

RESEARCH ARTICLE

Commemorating Geert Hofstede, a pioneer in the study of culture and institutions

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Abstract

This contribution commemorates Geert Hofstede, who recently passed away, as a pioneer in the study of culture and institutions. It does so by touching on some of the details of his personal life and connecting these with his professional career. The latter was devoted to developing the paradigm of national cultures based on empirical analysis, and to relate it to organisational behaviour. Closer scrutiny reveals that four distinct phases may be identified. Hofstede first started as an 'undercover' engineer and next moved to social psychology. During the second phase, he developed the first four dimensions of natural culture. During the third, Hofstede connected these national dimensions to organisational ones. During the last, he added two new cultural dimensions and developed additional practical applications. Finally, the article considers the reception, criticism, and further elaborations of Hofstede's contributions.

Key words: Cultural economics; Geert Hofstede; Institutional economics; National culture; Organisational culture

1. Introduction

Geert Hofstede, pioneer in the study of culture and institutions, was the first to develop a serious empirical model with measurable and quantifiable cultural values. The 'tangibility' of his cultural dimensions allowed a more consistent operationalisation of cultural values, and has spawned thousands of application and replication studies in various fields (Kirkman *et al.*, 2006). In particular, Hofstede's work has enabled a wide array of social scientists to conduct different empirical studies on the role of culture, test a variety of hypotheses left otherwise unexplored, and perform consistent comparative cross-country analyses (Beugelsdijk *et al.*, 2015; Davis and Williamson, 2016; Kaasa *et al.*, 2014). In addition, his study on values has been used by academics to illustrate the cultural embeddedness of formal institutions (e.g. Alesina and Giuliano, 2015; Gorodnichenko and Roland, 2017). Practical applications have been found by businesses operating in an increasingly connected and globalised world.

Hofstede ranks as one of the most cited social scientists in Europe, in between Karl Popper and Immanuel Kant, just below Karl Marx and Sigmund Freud. In the 1990s, the mechanical engineer and social psychologist dominated the economics citation-ranks whilst not even being an economist himself. In fact, one of Hofstede's typical identities was that he had none. He was driven by a desire to facilitate communication across cultures, which originated in his experience of war, and resulted in a relatively idealistic outlook and strong moral sense. He subsequently followed an unusual path from

¹This is remarkable, provided that values of collectives are rarely introduced as distinct variables (Jagodzinski, 2004). In fact, the definition problem is fundamental in values research.

²This is nicely illustrated in 'An Engineer's Odyssey', a documentary on Geert Hofstede that serves as an inspiration to some of the background elaborated in this article.

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technical engineering to cross-cultural psychology and beyond. Indeed, his career exemplifies the complementarity among disciplines, as knowledge of engineering led him to engineer social constructs, and next knowledge of social sciences led him to relate social constructs to economics and management outcomes.

Hofstede himself preferred to be characterised as *free-ranging professor* (in Dutch: 'scharrelprofessor'), crossing borders among sciences. In his own words: 'When you study cultures you have to be open to relevant information from various disciplines, from anthropology, from sociology, from social psychology, and even from individual psychology and from economics. All those disciplines play some role and without being an expert on all of them, one should at least be prepared to listen to what the experts from the other side say' (Hofstede and Fink, 2007: 15). One thing for sure, he was an inquisitive, stubborn, and pragmatic innovator, who wanted to make an international impact. As somewhat of a rebel, Hofstede worked 'incognito' as a mechanical engineer in multiple factories in metal and textile, before he started his job at IBM Europe. These life experiences certainly shaped him into the eager academic he later would be. Always striving for improvement, he oftentimes invited academics to criticise his work. He was convinced that 'if you have a message, you will find people who agree and people who disagree. If nobody disagrees, you have no message' (Siegmund and Smit, 2014: 4:20–4:32).

Gerard Hendrik Hofstede was born into an intellectual family in Haarlem, the Netherlands, on 2 October 1928. He was the son of Gerrit and Evertine Hofstede-Veenhoven and had two siblings. Hofstede married Maaike van den Hoek in 1955, the love of his life who, to paraphrase Hofstede, was responsible for 90 per cent of his success (Siegmund and Smit, 2014). Together they had four sons, ten grandchildren, and six great-grandchildren to date. Hofstede worked extensively with his oldest son Gert Jan Hofstede, a population biologist and professor of Artificial Sociality. The two co-authored several works, amongst which the second and third edition of Hofstede's best-selling book *Cultures and Organizations, Software of the Mind* (Hofstede *et al.*, 2010; Hofstede and Hofstede, 2005). Hofstede lived in Ede for the last years of his life. He passed away at the respectable age of 91 on 12 February 2020. Surrounded by his dearest family, he concluded 'I've had a good life' (Hofstede, 2020a).

