Cross-cultural research in cross-border regions:
verbal and non-verbal professional communication
Method and Survey Design

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Abstract. Cultural understanding, next to language competence, is critical for effective (international) communication. As nations are not necessarily homogeneous in terms of cultural characteristics, it is recommended to shift the (cross-) cultural research focus from nations to smaller units. The authors explain how a selection was made from 11 cultural dimensions, based on extensive literature research, in order to enable a cross-cultural research in a cross-border region; in this case a Euregion.

Keywords: Cross-cultural research; cultural dimensions; business communication; cross-border region

I. INTRODUCTION

In the globalising economy, civilisations, nations and regions across the world become increasingly mutually dependent. The increased interdependence of cultures causes phenomena such as “cultural penetration” and “cultural contamination” (Craig & Douglas, 2006) to occur, and leads to more obvious similarities between cultures. However, at the same time, differences between cultures do persist (e.g. Pinto, 2007; Pudelko & Harzing, 2007). Consequently, it is essential that international cooperation relies on adequate communicative strategies which take into account such differences.

This article describes the Method and Survey Design, which was developed by the authors to measure cultural differences and similarities between subregions of cross-border regions.

II. CROSS-CULTURAL RESEARCH AND ITS IMPACT ON VERBAL AND NON-VERBAL COMMUNICATION

In order to be classified as “adequate” a communicative strategy should be unaffected by miscommunication. Apart from being caused by language issues (e.g. Harzing & Pudelko, 2013), miscommunication is especially likely to occur if the culture of the (foreign speaking) interlocutor is not adequately dealt with. This is confirmed, in an exhaustive manner, by Merkin, Taras & Steel (2014) in their state of the art work concerning cross-cultural communication research.
Miscommunication attributable to cultural differences may also occur among (business) professionals (e.g. Ghauri & Usunier, 2003; Gudykunst, 1993, 2003; Gudykunst & Matsumoto, 1996; Haslett, 1989; Lam, 2013; Swift, 1991; Targowski & Bowman, 1988). So, even if both interlocutors share the same standard language or geographic variant\textsuperscript{1} as native speakers, culture may still cause communication to be ineffective and, consequently, (professional) relations might sour. It is crucial to be fully aware of the existence of similarities and differences between the cultures of interlocutors in order to correctly interpret (verbal and non-verbal) communication (e.g. Kluckhohn & Strodtbeck, 1961; Shadid, 2007), especially if one wants to cooperate well and/or live together in harmony (e.g. Angouri, 2010; Bennett, Aston & Colquhoun, 2000). Within the context of this article, communication should be understood in the broad sense of the term. Let us take the following example: if someone arrives only after the time the meeting was supposed to have started, some cultures expect an apology for the “lateness” while this might not be expected in another culture as it is perceived to be “usual and therefore non-ostentatious behaviour”. Behaviour (arriving after the scheduled start time) thus communicates a message, which might be decoded differently according to the specific culture (lack of respect or merely non-ostentatious behaviour). The anthropologist Hall even argues that there is no distinction between culture and communication (1959, 1976, 1990a, 1990b).

In 1963, Kroeber & Kluckhohn already collected 164 definitions of the “culture” concept, varying in the angle from which they approach the concept. The author’s team prefers the description given by Pinto (1994, 2000, 2007), especially because of the elements presented below. Culture is regarded as an evolving system of rules of interaction and communication. Thus culture is not conceived as static, but as dynamic (see also Craig & Douglas, 2006). Moreover, culture is considered to be passed down and internalised from generation to generation between persons who feel part of the same group. Pinto does not argue that this group is demarcated by nationality. Therefore he does not exclude possible geographic influences across borders with respect to cultural characteristics (e.g. Wilson & Hastings, 2005). According to Pinto culture affects, often unconsciously, the behaviour of the same group members. Hence cultural characteristics can be measured by means of statements related to verbal and non-verbal professional communication as a part of behaviour, thus enabling an empirical comparison across cultures.

