside			-0.047	0.623			-0.038	0.699	0.079	0.331
<i>Regional level indicators (NUTS)</i>										
Population density (in thousands)					-0.008	0.630	-0.002	0.237	-0.002	0.113
Regional GDP (ln)					0.226	0.014	0.196	0.048	0.110	0.252
Sociodemographic variables										
<i>Gender</i>										
Male									Ref.	
Female									-0.155	0.000
Age									-0.025	0.000
Age ²									0.000	0.025
<i>Education level</i>										
ES-ISCED 1 or lower									Ref.	
ES-ISCED II									0.195	0.001
ES-ISCED IIIb									0.387	0.000
ES-ISCED IIIa									0.345	0.000
ES-ISCED IV									0.540	0.000
ES-ISCED V1									0.453	0.000
ES-ISCED V2									0.635	0.000
Other									0.336	0.014

(Continued)

Table 4. Continued.

	Model 0		Model 1		Model 2		Model 3		Model 4	
	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>
Main activity										
Paid job									Ref.	
Education									0.334	0.000
Unemployed, looking for job									0.069	0.253
Unemployed, not looking for a job									0.125	0.101
Retired									0.007	0.890
Community or military service									-0.041	0.846
Housework, looking after children									-0.132	0.023
Other									0.112	0.367
Household income										
1st decile									Ref.	
2nd decile									0.058	0.304
3rd decile									-0.010	0.858
4th decile									-0.043	0.504
5th decile									0.035	0.560
6th decile									0.007	0.896
7th decile									0.009	0.881
8th decile									0.027	0.645
9th decile									0.063	0.357
10th decile									0.098	0.166
Missing									-0.025	0.699
Observations	33,263		33,198		33,263		33,198		32,970	
Variance component: region	0.062		0.020		0.018		0.018		0.018	
Variance component: individual	1.776		1.776		1.777		1.776		1.594	

Note: Country fixed effects (country dummies) are included in models 1–4. Estimates with *p*-value < 0.10 are shown in bold.

Table 5. Conservation.

	Model 0		Model 1		Model 2		Model 3		Model 4	
	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>
Geographical variables										
<i>Domicile</i>										
Big city			Ref.				Ref.		Ref.	
Suburbs or outskirts of big city			0.123	0.131			0.119	0.152	0.078	0.228
Town or small city			0.223	0.002			0.198	0.007	0.131	0.028
Country village			0.345	0.000			0.321	0.000	0.181	0.003
Farm or home in countryside			0.342	0.020			0.315	0.033	0.098	0.404
<i>Regional level indicators (NUTS)</i>										
Population density (thousands)					-0.014	0.697	0.012	0.696	0.025	0.422
Regional GDP (ln)					-0.546	0.000	-0.469	0.002	-0.277	0.061
Sociodemographic variables										
<i>Gender</i>										
Male									Ref.	
Female									0.275	0.000
Age									0.039	0.000
Age ²									0.000	0.098
<i>Education level</i>										
ES-ISCED 1 or lower									Ref.	
ES-ISCED II									-0.182	0.008
ES-ISCED IIIb									-0.230	0.000
ES-ISCED IIIa									-0.352	0.000
ES-ISCED IV									-0.515	0.000
ES-ISCED V1									-0.612	0.000
ES-ISCED V2									-0.895	0.000
Other									-0.205	0.381

(Continued)

Table 5. Continued.

	Model 0		Model 1		Model 2		Model 3		Model 4	
	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>	Coefficient	<i>p</i>
Main activity										
Paid job									Ref.	
Education									-0.469	0.000
Unemployed, looking for job									-0.045	0.489
Unemployed, not looking for a job									-0.176	0.149
Permanently sick or disabled									0.174	0.071
Retired									0.164	0.004
Community or military service									0.516	0.024
Housework, looking after children									0.309	0.000
Other									-0.122	0.489
Household income										
1st decile									Ref.	
2nd decile									-0.118	0.074
3rd decile									-0.155	0.019
4th decile									-0.092	0.190
5th decile									-0.278	0.000
6th decile									-0.178	0.010
7th decile									-0.266	0.000
8th decile									-0.252	0.000
9th decile									-0.367	0.000
10th decile									-0.409	0.000
Missing									-0.135	0.034
Observations	33,242		33,177		33,242		33,177		32,947	
Variance component: region	0.282		0.054		0.045		0.042		0.044	
Variance component: individual	3.452		3.44		3.45		3.442		2.760	

Note: Country fixed effects (country dummies) are included in models 1–4. Estimates with *p*-value < 0.10 are shown in bold.

