On “Nationology”: The Gravitational Field of National Culture

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Abstract

Nations have been questioned as meaningful units for analyzing culture due to their limited variance-capturing power and large internal heterogeneity. Against this skepticism, we argue that culture is by definition a collective phenomenon and focusing on individual differences contradicts the very concept of culture. Through the “miracle of aggregation,” we can eliminate random noise and arbitrary variation at the individual level in order to distil the central cultural tendencies of nations. Accordingly, we depict national culture as a gravitational field that socializes individuals into the orbit of a nation’s central cultural tendency. Even though individuals are also exposed to other gravitational forces, subcultures in turn gravitate within the limited orbit of their national culture. Using data from the World Values Survey, we show that individual values cluster in concentric circles around their nation’s cultural gravity center. We reveal the miracle of aggregation by demonstrating that nations capture the bulk of the variation in the individuals’ cultural values once they are aggregated into lower-level territorial units such as towns and sub-national regions. We visualize the gravitational force of national cultures by plotting various intra-national groups from five large countries that form distinct national clusters. Contrary to many scholars’ intuitions, alternative social aggregates, such as ethnic, linguistic, and religious groups, as well as diverse socio-demographic categories, add negligible explained variance to that already captured by nations.

Keywords: culture, nation, identity, units of analysis, cultural homogeneity

On “Nationology”: The Gravitational Field of National Culture

This study addresses a controversial assumption in cross-cultural research, namely that the nation is an appropriate entity of culture (Minkov & Hofstede, 2012). The tradition of studying nations as units of analysis goes back to the descriptions of national character and customs more than two centuries ago, as presented in Charles de Montesquieu’s *De L’Esprit des Lois* (1748) or Alexis de Tocqueville’s *De la Démocratie en Amérique* (1835). According to William Darton (1790), for example, “*The Norwegians are frank, open, and undaunted, yet paying proper respect.*” While such a description might derive from some empirical observation, it is questionable to what extent it applies to all Norwegians, or whether it has a stronger resonance in certain segments of Norwegian society or geographic regions, whether it applies also to the indigenous Sami people and to Pakistani and Polish immigrants living nowadays in Norway, or whether this is also a fair description of other nations, Nordic or otherwise, or possibly universal to all humanity. This speculation raises the important question about the most salient group boundaries when it comes to culture and the most appropriate entity to pinpoint variation in collective mentalities.

To be sure, characterizations such as Darton’s would now be perceived as simplistic stereotyping. Nonetheless, the tradition of treating nations as cultural units remains a convention. As the cross-cultural psychologist Shalom Schwartz observed, “*Almost all large, comparative, cross-cultural studies treat countries as their cultural unit*” (Schwartz, 2006, p. 153). However, this focus has been criticized as overemphasizing the importance of the nation as the prime source of cultural variation and neglecting apparent cultural heterogeneity within nations. This skepticism can be grouped into two types:

- (1) The first type stresses that the *within*-country cultural variation among individuals largely outsizes the *between*-country variation (e.g., in values). This is ultimately a skepticism regarding nations’ variance-binding power. Fischer and Schwartz

(2011), for instance, state that the similarities between individual-level values across countries greatly exceed the differences, concluding that, “This is problematic for claims that national cultures are the primary determinant of individuals’ value priorities” (p. 1134). Taras et al.’s (2016) meta-analysis of 558 studies of Hofstede’s cultural framework reveals that 80% of the variation in values and other cultural measures is *within* rather than *between* nations. Gerhart and Fang (2005) even push the explained variance of nations down to merely 2 to 4%, thus concluding that nations are not meaningful cultural entities. Building on this evidence, Greenfield (2014) predicts that the within-country differences will continue to increase while those between individuals of similar socio-economic status across different countries will decrease.

- (2) A second source of criticism derives from the observation that nations do not comprise sufficiently homogenous cultures and therefore using them as cultural units neglects competing cultural aggregations, whether spatial (locations, provinces, geo-political areas) or non-spatial (ethnicity, religion, class, gender, generation) in character (Baskerville, 2003; Jonsen, 2018; Lenartowicz et al., 2003; McSweeney, 2002; Taras et al., 2016; Tung & Verbeke, 2010). A related criticism emphasizes that national borders do not map on other—and presumably more important—group divisions: e.g., most country borders in Africa were drawn with a ruler on the map by the former colonial powers in complete disregard of the so created countries’ ethnic compositions (Taras et al., 2016).

These arguments reflect a deep-seated epistemological skepticism about treating nations as cultural entities in their own right, which basically is a criticism against “methodological nationalism” (Wimmer & Glick Schiller, 2002). This criticism feeds a tendency to consider nation-level cultural variables as artefactual creations of “aggregation

bias” and a related reluctance to conduct ecological analyses altogether—what we refer to as “nationology.” Countries are deemed “poor proxies for culture” (Taras, et al., 2014: abstract) and the assumption that they equate with cultures is called “fallacious” (Tung, 2008; Tung & Verbeke, 2010).

Attempts to address this issue empirically focus on a few specific sources of within-country heterogeneity. For example, Minkov and Hofstede (2012, 2014a, 2014b) demonstrate that, when supra-national regions and religious groups are analyzed, they tend to cluster within their respective nation, rather than grouping with neighboring countries’ regions or the same religious groups in other countries. Using Afrobarometer data, Minkov et al. (in press) find that nearly all of Africa’s ethnolinguistic groups also form homogeneous national clusters, a remarkable result in view of the recency of the formation of African states.

Against the backdrop of this theme, our study addresses the following question: Is the nation a meaningful entity for analyzing culture? In other words, does the nation have sufficient conceptual plausibility as well as variance-binding power for its individual members’ mentalities? To answer these questions, we first place the concept of national culture on a firmer theoretical ground, in the hope to underpin the discussion on a sounder epistemological base. Second, we clarify methodological issues associated with conventional measures of culture based on surveys of individual respondents. Third, we illustrate the variance-binding power of nations in comparison to alternative units of aggregation, including alternate spatial units in a hierarchy from towns to provinces to geo-political regions as well as non-spatial units, such as gender, cohort, ethnicity, religion, and social class.

