

# Cross-cultural research in a cross-border region: verbal and non verbal professional communication. The case of the Euregio Meuse-Rhine

Martine Verjans, Gilbert Swinnen, Marieke Huysmans  
*Hasselt University*

**Abstract.** In this study, the cultures of the five border subregions of the Euregio Meuse-Rhine (EMR) were measured and compared by means of a survey research. The results indicate that the subregions differ most in terms of the (in)formal way of their business interactions. Furthermore, discrepancies were found for the cultural dimensions ‘externalism-internalism’, ‘masculinity-femininity’ and ‘monochonism-polychronism’.

The results, and more specifically the observed cultural differences, allowed a first exploration of possible effects on professional verbal and non-verbal business communication. This study also shows the importance of cultural research at sub-regional level.

**Keywords:** cross-cultural research, cultural dimensions, business communication, cross-border region

## I. INTRODUCTION

This study takes up the challenge to compare cultures of geographic units which are embedded within different nations but, at the same time, also belong to neighbouring regions. The cultural units investigated comprise the five subregions of the Euregio<sup>1</sup> Meuse-Rhine (EMR): the province of Limburg in Flanders (Belgium), the province of Liège in Wallonia (Belgium), the German-speaking community (eastern part of Belgium), the province of Limburg (Netherlands) and the city of Aachen and surroundings (Germany)<sup>2</sup>. In the remainder of this paper these subregions will be referred to as: Limburg (BE), Liège (BE), the German-speaking community (BE), Limburg (NL), Aachen (DE), respectively.

## II. PROBLEM BACKGROUND

An extensive literature search (“Web of Science”) revealed no single published study providing insights into the cultural profile of the five EMR subregions. However, based on the examination of numerous (cross-)cultural studies

---

<sup>1</sup> “Euregio” (and not Euregion): term used in official documents in all languages of the Euregio Meuse-Rhine.

<sup>2</sup> Euregio Meuse-Rhine: 10400 km<sup>2</sup>, 4 million inhabitants, founded in 1976.

of the nations to which the EMR subregions belong (Gelade, Dobson & Auer, 2008; Green, Deschamps & Páez, 2005; Hoeken et al., 2003; Hofstede & Hofstede, 2006; Hofstede, Van Deussen, Mueller & Charles, 2002; Matsumoto, Yoo & Fontaine, 2008; Schwartz, 1992, 2007; Spector, Cooper & Sparks, 2001; Tinsley, 2001; Triandis et al., 2001; Van Oudenhoven, Mechelse & De Dreu, 1998; Van Oudenhoven et al., 2008; Waldman et al., 2006), one might contend that the EMR subregions should have clearly divergent cultural profiles. Indeed, they are linguistically heterogeneous (French, two variants of Dutch and of German). They are also part of four different larger units (i.e. three nations: Belgium, Germany and the Netherlands, as well as two larger within-nation regions: Flanders and Wallonia in Belgium). On the other hand, one may also expect that these five EMR regions exhibit a strong cultural communality. Factors that may have led to this strong cultural resemblance are the globalisation in general (*e.g.* cultural penetration/contamination), the geographic proximity and the institutionalised cooperation since 1976. Moreover, a similar affinity or “spacial identity” (Laven & Baycroft, 2008) of these subregions may be due to historical factors, more specifically the fact that EMR formed an administrative entity for a long time until the 19th century (Mertens, 2006). Prior research (Hastings & Wilson, 2001) also strengthened the idea that border regions are subject to a strong mutual influence.

This study assumes that differences in the extent to which each EMR subregion scores on a set of 11 cultural dimensions may, at least potentially, impact the effectiveness of business communication.

### III. TARGET POPULATION AND SAMPLE

This study being part of a more elaborate research<sup>3</sup> aimed at identifying key differences and similarities between the cultures characterising the five different EMR subregions to which business professionals belong. For this purpose perceptions of adult Europeans with regard to these subregions were collected using an electronic survey.

---

<sup>3</sup> The study presented in this paper is part of a more elaborate research effort aimed at encouraging students to participate in EMR exchanges and/or stay there for work, thus avoiding brain drain. Moreover, the research effort was also intended to encourage tourism in the EMR. Therefore, this research included three equivalent surveys (three target groups): students, business people with professional contacts and people with more general contacts. If a respondent met the requirements of several target groups, they were asked to just answer the survey they could answer best with regard to the whole subregion. Because of the deadlines imposed by the project (because of EU funding), priority had to be given to the analysis of student data and the use of these results for the development of e-modules for semi-autonomous blended learning. For this reason, the analysis of the data related to business professionals was carried out at a later stage.