0.319, $p = 0.019$) whereas other categories are non-significant. Thereby, the analysis following for example the urban rank-size approach (Zipf, 1949) with suitable data could further investigate this nonlinearity.

7. DISCUSSION AND CONCLUSIONS

Inspired by the classic theses in urban theory, this analysis examined the geography of human values with high-quality cross-national survey data from 18 European countries. In this task, we used the Human Value Scale by Schwartz (2012) and examined self-evaluated perceptions of urbanity while also acknowledging the potential contextual-level effects at the regional (NUTS) scale.

In sum, the results for the existence of spatial differences on human values seem to depend first on the specific value orientation (Self-enhancement, Self-transcendence, Openness to change and Conservation) being focused on; and second, on which measures of urbanity are viewed. In sum, Conservation, Openness to change and Self-enhancement show the most distinct and robust domicile-related variance and thereby signs of an urban–rural gradient. Instead, the value orientation of Self-transcendence does not show marked urban–rural differences even in the unadjusted models. Additionally, Conservation and Self-enhancement also show robust regional effects where high Conservation is related to living in a region with lower macroeconomic productivity (GDP) and high Self-enhancement is positively associated with the population density of the region.

All in all, the domicile-related results can be considered partly conditional with regard to whether to account for individual-level socio-economic indicators, that is, the composition effect. For example, Self-enhancement shows a domicile-related urban–rural pattern which is largely attributable to the socio-economic composition of the population in different domiciles. It needs to be noted, however, that the classic authors who aimed to describe the psychology of urban experience did not explicate the analytical distinction between compositional and contextual hypotheses (e.g., Ballas & Tranmer, 2012) behind the observed spatial differences in a given phenomenon or attribute. However, in defence of the classic scholars and aligning with the debate in, e.g., epidemiological literature (e.g., Jen et al., 2009), it is also clear that the compositional differences (in health or here in human behaviour) are of academic and especially policy relevance. Thus, this analysis has provided important empirical scrutiny on the classic thesis on interrelations between experiences of urbanity and modernity and, in essence, on the spatial nature of human behaviour and motivation.

Finally, as is usual in the case of any observational – and especially, cross-sectional – analysis, the causality concerning the potential contextual effects on individuals cannot be empirically confirmed by this study. Hence, future analysis should aim for defining the causal relationship between one's living environmental and values or ideology (e.g., Joye et al., 2020). The cross-sectional spatial differences in value orientations observed in this study are

hypothetically resulting from both compositional (i.e., spatial sorting of individuals seeking optimal person–environment fit in values) and contextual (i.e., value climate in situ have a contextual effect on value orientation of individual) effects. Hence, acquiring a panel data tracking the same individuals through time and space would offer further possibilities to distinguishing between the two mechanisms. In addition, ESS and Eurostat data enable a region-level panel approach where one could tease out the effect of temporal changes at regional level on aggregated individual responses.

Moreover, this analysis was set to define a so-called universal model by controlling for between-country variation and future studies could thereby examine the above-mentioned relationship within different country or country group contexts. In fact, the urbanity–value associations were not robust when running the analysis for separately country-grouping using different NUTS classifications. However, we believe this inconsistency does not refer to commensurability issues (establishing regional proportionality either by population size versus land area) while merging different NUTS levels into a single analysis but instead reflects the fact that there is country-group variance (i.e., moderation) in the relationship how urbanity is related to within-country differences in value orientations. Hence, seeking to unfold the temporal and spatial variance in human values both between and within countries would be important area for future research in economic geography but also for broader modernization theories.

Finally, there are some limitations in the ESS data that need to be acknowledged as they could potentially serve an incentive for more nuanced survey data collection for geographical use. As Ferreira (2012) notes the ESS data is not representative of the population at NUTS level. This is not a specific concern in our MLM approach but the fact that ESS samples are not representative at finer level of spatial disaggregation limits the possibilities of averaging approach (calculating regional means) at NUTS level. Hence, ESS data could be improved in the future by placing more emphasis to regional level (stratified) sampling and for example by including another survey item describing local surroundings of the respondent as addition to domicile variable.