In what follows, we refer to “the nation” as a political entity, which includes the whole population of a country, regardless of its individual members’ ethnic backgrounds and the strength of their national identification. A state, according to the Montevideo Convention on the Rights and Duties of States (1933), is a political formation, which meets the following

four criteria: it has a permanent population, a defined territory, a functioning government, and the capacity to enter into relations with other sovereign states. Therefore, the terms “country,” which refers to the territorial space, “nation” and “society,” which concern the population of that territory, as well as “(nation) state,” which is the same entity but in an institutional sense, are often used interchangeably in the literature, including this study. “Nation” has also another meaning: an ethnic community that may span country borders, e.g., North and South Korea are one nation in this historical sense. However, we use nations only in the meaning of a political community that encompasses the whole population of a certain sovereign territory. Beyond this conceptual reasoning, there is also a practical value to our focus: most data on cultural variables from multi-national survey projects, including the World Values Survey (WVS), European Values Study (EVS), European Social Survey (ESS), the International Social Survey Program (ISSP) and the Global Barometers Project (GBP), survey these territorially-defined entities and aim to be representative of their populations regardless of their composition. In other words, they are “nationally representative.”

After this brief introduction, we continue with our conceptualization of national culture and its associated methodological issues. Then, we identify the ways in which nations are related to culture and outline the role of border-transcending cultural carriers that create other cultural units within and beyond nation states. In the last section, we discuss the mechanisms by which national identity overrides the impact of these factors. We finish with a summary and conclusions that assert the status of national culture as a valuable analytical angle. Empirical examples are provided throughout the text to illustrate our points.

The Concept of Culture as a Collective Phenomenon

Culture is one of the most complex, polysemous terms in the social sciences, as its definition varies bewilderingly among different authors (Lane & Ersson, 2002). A review of the literature uncovers more than 300 definitions of the term across the social sciences (Faulkner

et al., 2006). This obvious arbitrariness provokes even cross-cultural researchers to refer to culture as *“the c-word, mysterious, frightening and to be avoided”* (Berry, 1997, p. 144) or *“whatever a scholar decides it should be”* (Minkov, 2013, p. 9).

To bring some order into this chaos, we extract several short definitions that we find useful. According to the Cambridge English Dictionary, culture is *“the way of life, especially the general customs and beliefs, of a particular group of people at a particular time.”* Geert Hofstede (2001) famously describes culture as *“software of the mind”* or more precisely as *“the collective programming of the mind that distinguishes the members of one group or category from another”* (p. 9). Michael Minkov (2013) defines culture as an *“amalgamation of potentially related and relatively durable societal characteristics that describe an identifiable human population, such as a nation or ethnic group”* (p. 17). To add another variant to this topic, Peterson and Barreto (2014) describe culture as *“patterns of social behavior, social interaction, and conscious and unconscious influences on action that recur in or typify a society”* (p. 1134).

These definitions concur that culture is a defining characteristic of an identifiable group of people or a population. An important conclusion we draw from these definitions is that *“Culture is always a collective phenomenon”* (Hofstede, 1991, p. 5). Similarly, Tsui and his colleagues (2007, p. 460) note that, *“Without exception, the definitions of culture refer to it as a group-level construct that demarcates one group from another.”* We emphasize this truism only to highlight that using the large individual-level variation in human values as a criticism against the concept of national culture is to ignore the conceptualization of culture as a group-level phenomenon. If we accepted the view that we should not compare complex systems because there is much more variation within them than between them, we should stop comparing individuals as well. The various types of cells of the human body—for instance a neuron, a leukocyte, and a sperm or egg—are far more different in characteristics and

functions than any two individuals on the planet. Yet, this would certainly be considered an invalid argument in support of the view that we need not compare whole individuals but should focus our research solely on cells.

Having underlined the collective nature of culture, we refer to Schwartz's (2014) stipulation that "*Societal culture [is] the hypothetical, latent, normative value system that underlies and justifies the functioning of societal institutions*" (p. 5). Applying this definition to the nation, we can treat culture as a latent construct that closely relates to a society's ecology, history, and institutions (Berry, 1997; Schwartz, 2014). Through state-wide institutions, national cultures affect every individual in a society, even though the individuals' values and behaviors are also determined by other factors, such as genes, physical health, family socialization, ethnicity, religion, gender, age, social class and others (Berry, 2017; Schwartz, 2014). Here we highlight the ontological primacy of culture over individuals: culture exists before and independently of its individual members. As a cooperative species whose achievements depend entirely on teamwork, humans evolved a psychological need for group integration and identification, which equips us with a strong social sense: that is, the ability to recognize and internalize one's reference group's central tendency in thinking and behavior, which then reinforces this central tendency. The nation is just one grouping unit that (re)creates such central tendencies and, hence, exposes all of its members to the same normative pressure of acculturation. Yet, among alternate grouping units, the nation is particularly powerful because no other grouping unit has more regulatory power and more command over people's loyalty than the nation, which is the reason why people usually feel strongly about their national identity.

In terms of the key element of culture, many cross-cultural researchers consider moral values as the most fundamental ones (Hofstede et al., 2005). Scholars define values as "*broad tendencies to prefer certain states of affairs over others*" (Hofstede et al., 2005, p. 8) or as

“conceptions of what is good and desirable in the culture, the cultural ideals” (Schwartz, 2006, p. 139). Values are conventionally incorporated in the measures of different dimensions of culture, the necessary or ‘true’ number of which is still contested (Fog, 2020; Maleki & De Jong, 2014). Cultural maps plot nations using their mean scores on value dimensions, be that a two-dimensional or multidimensional representation. Every nation can then be presented by a dot on a map where the mean of the respective country’s population shows its relative position compared to other countries.

Gravitational Fields of Culture

As explained by Schwartz (2014, p. 11): *“It is convenient to think of a culture as located at specific points on various dimensions, but it is more accurate to view the scores as indicating the central tendencies of the normative system. A range of ... value emphases extends around these central tendencies.”* With this conceptualization, the country means that are depicted on cultural maps as dots are approximately the peaks of the value distribution of individual responses on these dimensions in a given nation, while the individuals’ values spread across a much larger range away from this mean.

Given the dispersion of individual values on either side of their culture’s mid-point, we propose to conceive of national culture as a ‘gravitation field’ that pulls individuals into its orbit—a metaphor suggested by Minkov and Hofstede (2014). The country mean indicates the center of gravity, around which the psychological attributes (values and other related cultural characteristics) of the nation’s population gravitate (Figure 1). The values and attitudes of a country’s individuals extend away from this central position and overlap to some extent with the values and attitudes of individuals from other nations. Consequently, there is significant diversity within any nation, which partly overlaps with the diversity of other nations. Nonetheless, individuals residing in the same nation are exposed to the same normative pressure radiating from their nation’s cultural gravity center.