Hofstede worked in various academic positions, for instance, as Chair in Cultural Diversity at Maastricht University, Professor of Management at EIASM, and Honorary Professor at the University of Hong Kong. Furthermore, Hofstede co-founded the Dutch Institute for Research on Intercultural Cooperation (IRIC), worked as Director of Human Resources at Fasson Europe in Leiden, was appointed as Dean of the Semafor Senior Management Program in Arnhem, and worked as Extramural Fellow at the CentER for Economic Research of the University of Tilburg. Quite unusual, Hofstede never worked or studied in the United States. Hofstede was bestowed with many honours and awards. Hofstede himself was particularly proud of the high number of citations to his work, and especially grateful to have been made an Honorary Fellow of the International Association for Cross-Cultural Psychology in 2006 as he finally felt accepted by fellow cross-cultural psychologists. He received an even more remarkable honour in 2011, when Hofstede was knighted by Her Majesty Beatrix, Queen of the Netherlands, in the Order of the Netherlands Lion (in Dutch: Ridder in de Orde van de Nederlandse Leeuw).

The remainder of this article is organised as follows. First, we briefly discuss the overall focus of Hofstede's work and elaborate the six dimensions of national culture. Second, we identify four different phases in the career of Hofstede thereby shedding light on the process that led him to construct his cultural dimensions. Thereafter, we discuss the reception and criticism of his work within different academic disciplines. We further highlight promising directions for future research. The final section concludes.

2. Overall focus

Hofstede was the first to conduct empirical cross-country research with measurable cultural values (Hofstede, 1980a). He moved away from classic typologies and contrasts, towards an analytical, multi-dimensional view on cultural values. Formed by his studies in mechanical engineering, system thinker Hofstede used the analogy of the way computers are programmed and described culture as *software of*

the mind: 'Culture consists of the unwritten rules of the social game. It is the collective programming of the mind that distinguishes the members of one group or category of people from others' (Hofstede et al., 2010: 6). At the same time, Hofstede strived to avoid over-socialised social anthropology, adding: 'It does not mean, of course, that people are programmed the way computers are' (Hofstede et al., 2010: 5). In other words, people's behaviour is only partially predetermined by their cultural values. Hofstede (2004: 272) frequently explained:

What I tell my students is: *dimensions do not exist*! Culture does not exist either. Dimensions, and culture in general, are *constructs*, products of our minds that help us to simplify the overwhelming complexity of the real world, so as to understand and predict it. They are useful as long as they do this, and redundant when they don't. And because the real world is so complex, there is not just one way to simplify it. Different authors' minds produce different sets of dimensions.

Hofstede stressed that country-level analysis cannot explain individual behaviour (Oyserman *et al.*, 2002). He often used a metaphor of flowers, bouquets, and gardens that represent different levels of attention to the gardener. In a similar way, individuals, groups, and countries represent different levels of attention of the social scientist (Hofstede, 1995). Put differently, countries are not king-size individuals. Yet if incorrectly considered, this may result in level-of-analysis issues:

Even quite respectable authors have gone astray on this issue. The problem is that each level is dealt with by a different social science discipline: countries by anthropology and political science, organizations and occupations by sociology, individuals by psychology. Most authors have been trained in one of these disciplines only. When they move into another discipline's territory, they are unaware of the different laws that apply there, or they think they don't need them. In this era of interdependence, choosing the right level of analysis and what happens when we move across levels should be part of the basic training for all the social sciences, which is rarely the case (Hofstede and Hoppe, 2004: 76).

Hofstede visualised the different levels at which cultural differences can manifest themselves in a so-called 'Onion Diagram'. The middle of the onion represents the core of culture, formed by values that represent 'a broad tendency to prefer certain states of affairs over others' (Hofstede, 1980a: 19). The surrounding onion layers show practices in the shape of rituals, heroes, and symbols (Hofstede, 2001).