The present study uses the measurement model proposed by Verjans, Swinnen, Huysmans & Caers (2015) in the present issue of the *RIELMA* journal.

The respondents were asked to give their view on a EMR subregion they knew well, for having worked there and having participated in meetings and/or having other professional relations in the subregion with whom they communicate (*e.g.* by phone, e-mail), having lived or studied there, having friends/relatives there or any combination of these four reasons. If respondents were (born and) raised in a EMR subregion, they were *not* (as members of their own subregion's culture) asked to reflect on their own culture's behaviour/values because descriptions of one's own cultural group are typically (strongly) influenced by socially desirable responding (Maseland & Van Hoorn, 2009).

Being very familiar with one of the EMR subregions was a strict condition to participate. This study aimed at obtaining considerable variability in terms of respondents' background variables, including age, sex, education, and profession. To reach maximum coverage (and thus also maximal variability), a wide range of institutional contacts were used: companies (with the help of employers' and sector organisations), government agencies (like public agencies for the purpose of import and export, employment offices), high schools, universities and graduate schools (staff, students, alumni, temporary foreign students and lecturers), municipalities, social clubs (*e.g.* service clubs). These institutions provided e-mail addresses of possible respondents and/or recruited them.

A database of 12,224 potential respondents was set up. In contrast to many studies, in which only students are sampled (Merkin, Taras & Steel, 2014), the target group of this study consists of three categories: business professionals, students and general public (see also footnote IV). For the three categories three equivalent surveys were created. All potential respondents received an electronic link to their specific category-survey. In total, 3,307 respondents responded positively by submitting the survey electronically, producing an initial response of 27.1%. A subset of 997 surveys turned out to be useful for statistical analysis as all other surveys contained very limited information. Actually, of the 2,310 respondents who did not fully complete the survey, 822 only answered the first and the second question (profile of the respondent). As Hoerger (2010) indicated, most participants who fail to fully complete an electronic survey drop out in a very early stage. Of the 997 surveys filled in completely, 109 turned out to be invalid for statistical analysis because of inconsistent answers. Therefore, the author team retained 888 usable surveys.

However, given that this contribution only makes use of survey responses by business professionals, the subset of 307 valid surveys completed by business professionals was used to statistically compare EMR subregions. The sample included 146 respondents for Limburg (BE), 55 for Limburg (NL), 21 for the Aachen

region (DE), 77 for the province of Liège (BE) and 8 for the German-speaking community (BE). Since the number of completed surveys collected from the German-speaking community (BE) was largely insufficient, it was decided to exclude this subregion from further statistical analysis. As a result, 299 responses were eventually used in the analysis. Since the number of responses is still small for some subregions, the authors had to take this into account when selecting the method of analysis (see § 4).

The survey was administered using survey design and administration software (SNAP software; see [www.snapsurveys.com](http://www.snapsurveys.com)). All potential respondents received an email inviting them to participate. They could answer in English, French, German or Dutch. The original survey was created in (Flemish) Dutch and translated adequately into English, French and German following the principles outlined in the forward translation - back translation method (Brislin, 1970). It was ascertained that the Dutch version of the survey was correctly understood by respondents from Belgium and the Netherlands, just like the German version by respondents from Germany and Belgium.<sup>4</sup>

#### **IV. ANALYTICAL APPROACH**

In order to compare the four EMR subregions on eleven cultural dimensions, an overall score was computed that measures the degree to which the EMR subregions are perceived as possessing each cultural characteristic. The computation is based on survey data from four statements (two per pole). For instance, the overall measure of “formalism” should take into account the bipolar nature of the cultural dimension, including the pole “informalism”. Bipolarism is adequately accounted for by adding the scores obtained for the two statements measuring formalism and subtracting the scores obtained for the two statements measuring informalism. The resulting “overall score” obtained for an EMR subregion reflects the extent to which people in that EMR subregion are perceived to deal with each other in a formal way. In the same way, the overall scores for all other cultural dimensions were computed. The directionality of the overall score is chosen arbitrarily. Obviously, the decision to either compute “informalism minus formalism” or “formalism minus informalism” does not affect the results from this study. Since each statement is measured on a 6-point scale, the sum of scores for each pole is between 2 and 12. As a result, the difference between the poles “formalism” and “informalism” is represented by a number between minus 10 and plus 10. The point zero, which occupies the middle position between minus 10 and

---

<sup>4</sup> A second translation was made by native speakers of Dutch of the Netherlands. In comparing the two versions, the formulation, unambiguous to both Dutch speaking communities, was selected. The same procedure was adopted for both linguistic variants of German.