Figure 1. National cultures as gravitational fields with overlapping boundaries

While Figure 1 is a hypothetical visualization, Figure 2 provides a real illustration of the dispersion of the individuals' positions from five large countries on five continents in terms of emancipative and secular values—two value dimensions capturing a substantial share of the cultural variation in WVS data¹ (Welzel, 2013). The figure illustrates the dispersions around their centers of gravity country by country. These centers of gravity correspond approximately with their national means, showing descending overall support for emancipative values from Germany to Nigeria. It is true that the cultural spaces occupied by individuals from different countries overlap substantially and spread out almost all over the entire map in each nation. The idea of national cultures as gravitational fields nevertheless finds a striking confirmation in the obvious fact that the distribution of individuals shows a steadily increasing density towards each nation's gravity center.

¹ These two indices are available in the open access WVS data, which enables the easy replication of our analyses.

Figure 2. Concentric distribution of individuals along the distance from the culture’s gravity center.

Note. The concentric circles denote the density of the distribution. Data: WVS wave 7.

In light of this evidence, we maintain that national cultures function like gravitational fields that pull individuals to their center and keep them gravitating in a concentric orbit with increasing inward and decreasing outward density. As underscored by Schwartz (2006), *“Because prevailing cultural value orientations represent ideals, aspects of culture that are incompatible with them are likely to generate tension and to elicit criticism and pressure to change”* (p. 139). Whenever people belong to a group, and are aware of their belongingness, the human susceptibility to social influence, together with our evolved social sense, will guide us to figure out how the mainstream of that group thinks and behaves, and what most group members expect from others. Put differently, our evolved statistical antenna drives us to intuitively recognize a group’s central tendency in its most prominent values and expectations. Once such a central tendency is in place, it turns into a source of normative pressure on all group members to internalize the central tendency as their own position, which in turn reinforces that central tendency. While in “free” societies, individuals risk being labeled and treated as social mavericks, it is not an exaggeration that in less democratic ones, unorthodox thinkers would normally pay a much heavier penalty, such as isolation, imprisonment or even death. Thus, in each society, individuals tend to gravitate within a

“safe” cultural distance from their perceived national mean, even if in most cases this process remains unconscious.

The analogy we use does not imply that individuals cannot escape the gravitational pull of their national culture, but as the laws of physics dictate, this requires more energy than in the absence of gravitation. Thus, we do not observe—and neither expect—a strict congruence with the ideals of the national culture. Our conceptualization of culture, therefore, renders essentialism and cultural racism inadequate because by knowing someone’s nationality we cannot determine their personal values and attitudes, but only the gravitational fields they are or have been exposed to. Indeed, some of the greatest national leaders are those who stand in opposition to their national culture and by resisting its gravitational pull, they try to push their nation’s center of gravity in a different direction.

The Miracle of Aggregation

Many authors note that value diversity is larger within than between countries (Gerhart & Fang, 2005; Fischer & Schwartz, 2011; Taras et al., 2016). Aside from overlooking the nature of culture as a group-level phenomenon, our second response to this skepticism is that it exhibits a widespread disregard of certain methodological aspects of cultural research. Stressing the size of the within-country variance partition is misleading because it overlooks three central points, which we will explicate in more detail further below: (1) The size of the within-country variance component is usually largely inflated by the large amount of random measurement error in individual-level data; (2) aggregation eliminates random measurement because individual-level deviations from a group mean that are random cancel each other out, thus leaving the group mean unaffected; (3) freed from random noise, explained variances among identical variables are usually much larger at the aggregate level than at the individual level.

Among survey researchers, it has been understood since the beginnings of the American Election Study that representative mass surveys contain a great amount of random measurement error. Converse (1964) was the first to refer to this phenomenon as “non-attitudes,” recognizing that the individual-level correlations even between conceptually tightly related variables are always strikingly small, especially when one looks at correlations in terms of the explained variances that they reveal. At the individual level, explained variances rarely exceed 10%, which means that individual-level responses remain unexplained to 90% and more. As Alwin (2007) and others point out, 50% and more of the variation in individual attitudes is random measurement error. This random variation is outside the reach of systematic explanation and, hence, beyond the capture of *any* grouping unit. Converse also notes that individual-level responses remain only weakly correlated, even when respondents are asked the same question twice in different sections of a questionnaire. Significance is a different issue, which is often achieved in mass surveys even in the case of small correlations because of the large N of individual-level data.

Blalock (1961) provides statistical proof that random measurement error diminishes individual-level correlations and explained variances and that, for this reason, the small size of individual-level correlations and explained variance among conceptually closely related variables provides an indirect hint about the actual amount of random measurement error. In *The Rational Public*, Page and Shapiro (1992) address the same problem from a different angle, referring to what Kaase (1986) once coined “the micro-macro puzzle in the social sciences.” Specifically, Page and Shapiro stress that the weak individual-level correlation between conceptually related variables almost always contrasts starkly with a powerful correlation between the same two variables at the aggregate level (i.e., group or country means). In fact, country-level means between attitudinal variables often reach 60% and more explained variance.

This is because of the “miracle of aggregation”: provided a sufficiently large sample, aggregation by necessity eliminates all random measurement error that exists at the individual level, because random deviations from the group mean in individual-level responses cancel each other out (of course, aggregation does not cancel out *systematic* measurement error, that is, a consistently inflationary or deflationary bias in individual-level responses). For all these reasons, the true relationship between any pair of attitudinal variables regularly comes more clearly to the surface among aggregated versions of these variables. In light of these considerations, it is baseless to ask whether a grouping unit captures *most* of the individual-level variation in attitudes because such a unit does not exist. The correct question to ask is whether a grouping unit of interest captures a *significant share* of the variation and how well its variance-binding power competes with that of *alternative* grouping units, an examination that we will demonstrate below.

National culture can be conceived of as an aggregate construct and as such it cannot be measured directly at the individual level. Conventionally, we infer national culture by surveying individuals and averaging their values, even though individuals are not of interest when we want to compare national cultures. Individuals’ values are influenced by many other sources, including genetics, age, sex, education, personal wealth, etc., and their measures include a large amount of random measurement error. By aggregating the individuals’ responses, we average out this random variation to obtain information about the aggregate construct that defines the cultural variation between national populations. Therefore, the expectedly large variation in values between individuals within nations does not inform us about the meaningfulness of the higher-order construct. By aggregating individuals’ values, we measure only the central tendency in the culture, around which individuals gravitate, which we equate with the national culture.