The cultural dimensions can be briefly defined as follows. To begin with, Individualism versus Collectivism (IDV) is the extent to which members of society are expected to look after themselves and their immediate family. Second, Power Distance (PD) is the degree to which unequal power distribution and leadership by powerful organisations and institutions are accepted by the less powerful members of organisations and institutions. Hofstede 'borrowed' this term, as he called it, from Professor Mauk Mulder, a social scientist specialised in this concept (Mulder, 1976, 1977). Third, Masculinity versus Femininity (MAS) comprises social role division between genders and the extent to which the use of force is approved by society. Hofstede later referred to it as the 'taboo dimension' (Hofstede, 1998a). The fourth dimension is Uncertainty Avoidance (UAI), defined as the extent to which society tolerates situations that are uncertain and ambiguous. In subsequent publications, Hofstede presented two additional dimensions, namely Long Term Orientation (LTO) and Indulgence versus Restraint (IVR). LTO captures the relations that society maintains with its past, present, and future. Long-term-oriented societies continuously prepare for the future and encourage values such as thrift and perseverance, whereas short-term-oriented societies respect tradition, take the world as created, and are suspicious of societal change. Finally, IVR is defined as the extent to which members of society enjoy pleasures and express emotions. Together these six dimensions form the 6-D model of national culture.

To be sure, Hofstede was not the first to define the concept of culture. Already in the 18th century, philosophers such as David Hume and Immanuel Kant extensively studied and compared 'national character'. In the 19th century, culture claimed space within the economic debate when thinkers such as Marx Weber advocated a relation between society's moral values and its economic success, and Alexis de Tocqueville (rightly) predicted that the cultural traits that emerged in former British Colonies of North America would eventually spread (De Jong, 2009). Nonetheless, Hofstede was the first to define an empirical model of national cultural dimensions. Subsequently, other scientists put forward alternative dimensions. For instance, social scientist Shalom Schwartz surveyed individuals in 49 nations between 1988 and 1993. He identified seven values at the country level, very similar to Hofstede's cultural dimensions (Schwartz, 1994, 1999). Likewise, political scientists Ronald Inglehart and Christian Welzel distinguished two dimensions of cross-cultural variation based on an analysis of data on values and beliefs from the World Values Survey (WVS) for nearly 100 countries between 1981 and 2014 (Inglehart and Welzel, 2010). In addition, management consultant Fons Trompenaars developed seven cultural dimensions that correlated with IDV and PD (Trompenaars, 1993; Trompenaars and Hampden-Turner, 1997, 2012). He notably credits Hofstede for introducing social scientists to the subject of intercultural management, stating that Hofstede 'has made a major contribution to the field, and was responsible for opening management's eyes to the importance of the subject' (Trompenaars and Hampden-Turner, 1997: x). While not all dimensions found consistent support (Minkov, 2018), IDV tops the list as being the most robust in replications (Kirkman et al., 2006; Smith and Bond, 1999).

3. Four phases in the career of Geert Hofstede

Overall, Hofstede can be regarded as the first to use the paradigm of national cultures based on empirical analysis of cultural values, and to relate it to organisational behaviour. As such, he paved the way for increased attention to cultural values. One could identify four different phases in the life of Hofstede, which we will subsequently discuss.

3.1 Phase 1: from 'undercover' engineering to social psychology (1950-1967)

From his mother, Hofstede inherited a talent for Meccano, which are miniature metal or plastic parts from which mechanical models can be made. This interest continued throughout his technical education (Siegmund and Smit, 2014). After obtaining a degree in Mechanical Engineering from Delft Technical University in 1953, Hofstede joined the Dutch military service as a technical officer for two years. Upon the recommendation of his father, who wrote the reference book on machine parts at the beginning of the 20th century (original title in Dutch: *Het Naslagwerk Machineonderdelen*), Hofstede subsequently worked 'incognito' as a factory hand and eventually manager within several industrial companies. The 'undercover' engineer experienced the perspectives of the Dutch working class first-hand and learned how it felt to be managed. It sparked his interest in people and how they are marked by their experiences. For the rest of his life, Hofstede regarded it as his duty to make people aware of the differences in their values, thereby facilitating an understanding among groups of people.

