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SCIENTIFIC MATERIALS

Genesis, development and actuality of the Social Representation theory in more than fifty years (1961-2011 and beyond): the main paradigms and the "modelling approach"





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Facet Theory:

Design, Analysis and Applications

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Modeling Social Representations of European Nations and European Union: A Facet Theory Approach

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Abstract. The goal of the *EuroSkyCompass* research program is to analyze how cross-national positioning is expressed via attitudes and the social representations (SR) of geopolitical entities (nation, Europe, world, European States), conceived as a system of interrelated representations in relation to North-South-East-West geo-political parameters.

Results obtained by WASSA1 and Facet Analysis conducted on the data collected in 2003, one year before EU enlargement, via an Attitude Scale towards 38 European States, (EU Members and Non) took into consideration the subjects' nationality and the polarity indexes as attitudinal measures derived from the Associative Networks with regard to nation, Europe and world.

Key words: Social Representations, Europe

1. Theoretical introduction

The following results reconstruct the social representations (SR) that university students from 9 States, EU members (Austria, Finland, France, Germany, Great Britain, Italy, Portugal, Spain) and non EU members (Tunisia), had about Europe, the EU, and European countries in 2003. These results were extrapolated from a larger body of data collected via a multi-method questionnaire within the scope of a research project (EuroSkyCompass¹) as follow-up of a previous cross- national study on the topic conducted by de Rosa (de Rosa, 1996).

In this paper we are offering some empirical results concerning cultural "belonging", value systems, social representations (SR) and attitudes towards Europe and European States. We assume that the different nationalities and cultural contexts, the various levels of subjects' identification with their own

¹ See website htpp://www.europhd.psi.uniroma1.it.

nation and Europe, the systems of social categorization associated with those identifications will synthesize and be translated into attitudes towards other European States.

Using Facet Theory (traditionally linked to research on attitudes) to study relationships between national belonging and attitudes towards other European countries, EU members or non-members, is crucial to understand Europe, EU and European States SR dynamics.

2. Methodology

Data Collection Tools: For data collection we designed a questionnaire, which integrates projective tools (Associative networks, EuroSkyCompass, Silent Map of Europe) and structured tools (questions on socio-demographic features, questions on countries representing European regions and a seven point Attitude Scale referring to the 38 European countries).

In this paper, we will discuss results about the Attitude Scale and the Associative Networks for the stimuli "nation", "Europe", "world" in terms of Polarity Indexes. The Associative networks (de Rosa, 2002), is a verbal association task. To evaluate the implicit attitudinal component in the representational fields, de Rosa suggests the Polarity Index (P.I.) that is determined from the subjects' valence (positive/negative/neutral) for the elicitations of key words.² Results vary from -1 to +1 and are recoded in three classes according to their value as: *negative* (1), *neutral* (2) and *positive* (3).

Data Analysis Techniques: In order to better understand the complex interrelationships of such a large data set, a multi-dimensional tool known as Smallest Space Analysis was used. This technique, developed by Louis Guttman, presents the data graphically, portraying the structure of the data. First, a correlation matrix is calculated using the non-linear, regression-free Monotonicity Coefficient.

Points are plotted according to a principle that can be intuitively understood: the higher the correlation between two items, the closer they are on the map and, conversely, the lower the correlation, the further apart they are (Levy 1985). After the basic map is generated, other variables, such as subpopulations, may be introduced as "external variables" (Cohen and Amar 2002). The external variables are plotted, one by one, in such a way that the original structure is not affected.

Aims and Hypothesis: We assume that the positioning of subjects of different nationalities vis-à-vis the concepts of "nation", "Europe" and "world", measured

² PI formula: IP = (N positive words - N negative words) / (total N of words)

in terms of Polarity Index, is in a significant relationship with the system of attitudes that the same subjects express towards European countries.

In consideration of the supposed relationship between the cultural "belonging" of the subjects interviewed (all citizens of EU-15 countries, with the exception of Tunisians) and attitudes towards European states, we conducted a Facet Analysis, according to the following Mapping Sentence, taking into account the status at the time of data collection, in 2003, as *EU Member* or *Non-EU Member* of each of the 38 European countries inserted in the Attitude Scale.



3. Results

Sample Profile: The results presented in this section refer to responses from 2228 university students (aged from 18 to 27), of which 57% were men from the above mentioned EU and non-EU countries.

The distribution of the average values calculated relative to the Polarity Indexes (P.I.), for the 10 sub-samples towards "nation", "Europe", "world", shows that, independent of cultural "belongings", the attitudes towards the stimulus "world" are significantly more negative than those towards the stimuli "nation" and "Europe" (values between 2.0 and 2.6).

On the other hand, the attitudes towards "Nation" and "Europe" show average values respectively between 2.3 and 2.9, and 2.4 and 2.8.

Table I shows the average rating received by each of the 38 countries.