However, given the limitations described above, we can conclude that this analysis provides empirical verification for certain classic theses in urban theory regarding the values and mentality associated with the urban environment (Durkheim, 1893; Simmel, 1903; Wirth, 1938). Our results confirm that living in a more densely populated region, as well as living in a big city compared with a farm or countryside residence, is associated with higher Self-enhancement and by implication stronger motivation for self-interest, and interpersonal rivalry. As such, this analysis provides novel empirical support for the above-mentioned classic theses on urban mentality from both micro (domicile) and macro (regional) indicators of urbanity. More specifically, the argument that individually oriented behaviour and motivation is associated with population

density, as an contextual and objective indicator of urbanity, was originally proposed by Durkheim (1893) and later revised by classic theorists in urban sociology. In this sense, the results provide quantitative evidence for classic theses in urban and rural sociology that claim that the spirit of competition, and by implication capitalism, is indeed an urban trait (cf. Smiley & Emerson, 2020).

Additionally, the results confirm that conservatism, as normative behaviour promoting security, conformity and devotion to social norms and communality, is a value orientation profoundly associated with rural living. Thereby, in addition to scrutinizing the classic theories on 'the urban spirit', this analysis also addressed more general theories on institutional change and the development of societies. More specifically, this analysis provided a sub-national analogy to theories addressing the relationship between economic development and cultural change at the national level. As noted earlier, Inglehart and Welzel's (2005) modernization theory suggests that societies have developed in a consistent and path-dependent manner regarding their level and form of economic production and their prevailing societal and cultural values. More specifically, Welzel and Inglehart (2010) suggest that a higher level of economic affluence in a country enables individuals to shift their focus from individually orientated survival values to more socially orientated values that consider the welfare of others through the transcendence of selfish interests. However, our analysis, focused on the within-country context, offers contrasting results for such a pattern documented at the country level. Our results suggest that the value-economy linkage proposed by Welzel and Inglehart (2010) is in fact reversed in a subnational examination. The results of this analysis operating in a within-country context show that the orientation for Self-enhancement is higher in the urban environment, which in general possesses a higher level of economic production and affluence than rural areas. On the other hand, our results on regional-level predictors showed that Self-transcendence, emphasizing the concern for the welfare and interests of others, is associated with higher GDP in a region. This finding, however, could be considered to be in line with Welzel and Inglehart's argument concerning the contextual role of economic affluence affecting the value orientation of individuals. All in all, the results prove that in a geographical analysis the relationship between economic development and value orientations is highly complex and dependent on the spatial scale of the analysis, and as such deserves further study.

Additionally, and as mentioned in the introduction, the results of this analysis are highly relevant to contemporary Behavioural Economic Geography (BEG), which argues that psycho-cultural behavioural patterns in cities and regions have a strong influence on development factors and outcomes in economic terms (Huggins & Thompson, 2015, 2019). In line with Huggins and Thompson, we believe that taking account of measures from the cognitive sciences can inspire subsequent empirical analyses of the relationship between human behaviour and motivation and economic production under

evolutionary and behavioural frameworks in economic geography. Moreover, scholars in economic geography have argued that the focus of analyses conducted under the evolutionary approach could shift from company-level micro-scale processes to a broader framework (Martin & Sunley, 2015). Therefore, this analysis proposes the human value concept and measure as a central instrument to study the economic, institutional, and socio-political structures and processes in different spatial framings.

The results of this analysis already provide some insights and food for thought for further analysis on economic geography and urban economics. As the value orientation for Openness to change denotes a motivation for independent thought and action, creating, and exploring, the results provide empirical support for Florida's (2005) thesis on 'creative cities'. However, this analysis also provides an important advancement to the 'urban creativity' debate as it connects the concept of creativity (which has become a common buzzword in the academic and policy literature on the urban development) to an established and validated behavioural trait in social psychology. This conceptual scrutiny has been defined as a crucial omission in Florida's writings (e.g., Peck, 2005; Weckroth & Kempainen, 2016, pp. 242–243). On the other hand, concerning the socio-economic stratification of behavioural traits, the results of this analysis show that Self-enhancement is characteristic of the top (10th) income decile and associated with high population density, providing further support for the claims that large metropolis serve as the primary arena for a 'culture of greed and self-interest' (e.g., Dorling, 2010, p. 14).