10, does not necessarily indicate the “neutral point” (neither formal nor informal). It is possible that the two groups (of two) statements differ in the extent to which they measure an extreme position on each pole, implying that the zero point is not really “neutral” but somewhat formal or informal. As the quantifications of cultural dimensions are used to compare EMR subregions on cultural dimensions, and are not meant to make statements about absolute scores on the underlying cultural dimension, the possible non-neutrality of a scale value of zero is no issue of concern.

Once adequate quantifications had been obtained for all 11 cultural dimensions the mean dimension scores were calculated and compared across EMR subregions. Because one cannot impose a (univariate) normal distribution onto the sampling distribution around mean scores for each EMR subregion, the statistical comparison relied on nonparametric (distribution free) procedures. Violations of the normality assumption are a cause of concern, especially in comparative studies including small sample sizes (*e.g.* in the Aachen region  $N$  is limited to 21). The overall significance test (*i.e.* across all four EMR subregions) relied on the nonparametric Kruskal-Wallis independent samples test. Its significance value (*i.e.*  $p$  value) is computed with permutation tests such that accurate  $p$  values are obtained even if the normality assumption is violated (Moore, McCabe & Craig, 2012). All nonparametric procedures (Kruskal-Wallis and permutation tests) were carried out using *R* code (R Development Core Team, 2011) as supplied by the *R* package “coin” (Hothorn, Hornik, Van De Wiel & Zeileis, 2008). To adequately examine perceived cultural differences across EMR regions 95% bootstrap percentile confidence intervals (more specifically: bias-corrected accelerated [BCa] intervals) were computed along with the mean dimension score. The rationale underlying the technical procedures is elaborated on in the next two paragraphs.

Bootstrap methodology allows the confidence interval of a statistic of interest (in this study the sample mean score for particular cultural dimensions in all four EMR subregions) to be inferred from a large number of resamples (of the same size as the original sample) drawn from the original sample (*i.e.* drawing *with replacement*, meaning that, after being drawn, an observation is put back in the original sample). The ordinary percentile bootstrap uses the resamples to repeatedly estimate the sample mean. These estimates are rank-ordered to approximate the cumulative distribution function (CDF). Next, the 2.5<sup>th</sup> ( $\alpha/2$ ) and 97.5<sup>th</sup> ( $1-\alpha/2$ ) percentiles of the CDF are considered the lower and upper bounds of the 95% ( $1-\alpha$ ) confidence interval of the sample mean (Wood, 2005). The bias-corrected and accelerated (BCa) bootstrap, which was introduced by Efron (1987) and used in this study, adjusts for both bias and skewness in the bootstrap distribution.

In order to test the (null) hypothesis stating that the four EMR subregions do not differ on a focal cultural dimension, exact  $p$  values were produced by permutation tests. Permutation tests rely on the following principle. Resampling (*i.e.* drawing new

samples from the original sample) is done in a way which is consistent with the null hypothesis that no difference exists between the EMR subregions. More specifically, the labels indicating the EMR subregions as found in the original sample were interchanged (*i.e.* “reshuffled”), while leaving the dimension scores at their original position. The reader who wants to learn more about bootstrap methods and permutation tests is referred to Good (2005) and Wood (2005).

## V. RESULTS

### 5.1 EMR Subregions’ Scores on Cultural Dimensions

When significant discrepancies are found between the four EMR subregions, they always indicate differences in the way the different EMR regions are perceived by people from another EMR subregion or from any place in Europe (see § 3).

The results in Table 1 indicate that only three out of the eleven cultural dimensions turned out to be statistically different across the four EMR subregions. With a (conventional) upper bound for the  $p$ -value equal to 0.05 (5.0%), “informalism”, “externalism” and “masculinity” are found to differ across EMR subregions.