In 1964, Hofstede pursued this second interest and started his PhD in Social Psychology at the University of Groningen. Whilst working on his thesis, Hofstede was hired as a psychologist on the international staff of the multinational technology company IBM Europe. His work in an international environment for six years raised awareness in Hofstede that people around the world have similar problems yet different solutions. These 'solutions', such as how a society handles inequality, fuelled his interest in cultural differences among people. In 1967, Hofstede obtained his degree in Social Psychology cum laude with his thesis 'The Game of Budget Control', by some regarded as the foundation of behavioural accounting. Hofstede was particularly proud of his thesis and continued to draw on the insights throughout his life.

3.2 Phase 2: IBM and the four dimensions model of national culture (1967-1980)

Upon completing his PhD, Hofstede continued to work for IBM Europe. The company wanted to preserve its strong market position, hence thought it important to gather insights into its employees' view on their daily work for the company. Hofstede was hired to observe the ways IBM personnel performed their tasks in different countries. He set out a companywide personnel survey with questions on matters such as salary, working relations and employees' expectations of their managers. Between 1968 and 1972, these standardised paper-and-pencil questionnaires were filled in by 117,000 employees in 72 countries in 20 languages. Back in those days, there were no spreadsheets nor statistical software packages. Instead, Hofstede had to use punch cards, IBM-mainframes, and matrixprinters. Hence, it was an astonishing effort to analyse the data to find certain patterns - something to keep in mind when critics would later question the 'simplicity' of his method. Hofstede analysed data of the 40 countries for which the number of employees was judged sufficiently large to allow reliable comparison. Because of IBM's structured organisation, Hofstede could take samples of employees to be similar in all respects but one (Hofstede, 1980a: 30). He applied exploratory factor analytic techniques to national averages, and regional, where the data allowed, and discovered that answers did not depend much on employees' function, gender, or experience. Rather, employees' country of origin indicated certain patterns.

When IBM showed no interest in further research, Hofstede resigned, sold their house, and travelled with his family across Europe for three years. During his travels, Hofstede worked as visiting lecturer at IMD in Lausanne, Switzerland in 1971. Subsequently, he held positions in organisational behaviour and management at the European Institute for Advanced Studies in Management in Brussels and at INSEAD in Fontainebleau, France. This allowed him to collect more data as he surveyed his students with questionnaires similar to those at IBM. Again, answers clustered and yielded cross-national patterns. In addition, Hofstede examined more than 40 cultural studies that supported his findings. These included works by pioneers such as Raymond Cattell, who was the first to determine dimensions of culture empirically (Cattell *et al.*, 1979), and Richard Lynn, who identified three personality dimensions (Lynn, 1971).

Hofstede finished his manuscript on cultural values in 1979 but ran into difficulties publishing his work, for it was regarded as too controversial. During World War II, cultural studies had received ample attention from governments that aimed to understand the psyche of enemy nations, but the concept of national character lost popularity thereafter (LeVine, 2001). The idea prevailed that identifying cultural and religious differences among people could be precarious. After 17 publishers refused the manuscript, Hofstede tried publishing house Sage, and received yet another refusal. To his surprise, however, this was soon followed by an acceptance letter from Sage's highest president, Sara Miller McCune, who suggested the now well-known title *Culture's Consequences: International Differences in Work-Related Values*. Muller McCune notes: 'When it went on to become one of the Financial Times London One Hundred Top Business Books of the Year, no one was prouder than I' (Siegmund and Smit, 2014: 1:03). First published in 1980, *Culture's Consequences* included the first four dimensions of national culture: IDV, PD, MAS, and UAI (Hofstede, 1980a).

3.3 Phase 3: from national culture to organisational culture (1980–1990)

The debate on the role of culture took flight when economists could not find an empirical explanation for the so-called 'Asian Miracle'. During the 1980s and 1990s, East Asian countries experienced extraordinarily high levels of economic growth. Taiwan, South Korea, Japan, Singapore, and Hong Kong outperformed the US and Western Europe. This triggered a debate on the origins of the East Asian successes and the general determinants of economic growth. Academics went in search of a proper explanation (Hofstede and Bond, 1988), and scholars such as Oliver Williamson started comparing Japanese with American organisations (Williamson, 1985). Culture gained more attention internationally and multinational companies searched for credible advice upon experiencing cultural difficulties abroad. International Business scholars such as Robert Bartels, Tom Peters, and Robert Waterman

were among the first to analyse successful management techniques and illustrated the relevance of culture in decision-making, business ethics, and international transactions (Bartels, 1967; De Jong, 2009; Peter and Waterman, 1982). By the time Hofstede got interested in these developments, he had been working on cultural dimensions for over 10 years. Thanks to his accumulated experience, he found himself in a position to provide useful answers.