We demonstrate the miracle of aggregation by using real data from the latest WVS² and select emancipative values as an example (Figure 3). As claimed by critics, countries indeed account for a much smaller share of the variation among 70,867 individuals: 36% is between countries versus 64% within countries (although, noteworthy, the 36% are statistically highly significant in a T- or F-test for group mean differences and way above the explained variance of “2 to 4%” that other authors attribute to nations). Once we aggregate individuals to their respective residential units, such as towns and cities (N=1,869), thus removing most of the random measurement error, the share of explained variance clearly reverses in favor of countries—74% between countries versus 26% within countries. If we further aggregate towns/cities into sub-national regions (N=407), countries already account for a massive 91% of the total variation between regions, thus, demonstrating how removing random measurement error reveals the powerful gravitational pull of nations over smaller units of analysis.

Figure 3. Variance in emancipative values accounted for by countries (N=49) over individuals, towns, and regions (95% confidence intervals).

Note. The variance partitioning power was estimated using intraclass correlations (ICC).

Residential areas (villages, towns or cities) were dropped if comprising fewer than 10 respondents. Regions were dropped if comprising fewer than 50 respondents.

² We did not use the integrated WVS and European Values Study dataset because the latter lacks some of the variables we use in the analyses.

Layers of Cultural Embeddedness

Individuals are nested within many gravitational fields, called ‘solidarity circles’ by Welzel (2017), or ‘moral circles’ by Hofstede et al. (2005). The nation is only one of these concentric layers of culture, but individuals may also identify with other national groups, with sub-groups and geographic regions within their own nation (Hofstede et al., 2005), with supra-national geo-political groups (Huntington, 1996; Inglehart & Baker, 2000; Ronen & Shenkar, 2013), and even with a global culture (Brown, 1991). Individual identifications are poly-cultural and multi-layered (Morris, Chiu, & Liu, 2015). Therefore, the question of whether individuals gravitate around their nation’s culture or other cultural units is similar to asking whether the Moon gravitates around the Earth or the Sun. The Moon gravitates around both, and around the center of our Milky Way galaxy, just as individuals are pulled by multiple cultural influences at different levels.

We claim that the miracle of aggregation works at various layers of embeddedness and each of them *could be* a legitimate unit of cultural analysis. We demonstrate this point again with the latest data from the WVS and the variation in emancipative values. Individuals (N=43,064) cluster substantially within their area of residence (42.6% explained variance). Once we aggregate towns, the share of explained variance of the higher order units rises substantially. Sub-national regions (N=1,869) account for 79.4% of the variation between towns. Nations, for their part, account for 91.1% of the variation between regions. At the highest level of aggregation, culture zones³ account for 81.1% of the variation between countries.

Evidently, each of these aggregate units accounts for a substantial share of the variation in emancipative values. Their variance-binding power cannot be directly compared,

³ We use Welzel (2013)’s classification of culture zones, with the exception of combining all Western countries into one zone due to too few of them being surveyed in wave 7 of the WVS.

however, because lower-level units are, by definition, more numerous. Despite the apparent disadvantage of being only 49 in number, countries nevertheless explain the largest share of variation among the next lower-level units compared to what other territorial units explain among their next lower-level units. This evidence speaks strikingly to the superior power of nations in variance capture.

Figure 4. Hierarchy of territorial clustering: variance in emancipative values accounted for by the higher-order units.

Note. The variance was estimated using ICC. The width of the boxes represents the explained variance in the lower-level territorial unit. Confidence intervals (95%): Culture zone over countries: 62.1, 101.5; Countries over regions: 87.1, 95; Regions over towns: 75.9, 82.8; Towns over individuals: 39.8, 45.4. Residential areas (towns or villages) were dropped if comprising fewer than 10 respondents; regions were dropped if comprising fewer than 50 respondents.

Nations and the Socialization of a Common Culture

To understand the nature of nations as cultural entities, we go back to the functional roots of nations. All human societies must solve a set of basic problems, which demands agreement and cooperation between the individuals in that society (Hofstede et al., 2005). Hofstede and his colleagues specify four such problems. The first is the relation of members of a society to

authority, i.e., whether a society is hierarchy- or equality-oriented. The second is about the conceptions of the self, which is differentiated in two different ways: (1) the relationship between the individual and society, which distinguishes between individualist and collectivist societies, and (2) the individual's concept of masculinity and femininity, which relates to gender roles. The last societal problem to address concerns the institutionalized ways of dealing with conflicts and uncertain situations.

Historically, we can think about societies in an evolutionary sense (Varnum & Grossmann, 2017). Most states that existed in history did not survive to the present day and have collapsed (Diamond, 2005). Societies that find effective solutions to these problems have local survival advantages. Achieving cultural cohesion, especially through linguistic policies promoted through the educational system, is one such crucial advantage. The reason is that the solidarity, loyalty and commitment created by cultural cohesion allows societies to orchestrate the actions of their myriads of individuals and to direct them towards common purposes. As Peterson et al. (2018, p. 1087) claim, “...*cultural homogeneity promotes country survival by limiting transaction costs. A country emerges from an ethnic group when cultural homogeneity promotes institutionally legitimate practices that reduce monitoring and enforcement costs, and limit civil conflict. In such theories* [i.e., functionalist theories], *efficiency requires the internal trust, voluntary cooperation, shared identity, and information flow that cultural homogeneity facilitates.*” Therefore, nation states began emerging in late medieval Europe as efficient political formations. They offer functional advantages, such as increased capacity for taxation and army mobilization (Spruyt, 2002).

The printing in vernacular languages, beginning in the 15th century, gave further momentum to nationalism in Europe (Anderson, 1983). This process continued, and during the 19th and early 20th centuries, public education and conscription services led to greater linguistic homogeneity of European nations (Weber, 1976). In consequence, as Spruyt (2002,

p. 133) concludes, the nation *“came to denote the aggregation of individuals that had come to consider itself a coherent political entity. State building (the attempt to enhance the capacity to rule) and nation building (the attempt to construct a shared political identity among the subjects of that particular state) thus went hand in hand. States became increasingly homogenous entities, with governments that had the loyalty of their citizens and thus the commensurate ability to deploy those citizens in service of the state on an unprecedented scale.”* Notably, this process was associated with violent acts of assimilation, displacement, numerous atrocities, and even genocide. As Rummel (1997) reminds us, vastly more national populations were murdered through internal political violence in the 20th century than through external warfare.

This process continues even to the present, though, fortunately, in most cases it is relatively less violent (Pinker, 2010). Today’s nation-building focuses on strengthening the sense of shared identity by emphasizing the nation’s common history, language, or religion, by celebrating national holidays and events, sacralizing national heroes and symbols, and supporting national representatives in international competitions, sport events, etc. (Hofstede et al., 2005).