Table 1: Kruskal-Wallis rank sum test of cultural differences between subregions

Cultural Characteristic	Chi-squared (d.f.=3)	P value (two-sided)	Holm - Šidák corrected p
Polychronism – Monochronism	9.4	0.0243	0.1786
Individualism – Collectivism	3.0	0.3859	0.8578
Externalism – Internalism	13.2	0.0043	0.0422
Universalism – Particularism	2.0	0.5751	0.8805
Power distance	0.7	0.8628	0.8805
Masculinity – Femininity	12.7	0.0054	0.0476
Uncertainty avoidance	7.5	0.0578	0.3408
Ascription – Achievement	3.9	0.2711	0.7943
Long term - Short term orientation	2.3	0.5074	0.8805
High context - Low context	7.3	0.0633	0.3245
Informalism – Formalism	30.0	0.0000	0.0000

The next paragraphs provide more detailed insights into differences between pairs of EMR subregions. Table 2 presents the results of the permutation tests conducted. Figures 1a to 1d provide (BCa) bootstrap confidence intervals around the dimension sample means computed for each EMR subregion.

Table 2: Permutation tests of differences between subregions: 2-sided exact p-value and sequential Holm - Šidák correction (between brackets)\*

Dimension	Limburg-BE	Limburg-BE	Limburg-BE	Limburg-NL	Limburg-NL	Liège-BE
	Limburg-NL	Liège-BE	Aachen-DE	Liège-BE	Aachen-DE	Aachen-DE
Informalism	0.4564	0.0123	0.0000	0.0188	0.0000	0.0025
	<i>(0.4564)</i>	<i>(0.0364)</i>	<i>(0.0000)</i>	<i>(0.0372)</i>	<i>(0.0000)</i>	<i>(0.0100)</i>
Externalism	0.9945	0.0013	0.0203	0.0318	0.1124	0.7302
	<i>(0.9945)</i>	<i>(0.0078)</i>	<i>(0.0975)</i>	<i>(0.1213)</i>	<i>(0.3007)</i>	<i>(0.9272)</i>
Masculinity	0.0025	0.5202	0.2654	0.0622	0.0018	0.2026
	<i>(0.0124)</i>	<i>(0.5202)</i>	<i>(0.4604)</i>	<i>(0.2265)</i>	<i>(0.0108)</i>	<i>(0.4930)</i>
Polychronism	0.0246	0.2349	0.0971	0.3608	0.0082	0.0470
	<i>(0.1171)</i>	<i>(0.4146)</i>	<i>(0.2639)</i>	<i>(0.4146)</i>	<i>(0.0482)</i>	<i>(0.1752)</i>

\*Only those cultural dimensions are mentioned, for which a difference was found at the 5% level; such differences are displayed in italic.

Figure 1a: Formalism-Informalism

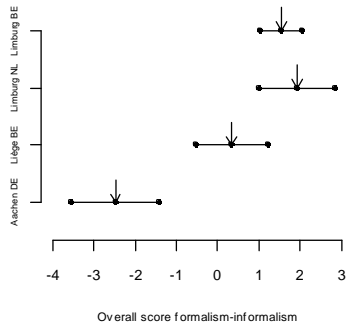


Figure 1b: Internalism - Externalism

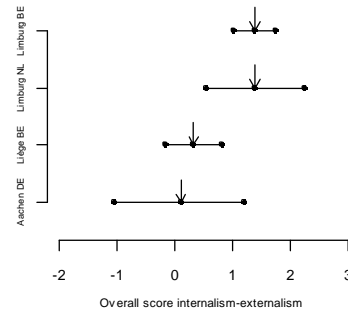


Figure 1c: Femininity - Masculinity

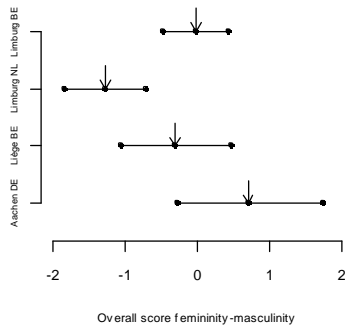


Figure 1d: Monochronism - Polychronism

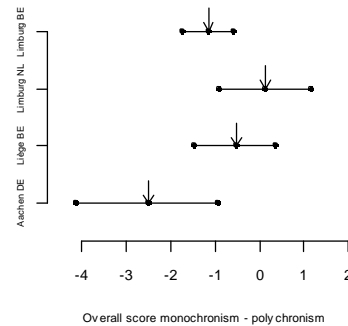


Figure 1: 95% Bootstrap (BCa) confidence interval for 4 cultural dimensions (\*)

## 5.2. Analysis of differences between subregions

### 5.2.1 “Formalism – informalism”

According to the Kruskal-Wallis test (see corrected  $p$ -values in Table 1), the differences between EMR subregions appear to be most distinct for the cultural dimension “formalism-informalism”. Figure 1a indicates sample dimension means (*i.e.* overall scores) using an arrow on each line; the dot symbols to the left and right represent the lower and upper limits of the 95% (BCa) bootstrap confidence interval, respectively. As mentioned in the Analytical Approach (§ 4), dimension means range from -10 to 10. As explained before, these dimension means have comparative value only. Figure 1a and the results of the permutation tests in Table 2 indicate that both Limburg (BE) and Limburg (NL) are perceived to be less formal in their business communication in comparison to Liège (BE) and Aachen (DE). For Liège (BE), in turn, business relationships are perceived to be less formal than in Aachen (DE).