It may thus come as no surprise that Hofstede's work was quickly integrated into international business studies that examined the implications of national culture for management and public policy. Between 1980 and 1986, Hofstede worked as director of human resources of Fasson Europe in Leiden, subsequently as dean of the Semafor Senior Management Program in Arnhem, the Netherlands. Hofstede and his colleagues started *The Organisational Culture Project*, surveyed value differences in 20 organisational units in the Netherlands and Denmark, and concluded that organisational differences did not follow cross-national cultural patterns. Whereas national culture was rooted in values acquired pre-puberty, organisational culture seemed to be rooted in practices acquired post-puberty.

In 1986, at the age of 57, Hofstede took his first job as academic as a professor of organisational anthropology and international management at Maastricht University, the Netherlands. During this time, Hofstede identified six mutually independent dimensions of corporate culture: process-oriented versus results-oriented, job-oriented versus employee-oriented, professional versus parochial, open versus closed systems, tightly versus loosely controlled, and pragmatic versus normative (Hofstede *et al.*, 1990). He showed that cultural differences can pose problems for the management of multicultural organisations to the extent that culture is intertwined with employees' expectations of institutions, their feelings of identity, and their types of thinking patterns (Hofstede, 1983).

3.4 Phase 4: the 6-D model of national culture (1990-present)

Whilst examining the economic success of East Asian countries, Hofstede encountered Michael Bond, a social psychologist specialised in Asian values. The two met at a cultural conference in India, during which Bond presented his study on students' values in 23 countries using questionnaires designed by Chinese scholars (Chinese Culture Connection, 1987). After Bond explained how he had derived four dimensions of national culture from his data, a bald man across the room stood up, praised Bond's focus and insights, yet regretted that he had analysed his data incorrectly. This was the beginning of strong connections between Hofstede and Bond.

The novelty of Bond's work was that his questionnaires, contrary to those of Hofstede, were constructed by non-Western scholars (Hofstede, 2004). Three of Bond's dimensions significantly correlated with Hofstede's dimensions. The fourth, named 'Confucian Work Dynamism', correlated with past national economic growth as fast-growing countries turned out to focus more on the long term. Together, Hofstede and Bond studied Chinese managers and workers and attributed the economic success of the so-called Asian Tigers to the Asian neo-Confucian tradition (Hofstede and Bond, 1988). This provided enough reason for Hofstede to include it as the fifth dimension to his framework under the name LTO, based on the Chinese Values Study (Hofstede, 1991, 2001). He included the new dimension in his second book, entitled Cultures and Organizations: Software of the Mind, first published in 1991, with a second edition in 2005, and a third in 2010 (Hofstede, 1991; Hofstede and Hofstede, 2005; Hofstede et al., 2010). Written as a popular science book based on Hofstede's research into organisational culture, it included practical solutions to solve conflicts among different cultural groups, and reached a broader public. Over 500,000 copies were sold around the world with translations in Bulgarian, Czech, Chinese, Danish, Dutch, Finnish, French, Georgian, German, Hungarian, Korean, Italian, Japanese, Norwegian, Polish, Portuguese, Romanian, Spanish, Swedish, and even Vietnamese. The book compares cross-cultural differences among 70 countries based on data of businesses, families, schools, and political organisations.

Next, Eastern-European sociologist Michael Minkov contacted Hofstede at the turn of the millennium. Whilst Minkov analysed WVS cross-country data, he found strong empirical and statistical evidence for a relationship between national culture and social indicators such as speed of economic

development, murder rates, happiness, religiousness, and educational achievements (Minkov, 2011). Most notably, Minkov discovered three cross-national dimensions of values, labelled Exclusionism versus Universalism, Monumentalism versus Flexumility (a new word combining flexibility and humility), and Indulgence versus Restraint (Minkov, 2007). The first dimension strongly correlated with IND, the second correlated moderately but significantly with LTO, and the third was new (Hofstede, 2011). Hofstede invited Minkov to co-author the third edition of *Cultures and Organizations* to include this new dimension (Hofstede *et al.*, 2010). Exclusionism versus Universalism was integrated into IND, Monumentalism versus Flexumility into LTO, and IVR was added as the sixth dimension. In addition, Hofstede and Minkov replicated the LTO analysis using WVS data. The two showed that LTO-WVS was a universal dimension of national culture, and subsequently provided empirically based scores for more countries (Hofstede and Minkov, 2012).