\textsuperscript{1} For example: English in the UK and Ireland, Dutch in the Netherlands and Belgium (Flanders), German in Germany and Belgium (the German speaking community, East Cantons).
III. CROSS-CULTURAL RESEARCH IN CROSS-BORDER REGIONS

Whenever cultures are compared (e.g. with respect to norms for inter-individual interaction) it is beneficial to also consider factors such as geographic proximity, topography, and economic development because these factors are known to affect the unique cultural characteristics of a group of individuals (Schaffer & Riordan, 2003). To grasp genuine cultural similarities and differences, Craig and Douglas (2000) recommend making a shift from studying larger cultural units (e.g. nation) to studying smaller cultural units (e.g. region). In particular, they recommend studying units that group individuals who share the same native language (or dialect) and who interact frequently, being present in the same physical environment. By shifting to smaller cultural units one can avoid the false premise that individuals within the larger cultural units are homogeneous. In reality, members of the larger units are likely to be heterogeneous due to many factors including language used and economic development (Craig & Douglas, 2006).

As indicated by Schaffer and Riordan (2003), quantitative comparative research in which the nation is the focal cultural unit is widespread (in organisational behaviour). However, even if many scholars have indicated that within-nation cultural units are typically characterised by clearly distinct cultures (e.g. Coon & Kemmelmeier, 2001; Lenartowicz & Roth, 2001; Mcsweeney, 2002a), these smaller within-nation cultural units belong to “clusters” within the same geographic entity (nation or region) (e.g. Minkov & Hofstede, 2014) and not to ‘clusters’ crossing national borders. As a consequence, cross-cultural quantitative research on various within-nation cultures belonging to different nations is more likely to be of an exploratory rather than of a confirmatory nature.

For this kind of research, Euregions are appropriate research entities. A Euregion may be described as a European region straddling different nations which, in view of European unification, strives to consolidate itself in economic, social and cultural terms by stimulating cooperation across the borders. It is of primary interest to explore how cultural differences among subregions in a Euregion may possibly harm effective communication among (business) professionals.

IV. METHOD

4.1 Selection of Relevant Cultural Dimensions

In order to conduct a study on Euregions the literature on culture (and cross-cultural differences) was studied in depth to identify potentially relevant dimensions to be used in a quantitative cultural comparison of the subregions of a Euregion (e.g. Hall, 1976; Hofstede, 1980; House et al., 2004; Trompenaars, 1993; Trompenaars &
A selection of just one particular model of culture or a selection of a restricted number of cultural dimensions from the “culture theory jungle” (Nardon & Steers, 2009: 3) was deemed necessary in order to keep survey administration manageable. The author team adhered to the belief that “the most productive approach is to integrate and adapt the various models based on their utility” (Nardon & Steers, 2009: 8), especially because the team wanted to obtain the widest possible view of the sub-cultures of a Euregion. Relevant literature was consulted to get a thorough appreciation of the exact nature and variability of existing cultural dimensions. On the basis of the literature, 38 cultural dimensions were identified which may (at least potentially) be useful to determine clear cultural profiles for the subregions of a Euregion.

The selection criteria used to identify the final set of 11 cultural dimensions are mentioned below. More details are provided in Appendix A.

Step 1: The meaning attached to the two poles of homonymic (i.e. with the same name) cultural dimensions was studied in-depth. To this end, desk research was performed on formal definitions and descriptions and/or illustrations provided by all relevant authors (e.g. typical behaviour characterising each pole of a cultural dimension). If the homonymic dimensions had the same meaning, the first, and thus oldest source was adopted. Step 1 resulted in the elimination of two cultural dimensions (36, i.e. 38-2).

Step 2: Based on definitions, descriptions and/or illustrative examples provided, the different appellations of the cultural dimensions were compared between the relevant authors: did the authors’ cultural dimensions have essentially the same meaning or is there a large overlap in content? In case of a strong overlap, the author team selected only the “best source”, as judged by the clarity and completeness of the label provided in the source (step 2, phase A). In case of substantial (but not strong) overlap, the author team carefully considered whether the elimination of one cultural dimension was justifiable (step 2, phase B). Step 2 resulted in a further elimination of 16 cultural dimensions (20, i.e. 36-16).

Step 3: If an overlap was found between the meanings of several cultural dimensions of the same author, only one dimension was chosen. Step 3 resulted in the elimination of one more cultural dimension (19, i.e. 20-1).

Step 4: Some cultural dimensions were eliminated as the authors do not wish to submit the questions regarding the cultural dimensions to respondents as members of a subregion reflecting on their own culture’s behaviour/values. Indeed, descriptions of one’s own cultural group are typically (strongly) influenced by socially desirable responding (Maseland & Van Hoorn, 2009). Because respondents did not have to judge themselves or the culture they belong to, collecting data on cultural dimensions representing ‘individual difference variables’ (e.g. one’s values in life) did not make sense. Therefore, after step 4,
only 11 (i.e. 19 - 8) cultural dimensions were retained in this study. Detailed information about all specific decisions made can be obtained with the first author.