### 5.2.2 “Internalism – externalism”

Figure 1b and the  $p$  values (Table 2) indicate that, in comparison to Aachen (DE) and to a lesser extent Liège (BE), Limburg (BE) has a significantly higher score for ‘externalism’.

### 5.2.3 “Femininity – masculinity”

Figure 1c and Table 2 show a clear distinction in ‘femininity - masculinity’ between Limburg (NL) versus Limburg (BE) and Aachen (DE). More specifically, Limburg (NL) is perceived to be situated on the “femininity” pole with regard to communication in a business context.

### 5.2.4 “Monochronism – polychronism”

For the remaining cultural dimensions, the Kruskal-Wallis test did not indicate any significant differences at the 5% level. However, the pairwise comparisons among regions indicated a significant difference for the cultural dimension “monochronism – polychronism” (see Table 2).

The statistical tests for the dimension “monochronism – polychronism” point out that Limburg (NL) is rather polychronic (see Figure 1d). More specifically, the position of Limburg (NL) is significantly different from that of Aachen (DE), which is monochronic.

## VI. DISCUSSION

The results of the statements with respect to non-verbal communication (behaviour) may have repercussions for verbal communication. An attempt is made



to interpret the significant differences by referring to the relevant statements in the survey as well as typical behaviours characterising the poles of the dimension. Such typical behaviours were taken from prior research on culture and management literature. This will be further investigated in the discourse analysis (see § 7).

### **6.1 'Formalism - informalism'.**

To illustrate the impact on business communications between subregions, the results indicate that, in contrast to Limburg (NL) and Limburg (BE), it is important to respect business professionals' titles (including academic titles) in Aachen (DE) and, to a somewhat lesser extent, in Liège (BE). In the more formal cultures, several aspects in communication deserve attention. Superiors are addressed formally: with "vous" instead of "tu" (French; in Liège (BE)) and with "Sie" instead of "du" (German; in Aachen DE) and surroundings). Likewise, employees are not supposed to address superiors by their first name. Moreover, belonging to higher social class commands respect. In order to obtain successful business contacts, it is also important to show one's own status by means of symbols (e.g. a stylish car). In business contacts, formal dress is expected (e.g. a suit and no jeans). Connotations of expressions (e.g. the nuance between *voulez-vous* and *pourriez-vous* when a request is made in Liège (BE), a nuance which is rather unusual in Limburg (NL) and Limburg (BE)) and formulas in letters and/or e-mails (e.g. the use of *Sehr geehrter* at the beginning of a letter in Aachen (DE), even when the addressee is someone the sender knows well professionally) need to be considered as well. Furthermore, in Aachen (DE), the formal Konjunktiv II (e.g. *Möchten Sie mitkommen?*) is also used in requests.

The unique personality of an individual in a particular EMR subregion might of course deviate from the typical profile encountered in that particular EMR subregion (Hofstede and Hofstede, 2006). A specific individual from Aachen, for example, may be rather informal by nature, but he/she is (most likely) well aware of the fact that most others in his/her EMR subregion are used to a higher level of formalism. This is true for all examples of interactions referred to when interpreting the statistical results.

### **6.2 "Internalism - externalism"**

The results indicate that for Limburg (BE), especially in contrast to Aachen (DE) and – though to a lesser degree - Liège (BE) business professionals in general find it more obvious to make an effort to speak the (foreign) language of the business partner (e.g. face to face: negotiations, meetings; telephone conversations). Before making a final business decision in meetings, business professionals in Limburg (BE) will try to reach a compromise during negotiations rather than to convince others of their own point of view. Being confronted with opposition may impede

their commitment to achieve their goals. People in Limburg (BE) are also more likely to be modest than to be complacent with themselves, their organisation or their product. The company strategy might therefore be more customer-oriented than product- or production-oriented.