Hofstede's research took a more practical turn when he started studying organisational themes such as the impact of jobs on people, or power and control in organisations (Hofstede, 1994). He found that organisational culture can affect the performance of the organisation, and that communication and cooperation between management and employees influence the latter's attitudes and satisfaction (Hofstede, 1998b). With the help of his cultural maps, visualising how the countries in his dataset scored on all dimensions (Hofstede, 1980b), Hofstede expected that two kinds of tensions could occur within multinational organisations: 'One of the tensions could be that a corporate culture does not have a good fit with the national culture into which it is transferred, and the other, that individuals who are hired by these firms, may carry different personality characteristics' (Hofstede and Fink, 2007: 16). The management of multicultural organisations operating abroad can hence best achieve high business performance by adapting their management practices to the cultural expectations of the country in which they operate (Newman and Nollen, 1996).

4. Reception, criticism, and future directions

All things considered, Hofstede's work has shaped the study and methodology of multiple academic disciplines, and spawned thousands of scientific studies (Kirkman *et al.*, 2006). Hofstede explains: 'I have seen applications in the fields of history, medicine, social anthropology, social geography, law, political science, public administration, journalism, international sports, information technology, archives management, accounting, laboratory management, quality control, in ethics, in engineering education, in nuclear power regulation' (Hofstede and Hoppe, 2004: 78). Hofstede attributes the tremendous impact of *Cultures and Organizations* firstly to it being published at the right time, when the importance of national and corporate culture began to be recognised, and secondly to it being written in English and published by a good publishing house (Hofstede and Hoppe, 2004). A third reason may be that Hofstede effectively offered an impressive ready-to-go list of research questions.

4.1 Reception

The follow-ups to Hofstede's work can be divided into replications and applications. The former replicate Hofstede's research with other data or in the context of specific countries. The latter analyse whether social, organisational, and economic phenomena, such as savings rates, consumer behaviour, or corporate governance, correlate with the values dimensions. The dimensions are thereby used either as the main effect or as a moderator. As an illustration of a replication study, Beugelsdijk *et al.* (2015) replicate Hofstede's dimensions using WVS data, and find that cultural differences between country pairs are relatively stable. Another example is the paper by Minkov (2018) that tests the coherence and utility of Hofstede's cultural dimensions by means of secondary data, including the WVS, and a new survey across 56 countries represented by nearly 53,000 probabilistically selected respondents. Illustrations of application studies include Gorodnichenko and Roland (2017) and Tabellini (2008, 2010), who find that IDV relates to innovation and economic development. Hofstede himself contributed to this line of applications as well, for instance in the article with Robert McCrae that studies the

correlation between national norms of personality scores and the culture dimensions (Hofstede and McCrae, 2004). As a final example, Chui *et al.* (2010) show that IDV is positively associated with trading volume, trade volatility, and momentum profits.³

The idea of cultural dimensions was well received in the fields of psychology, marketing, and international business, yet it took much longer for it to be used in (international) economics. Whereas culture was mentioned in almost all editions of the *Journal of International Business Studies* since the mid-1980s, the *Journal of International Economics* rarely refers to culture, perhaps because it was considered too vague a concept. It is only since about the turn of the century that culture is mentioned in economics, first in terms of a country's religion (e.g. Guiso *et al.*, 2009, 2006) and trust level (e.g. Knack and Keefer, 1995), and later via Hofstede's work. The Kogut–Singh Index (Kogut and Singh, 1988) proved important here. In short, this is a measure of cultural distance based on the dimensions PD, UAI, IDV, and MAS. Since its establishment, cultural distance has come to play a central role in studies on the economic gravity model and companies' choices of entry modes, putting Hofstede on the map of economics (Cuypers *et al.*, 2018).

4.2 Criticism

Despite the influence and popularity of Hofstede's framework, it has also been widely criticised.⁴ Hofstede himself accepted and expected this:

You must be familiar with the work of Thomas Kuhn (Kuhn, 1970), who says in the 'Structure of scientific revolutions' that if there is a new paradigm, in the beginning everybody criticises it and in the end everybody uses it. It becomes normal science. My paradigm has now moved to the stage where it is now more or less normal science, so everybody uses it. Discussions are inside the paradigm (Hofstede and Fink, 2007: 18).