National culture is socialized through the agency of various national institutions (Schwartz, 2014) and parenting practices (Bond & Lun, 2014). The political system in which people live, the degree of freedoms they are entitled to, as well as the particular legislative framework that they are confined by, are strictly limited within the territorial borders of the nation states (although nations vary in terms of their size and hence the degree of local autonomy also varies across nation states). Since the relationship between institutions and culture is believed to be reciprocal (Inglehart, 1997; Schwartz, 2006), the institutionalization of culture reinforces national culture, increasing its impact and exposing all citizens of the state to the same normative pressure (Schwartz, 2014).

One such crucial institution is the educational system. According to Inglehart and Hofstede, individuals' cultural values are socialized at an early age—generally before adulthood—and any subsequent change is limited. Inglehart and Baker (2000) also underline the primary role of public education as a mechanism through which culture is socialized and diffused across the whole population, thus ensuring the spread of national culture among the new generation of citizens.

According to Inglehart and Baker (2000), the other important means for disseminating national culture is the mass media. National media channels create a public space for shared experiences where cultural narratives are disseminated to varying degrees and presented as 'true' across the whole population with media access. In many countries these media channels are also state-owned or state-controlled, which allows intentional manipulation of public opinion in desired directions, only in that specific country (Akaliyski & Welzel, 2020).

Another reason why nation states are related to a common culture is the confinement of their citizens by their national borders. In contrast to those of the European Union (EU), these borders are in many cases impenetrable barriers that divide populations from one another. Although official data are unavailable, it is believed that the vast majority of people around the world has never travelled outside their country of origin. For example, only 0.5% of the Indian population have been issued documents for traveling abroad in the last six years (Ministry of External Affairs, Gov. of India, 2021). Even within the EU, which allows free movement of people and where people have considerable financial resources at their disposal, 37% of the member states' citizens have never stepped foot in another EU country (Eurobarometer, 2014). For that reason, cultural practices and values can more easily diffuse *within* national borders, but this diffusion is more limited *across* these borders, thereby contributing to a country's cultural homogeneity and preventing large scale cross-border homogenization.

Lastly, according to the revised modernization theory, differences in economic performance distinguish national cultures from one another, because the economy determines their level of existential security, occupational opportunities and lifestyles (Inglehart & Baker, 2000; Welzel et al., 2003). Macroeconomic indicators, such as average income, unemployment rate, occupational structure by sector, economic inequality, welfare provision, and many others, describe phenomena within national borders. North and South Korea are the extreme example of how the same historical nation diverged to the two polar ends of the global wealth distribution only within half a century of separation. Such economic differences on a national level also determine the occupational roles, the availability of physical resources and the existential security of the nation as a whole, which in turn determine the value emphases of the population in a nation.

Border-Transcending Cultural Factors

Having outlined several channels through which national culture permeates throughout the whole population, we proceed with a discussion of potential inconsistencies in treating culture as a national level phenomenon. We do so by shifting the perspective towards within and beyond the nation state. Several factors contributing to cultural clustering transcend national borders: ecology (climate and topography), language, religion, imperial legacies, history, and economic development (Akaliyski, 2017). These factors may overlap with national borders, but they may also cut across borders to create ethnic minorities or to encompass parts of more than one country. We can consider each of those factors as a separate gravitational force that potentially influences the values of individuals within those shared cultural spaces.

Virtually all countries incorporate a certain degree of ethno-linguistic and religious diversity. A large country like India acknowledges at least 22 languages spoken by more than a million native speakers and 122 spoken by more than 10,000 people (*Census of India*, 2001); this level of internal variation still pales compared to the linguistic diversity in Nigeria,

with its 500 languages (CIA, 2021), and Papua New Guinea where approximately 850 languages are spoken (The Economist, 2017). Many indigenous tribes have never been in contact with one another and may not even be aware that they belong to a nation state; their fealty is local. In contrast, several global languages, such as Arabic, English, French and Spanish, span widely beyond a single nation, thus potentially forming supra-national cultural clusters (Inglehart & Baker, 2000).

Furthermore, international migration is another factor that undermines the cultural homogeneity of nation states. According to United Nations Report (2019), 3.5% of the global population are migrants—not a large number, though very unequally distributed. The majority of nations around the world have accepted a negligible share of migrants, but the populations of most Western nations consist of between 10% and 30% foreign-born members (United Nations, 2015). This share is considerably higher in oil-rich Arab states, reaching 88.4% of the population in United Arab Emirates, for example (United Nations, 2015). It is questionable to what extent and with what speed nations succeed in integrating the newcomers into their cultural frames, or even if national policy tries to do so. Thus, such blending of people originally belonging to different nations may attenuate the distinctive characteristics of nations, if their different population are not successfully acculturated into their new society.

Another challenge to the concept of national culture originates in Huntington's thesis heralding a clash of civilizations. According to Huntington (1996), nation states will be replaced by civilizations as setting the most divisive cultural boundaries in the post-Cold War world. A civilization, Huntington claims, "*is the highest cultural grouping of people and the broadest level of cultural identity people have short of what distinguishes humans from other species*" (p. 43), and he identifies 8 or 9 such civilizations. In his view, these civilizations are based on historical connections, shared religious traditions, language, and imperial legacies.

In some cases, such as Ukraine and Romania, these civilizational identities supposedly cut across nations dividing them into different supranational cultural entities.

National borders also do not delineate economic prosperity sharply and regional economic differences remain significant in most countries. Capital regions are usually economically more advanced, and this resource base and different lifestyle may distance them culturally from the peripheral regions where people may have fewer economic resources and are less exposed to diversity in people and institutions. Capital cities and other large cities exercise a pull upon aspiring citizens in rural areas of the country, further distinguishing the characteristics of nations' city dwellers from those of their rural populations.

Furthermore, climate is also strongly linked to culture and its formation (Van de Vliert, 2008; Welzel, 2013). Different mechanisms can be involved. A commonly featured association of climate is pathogen prevalence, and its attendant consequences for infant mortality, fertility rates, ages of marriage, and family formation patterns (Welzel, 2013). Such regional differences are especially likely in larger nations like China (see e.g., Jing et al., 2020). Climatic types encompass national borders in whole or in part, shaping cultural differences across or within nations.

Another association between climate and culture operates through the historical type of subsistence style—whether irrigation-managed or rain-fed agriculture, herding or hunting and gathering, or rice versus wheat agriculture—reportedly has consequences for the cultural development of societies (Minkov & Kaasa, 2021). Large countries like China and India, for example, are divided into regions with either predominantly rice or wheat agriculture (Talhelm & English, 2020). Minkov and Kaasa (2021) point out that in the most individualist nations at present (Northwestern Europe), as well as the most individualist US states (those of the Northeast), dairy farming was the predominant traditional economic activity. These are outcomes of climatic distinctions based on their geographical latitudes which scholars argue

are associated with substantial cultural differences into the present (Talhelm et al., 2014; Talhelm & English, 2020).