### **6.3. “Femininity – masculinity”**

Unlike in a masculine culture, in a feminine culture such as Limburg (NL) the gender roles overlap (Verjans, Swinnen, Huysmans & Caers, 2015), implying that men and women may display the same behaviour, for instance being soft and modest. In a masculine culture, only women are supposed to be soft and modest. In the most feminine EMR region, Limburg (NL), private reasons are easily taken into consideration to postpone a business engagement. Moreover, business professionals in Limburg (NL) tend to consider their private lives more important than building a career. In addition, male employees in Limburg (NL) are not perceived as being that competitive. In a feminine culture it is important to have a pleasant atmosphere at work and to build good professional relationships. Business appointments are unlikely to take place during overtime. People work to live, rather than the opposite.

### **6.4 ‘Monochronism – polychronism’**

In a monochronic culture such as Aachen (DE), business professionals find it very disturbing when an appointment is postponed at the last minute. During a meeting all the items are dealt with in a structured way and in a predefined time span. Business meetings in Aachen start on time. Discussing deadlines is an important element in business communication and the agreements made should be observed. Business professionals are result-oriented, time is money.

## **VII. CONCLUSIONS AND FUTURE RESEARCH**

The authorities promote the (business) cooperation with/between the subregions of the Euregio Meuse-Rhine. Effective communication, which is crucial to good (business) cooperation, assumes an understanding of cultural (dis)similarities of the EMR subregions, primarily among business interlocutors of the EMR and also with the EMR’s professional business partners from outside of the EMR.

Therefore, the aim of this explorative study was to compare the cultures of these small geographic units on the basis of 11 cultural dimensions which have an impact on (verbal and non-verbal) business communication. These subregions are neighbouring areas, but embedded within different nations. As mentioned in the Introduction, one could anticipate strong communalities between subregions due to the globalisation, the subregions’ proximity, and their institutionalised cooperation.

On the other hand, because cross-cultural research on the nations or regions to which the EMR subregions belong has revealed substantial cultural differences one could also expect such differences to characterise the different subregions.

Even if there was insufficient response for the German-speaking community, excluding this subregion from further statistical analysis, the results of the survey, which have been completed by business professionals, yield first indications on how to avoid miscommunication in contacts with the four largest subregions within the EMR. The results indicate that three out of eleven cultural dimensions are statistically different between the four examined EMR subregions, namely: “formalism – informalism”, “externalism – internalism”, “masculinity – femininity”. The Aachen (DE) subregion exhibits deviations from the other subregions, as it is more internalistic and formal. Furthermore, the Limburg (NL) subregion diverges from the others in being more feminine. Additional interpretations of these differences were provided in the Discussion section. It has been concluded that the most important (*i.e.* the most outspoken) significant difference was found for the “formalism – informalism” dimension. As differences in formalism – informalism may, at least potentially, lead to serious misunderstandings, especially in verbal business communication, it is crucial to design effective communication strategies by adequately dealing with this cultural difference. It is also recommended to include this dimension in further cross-cultural research.

The pairwise comparisons of the subregions showed a significant difference for an additional fourth dimension, “monochronism – polychronism”, between Limburg (NL), polychronic, and Aachen (DE), monocronic. As far as all other (*i.e.* seven) cultural dimensions are concerned, the EMR subregions turned out to be highly similar.

The awareness of cultural differences but also similarities is crucial to the development of effective, *i.e.* result-oriented, communication strategies. Such awareness prevents miscommunication. However, in order to avoid miscommunication even more, a discourse analysis should follow the present quantitative study. Such a follow-up study aims to specifically determine whether differences in communicative patterns and styles can be established. In other words, it will be determined whether and how the cultural differences which were found in this study manifest themselves in (spoken) corpora of the EMR subregions. In this way, it is possible to elucidate how cultural differences can lead to miscommunication in (oral) interaction.

Additionally, it might be of interest to verify whether the results of discourse analysis (professional business meetings) are consistent with results of other studies about the relationship between cultural values (individualism, high power distance, masculinity and uncertainty avoidance) and communication styles and patterns (see also Merkin, Taras & Steel, 2014).

The aim is also to further examine the differences between the three groups of respondents in the elaborate research of which this study is a part, i.e. whether the perceptions of culture are the same for business people, students and the general public.

It is also recommended that further research consider the dimension “Indulgence vs. Restraint” identified by Minkov and added to Hofstede’s model (Hofstede, Hofstede & Minkov, 2010).