Nevertheless, Hofstede could not stand stupidity and often provided comprehensive replies to his critics. In the 2001 edition of *Culture's Consequences* (Hofstede, 2001: 73), Hofstede elaborates five standard criticisms of his approach.

To begin with, critics have argued that surveys are unsuitable for measuring cultural differences. A considerable critic in this regard is Brendan McSweeney who argues that the average number of questionnaires per country in Hofstede's database is too small and for some countries even minuscule (McSweeney, 2002). Likewise, the population surveyed is too narrow, i.e. exclusively from IBM and limited to marketing-plus-sales employees. In his direct response to McSweeney, Hofstede (2002) stresses that McSweeney reiterates old comments, focuses merely on details of the analysis of the IBM database, and does not write a word about the validation of country differences. In fact, already in the 1980 edition of *Culture's Consequences*, Hofstede explains how the process of external validation provides statistical proof that a significant part of the differences in answers is due to respondents' nationalities (Hofstede, 2002). In addition, all test-based cross-cultural researchers draw conclusions from central tendencies calculated from individual survey answers, according to Hofstede. Hence, he simply follows the common practice of statistical inference. Moreover, Hofstede has always emphasised that surveys should not be the only instrument used (Hofstede, 2001).

Secondly, it has frequently been argued that nations are not the best units to study cultures. For instance, Baskerville (2003) argues that Hofstede wrongly equates nation states with culture. In his reply, Hofstede (2003) explains that nations are usually the only units available for comparisons, which is better than nothing. Hofstede contemplates: if nation states cannot be equated with national

³Comprehensive reviews of studies that have applied Hofstede's framework are offered by Kirkman *et al.* (2006, 2017) and Beugelsdijk *et al.* (2017).

⁴Comprehensive reviews on the reception and limitations of Hofstede's work are provided by Kirkman *et al.* (2006, 2017), Taras *et al.* (2012), Beugelsdijk and Welzel (2018), and Beugelsdijk *et al.* (2018).

cultures, does this render conclusions about cultural differences based on nation-level data invalid, or could it be that the great majority of such conclusions still holds?

Thirdly, critics have argued that a study of the subsidiaries of one company cannot provide information about entire national cultures, so cannot be used to identify a causal link between national cultures and actions within countries. Again, McSweeney criticises the supposed rigidity of Hofstede's model and questions the mono-causal link between national cultures and actions within nations (McSweeney, 2002). In his reply, Hofstede (2002) reminds McSweeney that he himself has always emphasised that culture does not exist and never claimed that culture is the only thing to which to pay attention. Rather, the cultural dimensions are constructs that may be useful to explain and predict behaviour in case economic, political, or institutional factors cannot provide explanations. Likewise, the validations of the dimension scores do not imply assumptions about causality, as Hofstede already illustrated in the 1980 edition of *Culture's Consequences* (Hofstede, 1980a: 27). Rather, the country scores correlate highly with all kinds of other data, including results obtained from representative samples of entire national populations.

This third critical point relates to the endogeneity concern, hardly preventable in cross-country cultural research. Endogeneity is an issue due to reverse causality and the omitted variable bias. As an illustration, suppose cultural measures are used to explain individuals' tolerance towards corruption. Then it cannot be ignored that individuals' tolerance towards corruption might also determine some cultural aspects. Endogeneity problems would arise if corruption tolerance and culture were somehow co-determined by some latent factors that vary across regions within the same country and that the model is not able to identify. This may result in measurement errors (Alesina and Giuliano, 2015). To address this issue, previous studies have used instrumental variables (e.g. Cline and Williamson, 2017; Davis and Williamson, 2016), cultural measures at a narrower level (Alesina *et al.*, 2013; Kaasa, 2015; Kaasa *et al.*, 2014; Tabellini, 2010), or cultural measures at a cohort level (Beugelsdijk *et al.*, 2015).