The legacies of former empires may constitute another border-transcending factor. Hofstede (1991), for example, explains the difference in power distance between Northern and Southern Europe with the extension of the Roman Empire two millennia ago. Subsequently, the split between the Eastern and Western Roman Empires in 4th century AD and then the Great Schism in the 10th century may also be linked to long-lasting cultural differences between Eastern and Western Europe nowadays (Saroglou, 2020). Another example is the legacies of the former Habsburg, Russian, and Ottoman Empires in Central and Eastern Europe—supranational regions associated with cultural differences at present (Akaliyski, 2017). Lastly, the European colonial empires may have also transplanted cultural institutions in their former subject states, as is evident from the cultural clustering of the English-speaking and Latin American countries (Inglehart & Baker, 2000).

The last factor to challenge the concept of national culture is globalization. Technological innovations and developments in cross-border trade allow the shortening of physical distances and more frequent interactions between cultures. With the advance of the Internet, people from all over the world engage in more and more widely shared social networks and are increasingly exposed to the same artistic products and media channels. Moreover, the political cooperation between nations through inter-governmental organizations, like the European Union, Eurasian Union, ASEAN, can also lead to institutional and cultural diffusion across countries (Akaliyski, 2019; Akaliyski & Welzel, 2020). For these reasons, one may imagine that globalization is undermining the gravitational force of nation states, blurring national and subnational cultural boundaries.

National Identity Versus Other Sources of Identity

We recognize that multiple sources of identity coexist, but we claim nevertheless that nations, as political actors, have an intrinsic interest in securing their citizens' unquestionable loyalty to the state. Therefore, we argue that nation-builders and the institutions they create are inclined to root their national identity in the cultural factors that distinguish their nation from other nations, although these distinctive factors can vary considerably from case to case.

This pressure to establish cultural distinctiveness is exemplified by the cases of Bosnia and Herzegovina, Croatia, and Serbia. These countries share a common language—a commonality which may challenge the legitimacy of each country's separate identity—but they differ on religion, which therefore becomes the basis of a distinct national identity. Conversely, language can surface as a dominant source of identity, as in the case of Germany and the Netherlands, where approximately half of both populations are Protestant and Catholic. Thus, empirical studies show that countries with different predominant religions deviate from each other, but cultural differences between adherents to different religions within nation states do not appear as distinct from each other in terms of their values: e.g., Dutch Catholics are closer to Dutch Protestants than to French Catholics (Inglehart & Baker, 2000; Minkov & Hofstede, 2014b). In rare cases, where both religion and language are the same, e.g., Austria and Germany (although Germany is split religiously), then the distinction is drawn on historical grounds. In these various ways, nations act as adaptable living organisms where each finds a unique basis for asserting its cultural distinctiveness.

Nations require commonalities on which to build a common sense of belongingness. In their absence, an essential part of the nation-building process is to create them. As 'imagined communities,' nations do not require objective commonalities (Anderson, 1983); nations are not biological entities, but human inventions or 'fictions,' as Harari (2014) describes them and as such, they transcend objective realities. Following social identity theory

(Tajfel & Turner, 2004), we hold that over time nations *create* such commonalities and differentiate the ingroup from the outgroup in order to enhance a sense of solidarity and positive affect among its citizens. Languages, for example, often split following political separations even if they remain mutually comprehensible. In Croatia, efforts have been made to differentiate the official language as much as possible from its Serbian version, sometimes by apparent borrowing from Slovene, just as the official language of Northern Macedonia was artificially distanced from Bulgarian by means of heavy borrowing from the Serbian language. Such social processes are the origin of the famous aphorism that “a language is a dialect with an army and navy.” Conversely, in multilingual countries such as India, China, and the Philippines, the governments promote national language through education, the media and other national institutions to enable communication across in-country language communities and to create a common sense of national identity. This is an ongoing process of nation-building that aims to counteract the natural forces of entropy, just as the second law of thermodynamics dictates.

Furthermore, national identity, when present, counteracts the forces of globalization that many authors expect would lead to the emergence of a “global village” (Holton, 2000). Cultural globalization may indeed be in place, but it operates mostly at the level of elites, which comprise a tiny fraction of national populations (Huntington, 1996), and to which authors themselves may feel a part of, thus affecting their objective perception of its real scale. Empirical studies in this field provide no evidence that ongoing globalization has had a homogenizing effect on the world’s cultures (Kaasa & Minkov, 2020; Li & Bond, 2010). The fact that people are exposed to foreign cultures does not mean that they will automatically like and adopt what they see. On the contrary, cultural contact often results in shock and reinforcement of one’s cultural chauvinism: the supremacist idea that one’s own culture is the best whereas other cultures are somehow deficient, even pathological (Akaliyski & Welzel,

2020). “[C]onsumption of the mass media worldwide provokes resistance, irony, selectivity, and in general, agency” (Appadurai, 1996, p. 21). In reaction to the march of a “globalizing Western culture” and the threat of losing a sense of identity, heritage cultures seek distinction on dimensions on which they rank themselves superior (Rosenmann et al., 2016).

However, we can also outline cases where the nation-building processes efforts fail to bring allegiance to a common idea of nationhood. We consider such states as unstable and in retrospect we observe numerous examples of countries splitting on the basis of internal divisions that nation-state building was unable to overcome. India, Pakistan, and Bangladesh are one such example where religious differences led to the separation of the larger parent nation. The Soviet Union is another example, where cultures of such diverse backgrounds as Estonia and Turkmenistan were forcefully brought together, but also failed to create a shared sense of nationhood, despite horrendous efforts to eradicate religion, relocate millions of people, and socialize everyone in the common communist ideology. In other cases, such as the United Kingdom, Belgium, and Spain, internal division on the basis of language and a history of violence has not led to dissolution of states, but they remain a continuous source of tensions that threaten the unity of the nation. This is analogous to family formation and dissolution. Over time, some families become dysfunctional; some may split, while others may prefer to stay together despite the existing tensions. Of course, this common knowledge does not lead us to conclude that the family is in general a meaningless social institution.