And finally, on the basis of the data of this research but limited to the five Hofstede dimensions, the author team intends to investigate whether the cultural homogeneity across the EMR border subregions cluster is greater than de homogeneity across within-nations clusters or “in-country clusters” (Minkov & Hofstede, 2014) to which the EMR subregions belong.

### **Bibliography**

- Brislin, R.W. (1970) “Back-translation for cross-cultural research”, *Journal of Cross-Cultural Psychology*, Vol. 1, pp. 185-216.
- Efron, B. (1987) “Better Bootstrap Confidence Intervals and Bootstrap Approximations”, *Journal of the American Statistical Association*, Vol. 82, pp. 171-185.
- Gelade, G. A., Dobson, P., Auer, K. (2008) “Individualism, Masculinity, and the Sources of Organizational Commitment”, *Journal of Cross-Cultural Psychology*, Vol. 39, pp. 599-617.
- Good, P. (2005) *Permutation, Parametric, and Bootstrap Tests of Hypotheses*, *Springer Series in Statistics*, New York, Springer Science + Business Media.
- Green, E. G., Deschamps, J.-C., Páez, D. (2005) “Variation of Individualism and Collectivism within and between 20 countries: A Typological Analysis”, *Journal of Cross-Cultural Psychology*, Vol. 36, pp. 321-337.
- Hastings, D., Wilson, T. M. (2001) *Borders, Frontiers of Identity, Nation and State*, Oxford/New York, Berg.
- Hoeken, H., Van Den Brandt, C., Crijns, R., Domínguez N., Hendriks B., Planken B., Starren M. (2003) “International Advertising in Western Europe: Should Differences in Uncertainty Avoidance be Considered when Advertising in Belgium, France, The Netherlands and Spain?”, *Journal of Business Communication*, Vol. 40, pp. 195-218.
- Hoerger, M. (2010) “Participant Dropout as a Function of Survey Length in Internet-Mediated University Studies: Implications for Study Design and Voluntary Participation”, *Psychological Research, Cyberpsychology, Behavior, and Social Networking*, Vol 13, pp. 697-700.
- Hofstede, G., Hofstede, G. J. (2006) *Allemaal andersdenkenden: omgaan met cultuurverschillen*, Amsterdam/Antwerpen, Uitgeverij Contact.
- Hofstede, G., Hofstede, G. J., Minkov, M. (2010) *Cultures and organizations: Software of the mind*, New York, McGraw-Hill.
- Hofstede, G., Van Deusen, C. A., Mueller, C. B., Charles, T. A. (2002) “What Goals Do Business Leaders Pursue? A Study in Fifteen Countries”, *Journal of International Business Studies*, Vol. 33, pp. 785-803.
- Hothorn, T., Hornik, K., Van De Wiel, M. A., Zeileis, A. (2008) “Implementing a Class of Permutation Tests: The coin Package”, *Journal of Statistical Software*, Vol. 28, pp. 1–23, <http://www.jstatsoft.org/v28/i08/>
- Laven, D., Baycroft, T. (2008) “Border regions and identity”, *European Review of History – Revue européenne d’histoire*, Vol. 15, pp. 255-275.
- Maseland, R., Van Hoorn, A. (2009) “Explaining the negative correlation between values and practices: A note on the Hofstede-GLOBE debate”, *Journal of International Business Studies*, Vol. 40, pp. 527-532.