The fourth standard criticism acknowledged by Hofstede (2001) is that the IBM data are old and therefore obsolete. Put differently, the precision of the scores on the cultural dimensions has decreased over time because of validity degradation related to slow yet considerable cultural change, as suggested by the WVS (Inglehart and Baker, 2000). This may imply that Hofstede's scores no longer represent world culture (Taras *et al.*, 2012). Hofstede answers that the cultural dimensions are assumed to have centuries-old roots, and that he only kept data that remained stable across two subsequent surveys (Hofstede, 2001). The cultural dimensions have been validated against external measurement, and recent replications show no loss of validity. What is more, Hofstede developed his dimensions in such a way that country scores could change over time, whilst keeping countries' relative position stable (Hofstede, 2001). Replication studies support that Hofstede's dimensions can be updated (Beugelsdijk *et al.*, 2015; Cline and Williamson, 2017; Kaasa *et al.*, 2014) without weakening the consistency with their original conceptual definition (Beugelsdijk *et al.*, 2015; Kaasa, 2015). Previous studies have also indicated that Hofstede's database can be revitalised with updated sets of meta-analytic cultural scores (Taras *et al.*, 2012).

Finally, a standard criticism is that four or five dimensions are not enough. As such, Hofstede welcomes additional dimensions that are both conceptually and statistically independent from the five dimensions already defined (Hofstede, 2001). Such new dimensions should be validated by means of significant correlations with conceptually related external measures.

4.3 Future directions

Surely, Hofstede's work remains central to the academic and practical field of international businesses. Illustrations of promising future areas of application include climate change, an extended or reduced role of governance, or the convergence versus divergence issue of cultural dimensions within the European Union. In addition, Hofstede's model enables academics to shed light on the different ways in which societies respond to the COVID-19 pandemic (Hofstede, 2020b). Future research

might '(a) broaden the conceptualization and operationalization of culture; (b) explore other "containers" of culture besides country; (c) consider and incorporate multiculturalism; (d) investigate cultural change; (e) move beyond self-report, survey-based assessments of culture and isolating one or two values; and (f) expand the focus on cultural value effects at the group/organization level' (Kirkman et al., 2017: 19). While Hofstede has mostly stimulated macro-level research (Jagodzinski, 2004), future studies may aim to bridge the gap between the macro- and micro-level (Hofstede, 2015).

Furthermore, Hofstede's work may facilitate further research that aims to disentangle the inter-play between culture and institutions. In his own work, Hofstede considered family, educational systems, political systems, and legislation as the primary institutions that perpetuate culture (Hofstede, 2001). Other researchers have examined the causes of cultural change, and find that it could be explained by micro characteristics such as age, education, and socio-economic status, as well as macro characteristics such as wealth and freedom (Steel and Taras, 2010). Particularly the IDV dimension has been used to show that culture and institutions interact and evolve in a complementary way (Alesina and Giuliano, 2015; Gorodnichenko and Roland, 2017). This is in consonance with the cultural embeddedness of formal institutions illustrated in the four levels of social analysis framework of Williamson (2000). In this regard, the inter-play between culture and institutions is not trivial and, more recently, has been advocated as a necessary and emerging economic research perspective (Tabellini, 2008). Since institutions play a role in addition to culture, Hofstede's work may connect cross-cultural psychology perspectives with institutional studies (Cline and Williamson, 2017; Davis and Williamson, 2016; Pitlik and Rode, 2016). All in all, there remain ample directions for future research following up on the work of Hofstede.

5. Concluding comments

With his pioneering research on cultural values, his efforts to connect multiple levels of analysis, and his finetuning of the various cultural value dimensions, Geert Hofstede has had a lasting impact on a wide range of academic disciplines and will most likely continue to inspire new research. He made culture more tangible, which allowed a more consistent operationalisation of cultural values in academia, coupled with enhanced constructive communication across disciplines. His example of using large databases is still followed by many. Since Hofstede's first publication in 1980, available data on country scores on cultural dimensions have increased, both by Hofstede himself and other academics in the field that used the data to explain economic patterns. This was encouraged by the fact that he effectively offered an impressive list of promising research questions, and this was taken up. Studies that identify cultural dimensions have an important contribution to make when it comes to improving dialogue and communication across cultures.

Nevertheless, critics have raised several concerns. Hofstede actively engaged in these discussions and met with many academics. Some of these meetings proved to be important turning points in the development of Hofstede's dimensions, which illustrates his ability to engage critically with his own work and to build on complementary contributions. Up to the present day, his assumptions as well as theoretical perspective continue to receive much scrutiny. Overall, one is left with appreciation for Hofstede's efforts to cross-national as well as disciplinary boundaries. In his own words: 'crossing into neighbouring disciplines can be very productive' (Hofstede and Fink, 2007: 17). Let this be an important lesson that continues to inspire academics across a wide variety of disciplines.

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