Finally, the results of this analysis are relevant to certain topical lines of research in human geography and related dimensions in urban, rural, and regional policies. First, the emergent literature on the geography of subjective well-being has focused mainly on urban–rural differences and specifically to patterns in developed countries where experienced life satisfaction is higher in rural surroundings compared with large cities (Morrison & Weckroth, 2018; Sørensen, 2014). These differences have often been interpreted as the results of greater social capital and stronger communities in rural areas (e.g., Sørensen, 2014), whereas others have also tried to take urban–rural value differences into account (Morrison & Weckroth, 2018). A separate body of literature in social psychology has examined the relationship between human values and individual life satisfaction and found that in developed countries Conservation values are positively associated with life satisfaction whereas Self-enhancement values have the opposite effect (Sorthaix & Lönnqvist, 2014). Hence, in addition to the physical disamenities associated with urban contexts (pollution, traffic, and noise), rural life might also be related to higher subjective well-being due to a better 'value climate'. Additionally, as suggested by Morrison and Weckroth (2018), urban–rural differences in life satisfaction might also be due to perceived 'value dissonance', where individuals who reside in an urban context but have a more rural and communal value orientation, are negatively affected by their low 'person–environment

fit' (Sortheix & Lönnqvist, 2014). In sum, the role of human values should be more strongly integrated in future studies examining the socio-psychological explanations for the urban–rural differences in subjective well-being. Recent contributions aligning with this suggestion include analyses by Bruna (2022), who examined the joint effects of human values on subjective well-being at the individual and contextual level, and a study by Hanell (2022) scrutinizing the association between unmet aspirations (in cities) and lower life satisfaction through varying levels of self-enhancement value orientation.

Second, as proposed by Horlings (2015), human values that are rooted in local cultures should be acknowledged in the formulation and implementation of regional policies. According to Horlings (2015), a value-oriented approach to regional policies can provide a more in-depth insight into what people appreciate, feel responsible for, and are willing to commit to in the context of their place. In sum, these notions mean that regional policy measures as well as goals need to be in line with the values prevailing in the communities and localities that they are subject to. This notion has practical relevance for a range of local and rural policies, and also broader discussion on regional policies in the European Union. The critics of 'place-based development' concept and approach in EU's regional development consider it a mere neoliberal governmental technology of minimal political intervention, leaving most European regions and places to survive on their own under the imperatives of economic competitiveness (Weckroth & Moisisio, 2020). Hence, the opposition to the 'place-based development' and 'smart specialization' strategies embedded in the EU's vocabulary is most likely a case of value divergence and conflict between the policy-makers at supranational level and the local communities. As a response to this tension, some scholars have suggested a revised form of 'place-based development' whereby regional actors are enabled and empowered to assert their own capacities to act and pursue policy measures that are in accordance with their own values and visions of positive regional futures (Jones et al., 2020).

Finally, and in accordance with previous notes on the importance of value dissonance and conflicts, the concept of human values can play a major role in a highly important line of research; the geography of populism and discontent (Rodríguez-Pose, 2018). The reasons and drivers behind the geographical differences in populism and discontent have been conducted mainly from an economic perspective and with related objective indicators on regional demographics and macroeconomic performance (e.g., migration rates, levels of employment etc.). However, besides the macroeconomic realities and patterns of demographic change in regions, it is likely that there is a more profound cultural and value-based component, leading to sentiments of being left out or becoming irrelevant in the future projections of societal development (Luukkonen et al., 2021). Outside geographical literature, political scientists have formulated these considerations as a 'cultural backlash thesis' (Inglehart & Norris, 2016), suggesting that the rise of the populist vote should be

interpreted primarily as a cultural counter-revolution by more conservative segments of a population against the rise of progressive and liberal values. As the results of this analysis show, this debate is strongly related to questions of the geography of value orientations and conflicts along the various stages and forms of urbanity and modernity. However, as was the case with the theory of cultural change by Inglehart and Welzel (2005), the 'cultural backlash thesis' has not yet been examined in subnational or regional contexts. In sum, the geography of populism presents as one case among many areas of research where the acknowledgement and utilization of the human value concept and measure can lead to significant advancements in our understanding of the *human* dimension in human geography.

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NOTES

1. NUTS = *Nomenclature des unités territoriales statistiques*.
2. For a review of the conceptual and theoretical overlap between Inglehart and Schwartz's value dimensions, see Dobewall and Strack (2014). Since these two are included to the core questionnaires in European Social Survey (Human Values Scale by Schwartz) and World Values Survey ('post-materialism' scale by Inglehart), they have emerged as the most commonly used by researchers working with cross-national analyses and nationally representative samples.
3. For the rationale for the multilevel data structure in the ESS data and the relation to Eurostat regional dataset, see <https://www.europeansocialsurvey.org/about/news/essnews0030.html/>.
4. As Schwartz (2012) notes, Hedonism shares elements of both openness to change and self-enhancement. Hedonism was thus excluded from our analysis.
5. NUTS-2 = AT, BE, DK, ES, FR, NL, NO, PL, PT; NUTS-3 = CZ, FI, HU, IE, LT, SE, SI.

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