Cultural pluralism within nations may exist, but they do not undermine the concept of national culture. Accepting that national culture is the predominant value system in a society on which the societal institutions are based, such culture *must* exist, even if it is not equally supported by all cultural groups. Returning to the Soviet Union example, cultural maps after 1990 commonly place Russian, Ukrainian, and Belorussian cultures in close proximity (e.g., Inglehart & Baker, 2000; Schwartz, 2006; Welzel, 2013), while the Baltic countries usually

deviate significantly, although this deviation increased *after* the collapse of the Soviet Union (Akaliyski, 2019; Akaliyski & Welzel, 2020). However, as we conventionally measure national culture by aggregating its population's values, the total population of the first three, relatively similar countries, would weight 2/3 of the average, while that of the Baltic countries with less than 10 million inhabitants combined would make little difference to the average of the 300-million population of the then Soviet Union. Moreover, other Soviet republics whose values deviate from the core Soviet culture in the opposite direction to that of the Baltics also cancel each other out. Therefore, whether we measure Soviet culture as the predominant values of the core states or of those of all 15 republics makes a negligible difference for the overall cultural score of the Soviet Union, a logical outcome which we consider relevant for cross-cultural comparisons. Thus, our claim is not that regional cultures within states do not exist, but that they are subordinate to the mainstream national culture, which is foundational to the national institutions. Instead, regional cultures may belong to the tail-end of the cultural distribution, thus exerting only a small impact on where the national average falls, analogous to the little influence that they have on molding national institutions.

Despite individuals' belonging to, or affiliation with, diverse sub-national groups, these groups form fairly homogenous national clusters. In Figure 5, the respondents from five countries are divided into several groups per country. Then, these groups are plotted on the two cultural variables, emancipative and secular values. We chose Brazil, China, Germany, Nigeria, and the US because these are the most populous countries in each of the five most populous continents. Their large territories, population size, and *alleged* cultural diversity, as well as their unique geographic location and different level of economic development, serve as a suitable setup to test for the *actual* size of within-country cultural differences when zoomed out to the global scale.

Figure 5. Clustering of internal cultural divisions into their respective country clusters (full size figures with labels are presented in Figures A1 to A12 in the Appendix).

Evidently, the cultural groups within these five large countries practically lack any overlap with other nations' groups in the cultural space created by the two value dimensions. The internal cultural differences are meaningful and well-documented in previous research: for example, younger, more educated, urban, and politically left-leaning respondents are, on average, more emancipated and secular in most countries. *Nonetheless, these within-country groups remain within the gravitational field of their national culture rather than clustering with the respective groups of other nations.* For example, younger and highly educated Chinese respondents are closer culturally to their older and low educated compatriots than to younger and highly educated German respondents. The capital cities in all countries (Washington DC did not have a sufficient number of respondents) are more emancipated and secular, as we can expect, given their more advanced economies and exposure to diversity, but in each case, they are culturally closer to the smaller types of settlement from the same country than to the capital cities of other nations. Even the most emancipated US state, Massachusetts, is less so than the least emancipated German state, Brandenburg, while the least emancipated US state, Texas, is still more so than the most emancipated Brazilian state, Santa Catarina. Finally, despite a frequently present strong sense of distinct cultural identity, adherents of various religions, speakers of different languages, and people belonging to different ethnic or racial groups cluster more closely to the other groups within their *own* country than to the equivalent groups in *other* countries⁴. The largest differences instead are

⁴ The only exception here is the Muslim minority in Germany (largely corresponding also to speakers of "other" languages in Germany), which is significantly less emancipated and secular than the mainstream German culture. Islam, however, is not a traditional religion in Germany, and this population represents relatively recent migrants, mainly from Turkey. If we place Turkey on the same map, we would find that the Muslim minority in Germany positions between the mainstream German culture and the Turkish culture, which reflects the two gravitational fields to which this population has been exposed to. Thus, this exception provides strong evidence of how nations pull populations towards their culture's gravity centers: under the gravitational field of two different nations, people are pulled into the space in between.

between religious and non-religious respondents and those positioning themselves differently on the political left-right scale in the US. Even in these cases, the respective groups rank in the same order as their national means, which again underlines the gravitational pull of the national culture.

Earlier, we claimed that the variance-binding power of countries over individuals' attributes should, for methodological reasons, not be judged in *absolute* but in *relative* terms. We acknowledge that other gravitational pulls do exist, but the real question is how much they operate against nations as gravitational fields in their own right. Figure 6 answers exactly this question. The total individual-level variance in emancipative values explained by countries is modest at 31.5%. Adding three alternative cultural grouping units—religion, language, and ethnicity/race—contributes only a tiny 2.5% additional explained variance, despite two of them being far more fine-grained categorical variables than countries. This trivial additional explanatory power is due to two reasons: first, religion, language and ethnicity already overlap closely with nations in a political sense, and second, their lack of full overlap matters little for nations' cultural coherence.

To conclude, we add eight socio-demographic characteristics associated with value differences. Evidently, these variables contribute additional explained variance, but this is again a negligible 4.3% of the total, meaning that—even in their combination—alternate grouping units (whether spatial or functional) do not challenge nations as a gravitational field of culture. Not surprisingly, the bulk of the variation (61.8%) remains unexplained, an outcome we attribute mostly to random measurement error at the individual level, which—by definition—is entirely outside the reach of *any* grouping entity, including nations.

Figure 6. Variance in individual-level emancipative values explained by countries, other cultural groups and individuals' socio-demographic characteristics.

Note. N=52,992. Explained variance is estimated using the coefficient of determination in a stepwise regression. In the first model, predictors are only the country dummies. In the second model, other cultural groups are added: language (70 categories), ethnicity (98 categories) and religion (10 categories). These categories were dropped if consisting of fewer than 50 observations. In the third model, the following socio-demographic characteristics are added: settlement type (5 categories), sex (male and female), age group (3 categories), migrant status (binary), educational level (ISCED classification, 8 categories), occupation (12 categories), social class (subjectively defined, 5 categories), income levels (harmonized for the whole sample of countries, 10 categories). N is held constant in all models.

Conclusion and Discussion

This study addresses a widespread skepticism against treating nations as meaningful cultural entities. This reluctance stems from two apparent but, as we demonstrate, largely misinterpreted observations: that there is more cultural variation within nations than between nations and that nations are not homogenous culturally. Although these observations are correct on the surface, they do not qualify for an invalidation of nations as a meaningful unit of cultural analysis, for three reasons. First, culture is by definition a group-level

phenomenon, for which reason focusing on individual differences within cultures defies the very concept of culture. Second, we re-emphasize a well-documented but largely ignored shortcoming of mass survey data: that individual responses always include a large amount of random measurement error. Thus, by aggregating the data to the group level we remove this “noise” that otherwise inflates the within-country variation. Aggregation also cancels out other individual-level variation which is of no interest when the focus is on culture. Third, we propose a conceptualization of national culture as a gravitational field that pulls individuals into a demarcated orbit with increasing density to the gravity center. That is, nations are gravitational forces, rather than discrete containers of culture.