The final set of 11 cultural dimensions consisted of potential discriminators between subregions of a Euregion in terms of (business) behaviour and, more specifically, (business) communication. Each of the 11 cultural dimensions comprised two opposite poles. As explained in § 4.2, four statements were used for one cultural dimension (two statements to quantify each pole). All five cultural dimensions by “founding father” Hofstede (1980) as well as Hofstede & Hofstede (2006) were included: “large” vs. “small power distance”; “masculinity” vs. “femininity”; “high” vs. “low uncertainty avoidance”; “individualism” vs. “collectivism”; and “long-term” vs. “short-term orientation”.

The authors of this study are aware of the criticisms levelled at Hofstede with respect to the choice of dimensions as well as the sample composition, the demarcation of nations, the statistic nature of the measurements and the bipolarisation of the cultural dimensions (e.g. Baskerville, 2003; Fang, 2006; Goodeham & Nordhaug, 2001; Hampden-Turner & Trompenaars, 1997; Harrisson & Mckinnon, 1999; Harvey, 1997; Myers & Tan, 2002; Mcsweeney, 2002a, 2002b; Osland & Bird, 2000). Nevertheless, they believe that such a measurement of culture is entirely consistent with the definition of Pinto. Because of the dynamic nature of culture, the measurements, resulting from a survey sample that assesses past experience of the respondents, are by all means time-bound and should be re validated in the future.

In addition to the five cultural dimensions of Hofstede (& Hofstede) three cultural dimensions were retained from Trompenaars (1993): “internalism” vs. “externalism”; “universalism” vs. “particularism”; “achievement” vs. “ascription”. Furthermore, two cultural dimensions by Hall (1976), namely “high” vs. “low-context” and “polychronism” vs. “monochronism” were included as well. Finally, the dimension “formalism” vs. “informalism” by Gesteland (1996) was also selected because of its relevance for business communication across cultural borders (e.g. the connotations of formulations, use of titles). Unlike cultural dimensions proposed by Hofstede, Trompenaars & Hall, the author team is not aware of academic studies using the cultural dimension ‘formalism’ vs. ‘informalism’ proposed by Gesteland (1996).

4.2 Survey Design

In order to investigate cultural characteristics of subregions belonging to a larger cross-border Euregion, a generic survey was set up on the basis of 11 cultural dimensions selected (§ 4.1).

The first part of the survey collects relevant information on respondents’ detailed knowledge of the subregion he/she choose to deal with (e.g. number of contacts, descriptive information on these contacts, frequency, nature and duration of
the interaction with these contacts, profile of the contact persons in the subregion). Secondly, measures of regional culture (i.e. 44 statements on 11 cultural dimensions, two items for each pole) are collected. Thirdly, traditional background variables (e.g. age, gender) and those variables needed to assess the heterogeneous nature of the sample (e.g. place of birth, nation of residence) are collected.

In the core of the survey, the relevant questions from previous research on culture (e.g. Hall, 1976; Hofstede, 1980; Richardson & Smith, 2007; Trompenaars, 1993) were adapted in such a way that they allow for assessing relevant aspects of the professional (business) interactions with members of the focal subregion. As an illustration of such an adaption: in the explanation of “masculinity” versus “femininity” Hofstede & Hofstede noted that “boys play to compete” (2008: 139). In the survey, respondents are asked to what extent they (dis)agree with the statement: “In … (focal region inserted) men are very competitive. They want to outdo others”.

As indicated before, the survey includes four survey statements per cultural dimension, that is two for each pole. The respondents have to to score each statement on a 6-point rating scale with the following response options: “does not apply at all”, “does not apply”, “does not really apply”, “more or less applies”, “applies”, “absolutely applies” (no corresponding numeric values [e.g. “absolutely applies” = 6] were shown). Whenever they fail to provide an accurate answer, the respondents will be entitled to select the additional response option “no idea at all”.