- Matsumoto, D., Yoo, S. H., Fontaine, J. (2008) "Mapping Expressive Differences Around the World: The Relationship Between Emotional Display Rules and Individualism Versus Collectivism", *Journal of Cross-Cultural Psychology*, Vol. 39, pp. 55-74.
- Merkin, R., Taras, V., Steel, P. (2014) "State of the art themes in cross-cultural communication research: A systematic and meta-analytic review", *International Journal of Intercultural Relations*, Vol. 38, pp. 1-23.
- Mertens, E. (2006) *30 jaar Euregio Maas – Rijn*, Stichting Euregio Maas – Rijn.
- Minkov, M., Hofstede, G. (2014), "Clustering of 316 European Regions on Measures of Values: Do Europe's Countries Have National Cultures?", *Cross-Cultural Research*, Vol. 48(2), pp. 144-176
- Moore, D. S., McCabe, G. P., Craig, B.A. (2012) *Introduction to the Practice of Statistics*, New York, Freeman.
- R Development Core Team (2011) *R: A Language and Environment for Statistical Computing*, Vienna, R Foundation for Statistical Computing, online <http://www.R-project.org> (accessed on 17 Mai 2012).
- Schwartz, S. H. (1992) "Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries", *Advances in Experimental Social Psychology*, pp. 25, 1-65.
- Schwartz, S. H. (2007) "Universalism Values and the Inclusiveness of Our Moral Universe", *Journal of Cross-Cultural Psychology*, Vol. 38, pp. 711-728.
- Snap, online, [www.snapsurveys.com](http://www.snapsurveys.com).
- Spector, P. E., Cooper, C. L., Sparks, K. (2001) "An International Study of the Psychometric Properties of the Hofstede Values Survey Module 1994: A Comparison of Individual and Country/Province Level Results", *Applied Psychology: An International Review*, Vol. 50, pp. 269-281.
- Tinsley, C. H. (2001) "How negotiators get to yes: Predicting the constellation of strategies used across cultures to negotiate conflict", *Journal of Applied Psychology*, Vol. 86, Issue 4, pp. 583-593.
- Triandis, H. C., Carnevale, P. J., Gelfand, M. J., Robert, C., Wasti, S. A., Probst, T., et al. (2001) "Culture and deception in business negotiations: A multilevel analysis", *International Journal of Cross Cultural Management*, Vol. 1, Issue 1, pp. 73-90.
- Van Oudenhoven, J. P., Mechelse, L., De Dreu, C. K. W. (1998) "Managerial Conflict Management in Five European Countries: The Importance of Power Distance, Uncertainty Avoidance, and Masculinity", *Applied Psychology: an International Review*, Vol. 47, pp. 439-455.
- Van Oudenhoven, J. P., De Raad, B., Askevis-Leherpeux, F., Boski, P., Brunborg, G. S., Carmona, C., Barelds, D., Hill, C. T., Mlačić, B., Frosso, M., Rammstedt, B., Woods, S. (2008) "Terms of abuse as expression and reinforcement of cultures", *International Journal of Intercultural Relations*, Vol. 32, pp. 174-185.
- Verjans, M., Swinnen, G., Huysmans, M., Caers, E. (2015), "Cross-cultural research in cross-border regions: verbal and non-verbal professional communication", *Revue Internationale d'Etudes en Langues Modernes Appliquées/International Review of Studies in Applied Modern Languages*, Vol. 8/2015, pp. 117-126.
- Waldman, D. A., De Sully, M.S., Washburn, N., House, R.J. et al. (2006) "Cultural and leadership predictors of corporate social responsibility values of top management: a GLOBE study of 15 countries", *Journal of International Business Studies*, Vol. 37, pp. 823-837.
- [For reviewers and the editorial board only: Web of Science, <http://apps.webofknowledge.com/WOS>
- Wood, M. (2005) "Bootstrapped Confidence Intervals as an Approach to Statistical Inference", *Organizational Research Methods*, Vol. 8, pp. 454-470.

**Martine VERJANS** - professor of Business French and Intercultural Communication at the faculty of Business Economics – Hasselt University (BE); director of the Center of Applied Linguistics (R&D) ([www.uhasselt.be/ctl](http://www.uhasselt.be/ctl)); scientific coordinator of several European projects for 20 years; general coordinator of the "Olympiade du Français et de la Francophonie" and of the "Tournoi mondial de français par internet" ([www.olyfran.org](http://www.olyfran.org)); co-founder and President of the Board of Directors of

CommArt International, spin-off of Hasselt University ([www.commart.eu](http://www.commart.eu)); R&D fields: cross-cultural communication, blended learning, Business French.

**Gilbert SWINNEN** - professor emeritus at the Faculty of Applied Economics, Department of Marketing & Strategy, Hasselt University in Diepenbeek, Belgium. He received his Ph. D. in Applied Economics at Antwerp University. He published in journals like the Journal of the Academy of Marketing Science, International Journal of Research in Marketing, Journal of Business Research, Journal of Occupational and Organizational Psychology, and Statistica Neerlandica.

**Marieke HUYSMANS** - researcher, sociolinguist, holds a Master's degree in African languages and cultures (Ghent University) and a MANAMA degree in Gestion du développement (Université de Liège). She joined CTL-UHasselt in 2010 and was principal researcher of the past INTERREG IVA project INTERCOM and carries out research and course development activities in several European projects among which the ESF project "Culturele Diversiteit op de Vlaamse Werkvloer". Her research interests lie in the field of cultural characteristics (impact on verbal and nonverbal communication).