Furthermore, we note that individuals are nested within multiple solidarity circles, each exercising its own gravitational force and socializing its members into varying degrees of alignment with the socializing cultural unit under consideration. Thus, one cannot expect homogeneity at the individual level. Groups within nations are also pulled toward their smaller scale gravitational centers but remain within the larger gravity field of the national culture. Figure 7 presents a diagram depicting the individuals’ multilayered cultural embeddedness and the respective carriers of cultural information, all of which are potential units of analysis for addressing level-appropriate questions.

We support these claims with data from the largest source of cross-national cultural variables—the WVS—and two cultural dimensions of substantial importance—emancipative and secular values. We demonstrate that individual-level values cluster in concentric circles around the nation’s cultural gravity center. Moreover, we illustrate the miracle of aggregation whereby nations account for the bulk of the variation in values once individuals are aggregated at lower-level territorial units, such as towns and sub-national regions. Then we provide examples of how intra-national groups from five of the largest countries in the world gravitate around their national culture’s center to form fairly homogeneous national clusters.

Finally, we show that alternative and more fine-grained cultural units such as ethnicities, linguistic groups, and religions, as well as a list of individual characteristics add little explained variance to that already explained by national differences.

Figure 7. Layers of cultural embeddedness and of units of analysis

We presented several reasons for the nations' powerful gravitational force that underline their importance as cultural units: (1) Nations are historically evolved political units with a degree of shared identity, national symbols, and heroes; (2) their citizens are socialized to function successfully within their national border; (3) their national institutions disseminate their cultures through, e.g., national media channels and the educational system; (4) they provide the political, legal, and law-enforcement frameworks of society; (5) they determine the degree of economic development, health provisions, the social welfare system and existential security. In light of these national features, it is sensible to agree with Inglehart and Baker (2000) who note that *"Despite globalization, the nation remains a key unit of shared experience and its educational and cultural institutions shape the values of almost everyone in that society"* (p. 37).

Nevertheless, as Peterson et al. (2018) stress, “*While countries overlap with cultural groups to a considerable degree, the points where the correspondence is weaker are just as important. ... some countries have important subcultures and others are strongly linked to multi-country cultural groups*” (p. 1096). Accordingly, we have described why nation-state borders do not always contain homogenous and distinct cultural entities, and where we can look for sub- and supra-national cultural boundaries: (1) fluidity of national borders: ethnic, linguistic and religious minorities, and split, former nations; (2) international migration; (3) globalization and cross-country cultural diffusion; (4) supranational organizations and cultural zones. This patterning of intersecting cultural alignments acts upon the individual member of a nation with differential gravitational force. Such poly-cultural associations (Morris et al., 2015) all potentially impact upon individual citizens’ cognitions, emotions, and behaviors.

To conclude, we regard nations as powerful, but not the only, cultural gravitational force in play for the formation of individual values. For that reason, they should not be taken for granted as *the only* units of analysis for cultural studies. Hofstede et al. (2005, p. 19) warn that, “*In research of cultural differences, nationality—the passport one holds—should be used with care*” and they recommend that “*Where it is possible to separate results by religion, ethnic, or linguistic group, this should be done*” (p. 19). This separation is frequently performed with regard to well-known internal cultural divisions, for example, the former East and West Germany, French- and English-speaking Canada, Jewish and Arab Israelis, etc. (e.g., in Schwartz, 2006). This analysis of internal distinctions can be expanded to other countries whenever necessary for understanding the issue under examination. Although our study defends the meaningfulness of studying national cultures, we encourage vigilance in doing so and we hope that future research will increase efforts in identifying and analyzing intra-national cultural divisions.

In the interest of expediency and parsimony, especially in large-scale studies, national populations are meaningful units of analysis. However, for the sake of precision and advancing the field of research, attention could be devoted also to *sub*-national regions (e.g., Kaasa et al., 2014; Yamawaki, 2012) and non-spatial grouping units, including ethnicities, language groups, religious denominations, and social classes, as well as to *supra*-national grouping units such as geo-political areas. Ultimately, this grouping strategy depends on the interests of the researcher, the scope, and the objectives of the analysis.

Our analyses illustrate that nations have strong variance-binding power when it comes to emancipative values, one of the most powerful markers of cultural differences from the WVS. We note, however, with caution that this is just one illustration of the idea. In that regard, our study is limited but exactly that limitation opens the horizon for future research agendas to test if other psychological variables of significance exist in which the illustrated pattern applies in similar or different fashion.

Another avenue for future research would be to investigate the differences in the degree of cultural homogeneity within nations and its predictors along the lines of historical specificity, ethnic, religious, and linguistic fractionalization as well as societal modernization. Two viable hypotheses follow from our discussion: the strength of the nation's cultural gravitation field is positively correlated with the strength of the national identity, and secondly, that it is inversely related to a culture's degree of individualism. Since collectivist cultures exert stronger pressure on individuals to comply with societal norms, this may result in more homogeneous cultures, as long as a country has also achieved some level of urbanization and economic modernization (Minkov et al., in press).

In conclusion, we propose a conceptualization of national culture that does neither require full internal homogeneity nor complete external distinctiveness. National culture is not an almighty gravitational force; it is one with limited, albeit remarkable, power that generates

a degree—not a totality—of internal homogeneity and external distinction, and it does so to different degrees for different nations depending on historic and economic specificities. As a collective phenomenon, national culture has evolved to serve the purpose of justifying national institutions, establishing a “plausibility structure” (Berger & Luckmann, 1966) that impacts upon all individuals in a society to a greater or lesser extent. We call for reasserting the status of national culture as a real and consequential analytical concept.

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Appendix

Figure A1: Clustering of age groups into their respective country clusters.

Figure A2: Clustering of genders into their respective country clusters.

Figure A3: Clustering of education groups into their respective country clusters.

Figure A4: Clustering of income groups into their respective country clusters.

Figure A5: Clustering of social class groups into their respective country clusters.

Figure A6: Clustering of political left-right scale groups into their respective country clusters.

Figure A7: Clustering of groups by settlement type into their respective country clusters.

Figure A8: Clustering of regions into their respective country clusters.

Figure A9: Clustering of religious groups into their respective country clusters.

Figure A10: Clustering of linguistic groups into their respective country clusters.

Figure A11: Clustering of ethnic/racial groups into their respective country clusters.

Figure A12: Clustering of groups by migrant status into their respective country clusters.