To check the content validity of the cultural statements, eight experts from relevant fields (one sociologist, one socio-linguist, one clinical psychologist, two cross-cultural specialists [one psychologist, 1 linguist], one occupational psychologist, one marketeer, one educational scientist) were asked to (independently) study them. The suggestions for improvement made by the experts were mutually compared and discussed within the author team. If deemed necessary, adaptations were made according to the experts’ suggestions. A second type of validation was performed by a group of 10 business economics students who had successfully completed the course ‘intercultural business communication French’ at a Belgian university. The students were offered each of the 44 statements as well as the name of each pole related to a particular cultural dimension, all printed on 66 separate cards (i.e. 44 statements + 11 times 2 poles). In addition, students examined a separate, one-page sheet containing short descriptions of all 11 cultural dimensions. Each student was asked to group pairs of cards, namely one card listing a statement and another card listing a specific pole of a cultural dimension. If more than three students (out of 10) “mismatched” a statement, the statement was revised. Only four statements were eventually revised. This validation procedure is analogous to a procedure used by Langbroek & De Beuckelaer (2007).

The authors tested the multidimensional measurement scale on the Euregio Meuse-Rhine, the results of which were also included in the present issue of RIELMA.
V. CONCLUSIONS

Research of cultural differences should not be confined to nations but should also be examined for smaller cultural units and at a subregional level. The present study contributes to the study of such differences by constructing a multidimensional measurement scale that involves the use of eleven cultural dimensions. Each cultural dimension is measured by using statements that are substantively adapted to the groups being studied. In this way, differences between separate groups or segments of the population may be studied by measuring the perceptions of, say, business people, students or the general public.

Further research of intercultural differences, using the proposed method, will have to demonstrate the feasibility in the context of subregional comparisons.

Bibliography

Angouri, J. (2010) “If we know about culture it will be easier to work with one another: developing skills for handling corporate meetings within multinational participation”, Language and Intercultural Communication, Vol. 10, pp. 206-224.


### Appendix

#### Cultural Dimensions

<table>
<thead>
<tr>
<th>Source</th>
<th>Number</th>
<th>Cultural dimension</th>
<th>Retained / Eliminated (step)</th>
</tr>
</thead>
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<tr>
<td>Hall (1976)</td>
<td>1</td>
<td>High - low context;</td>
<td>Retained (step 3)</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Monochronism - polychronism;</td>
<td>Retained (step 2, phase A)</td>
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<td></td>
<td>3</td>
<td>Space;</td>
<td>Eliminated (step 2, phase B)</td>
</tr>
<tr>
<td>Hofstede (1980, 2006)</td>
<td>4</td>
<td>Individualism – collectivism;</td>
<td>Retained (step 2, phase A)</td>
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<tr>
<td></td>
<td>5</td>
<td>Power distance;</td>
<td>Retained (step 1)</td>
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<td>6</td>
<td>Uncertainty avoidance;</td>
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<td></td>
<td>7</td>
<td>Masculinity – femininity;</td>
<td>Retained (step 2, phase A)</td>
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<td></td>
<td>8</td>
<td>Long-term – short-term orientation;</td>
<td>Retained (step 2, phase A)</td>
</tr>
<tr>
<td>Trompenaars (1993)</td>
<td>9</td>
<td>Universalism - particularism;</td>
<td>Retained (step 2, phase A)</td>
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<tr>
<td></td>
<td>10</td>
<td>Specific-diffuse;</td>
<td>Eliminated (step 3)</td>
</tr>
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<td></td>
<td>11</td>
<td>Past-present-future; Synchronic-chronological;</td>
<td>Eliminated (step 2 and step 4)</td>
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<td></td>
<td>12</td>
<td>Internalism - externalism;</td>
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<tr>
<td></td>
<td>13</td>
<td>Communitarism;</td>
<td>Eliminated (step 2, phase A)</td>
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<td>A</td>
<td>B</td>
<td>A</td>
<td>A</td>
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<td>14</td>
<td>Neutral - emotional;</td>
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<td>15</td>
<td>Achievement - ascription;</td>
<td>Retained</td>
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<td>16</td>
<td>Power;</td>
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<td>17</td>
<td>Security;</td>
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<td>Hedonism;</td>
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<td>Benevolence;</td>
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<td>Rigid-time – fluid-time;</td>
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<td>Deal-focus – relationship-focus;</td>
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<td>Expressive - reserved;</td>
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<td>Formal - informal;</td>
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<td>Assertiveness;</td>
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<td>38</td>
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**Note.** The number of the step is mentioned in the paper text.

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