The highest rating was given to Italy, the lowest to Albania. More generally, we find positive attitudes towards countries from the European Mediterranean, Scandinavia and Northern Europe and negative attitudes towards Eastern Europe. The best-liked countries did not correspond to the perception of the economically more powerful countries, which even among themselves did not have homogenous results.

Table 1. Average of responses to question: "To what extent do you like each	of
the following countries (1 = not at all, 7 = very much)"	

HIGHEST-RATED		MID-RATED		LOWEST-RATED	
Country	Average rating	Country	Average rating	Country	Average
Italy	5.34	Germany	4.35	Lithuania	3.42
Spain	4.98	Iceland	4.27	Romania	3.39
France	4.90	Belgium	4.00	Slovenia	3.38
Greece	4.84	Hungary	4.00	Bulgaria	3.36
Portugal	4.75	Austria	3.95	Slovakia	3.33
Netherlands	4.74	Luxembourg	3.91	Macedonia	3.27
Sweden	4.74	Czech Rep.	3.89	Ukraine	3.22
Ireland	4.64	Poland	3.82	Federal Rep. of Yugoslavia	3.18
Great Britain	4.60	Turkey	3.68	Moldova	3.15
Norway	4.60	Russia	3.58	Bosnia	3.05
Switzerland	4.54	Estonia	3.50	Belarus	2.97
Finland	4.46	Latvia	3,47	Albania	2.69
Denmark	4.44	Croatia	3.45		

In fact, Germany is the least liked among those defined as "Big Bosses" (Great Britain, France, Germany), while France has average results more in line with those of the Mediterranean countries.

Results via WSSA1: The SSA data map concerning the Attitude Scale towards European countries is shown in Fig.1. This is, at the same time, the respondents' cognitive and attitudinal map towards the various countries (EU members and Non-members). In this map we can recognize four regions that correspond to the geopolitical structural configuration of Europe: North-West, South-West, North-East and South-East. The western half of the map shows more distinction between the countries, while many of those in the North-East are grouped closely together, indicating a lack of distinction between them in the minds of the respondents. Russia is set somewhat apart from other Eastern European countries.

Turkey is isolated in the South-East region, reflecting the special role played by this country in the political discourse in media agenda setting.

Figure 2 shows the same map with the subjects' nationalities added as external variables.

We can recognize three basic attitude types: those who are located in the same region as their home country (English, Austrians, Finns and Italians), those located in a different region from their home country (Spanish, French, and Germans) and North African immigrants, located at the periphery of the map. This result would require extensive comment and theoretical discussion.

Figure 3 shows the basic map with sub-populations of subjects according to 3 Polarity Indexes (P.I.), negative, neutral and positive, related to "nation", "Europe" and "world" introduced as external variables³.

³ In figure 3 IP49 = Polarity Index for Nation; IP50 = Polarity Index for Europe; IP51 = Polarity Index for World.



Fig. 1. SSA of the results of rating 38 European countries



Fig. 2. SSA of the results of rating 38 European countries with respondents' nationality as external variables



Fig. 3. SSA of the results of rating 38 European countries with respondents' polarity indices as external variables

We underline that the Positive P.I. for "nation", "Europe" and "world" are associated with the West and South on the chart, where the group of European Mediterranean countries is located.

At the edge of the South-East quadrant, where Turkey alone is positioned, only the Negative P.I. for "Europe" is shown. The countries usually defined as Eastern European are, instead, in a quadrant in which are shown the Negative P.I. for "nation", inside the cloud of internal variables, and the Neutral P.I. for "nation" outside. The other European countries (North Central Europe) are placed in the North-West quadrant, where the Neutral P.I. are shown for "world" and "Europe" and, on the border with the North-East quadrant, the Neutral P.I. for "nation".

Facet Analysis: Figure 4 presents the results of the Facet Analysis, in which, consistent with the Mapping Sentence offered, 2 facets were identified concerning attitudes expressed towards European countries; one for the countries that in 2003 were already members of the EU and one for those countries that in 2003 were not yet EU members. One year later in 2004, 10 of the latter became part of the enlarged EU.



Fig. 4. SSA of states with EU membership as Facet

The exceptions are Switzerland and Norway, which are found in the area of EU members even though they are not EU members. These positions can be explained by the effect of the cultural "belonging" of the subjects interviewed. All of the subjects interviewed were from countries that are geographically and culturally close to these two Non-EU states. Particularly Norway is in an area where the Scandinavian countries are closely grouped together and the sub-sample of Finns is shown as external variable (fig.2).

Finally, if we break down the attitudinal dimension expressed by the averages and the structural aspect of the S.R. (fig.1, 2, 3), it clearly emerges that the lowest average values are attributed to countries that make up the non-EU member facet.

4. Conclusions

Concerning the attitudes of subjects from 10 different cultural "belongings" towards European countries, the results discussed above confirm the complexity of that system of attitudes and its sensitivity to various influence factors.

On the basis of the results discussed, cultural "belonging" seems to be expressed more via identification of citizens with the block of EU member countries (even if differentiating among themselves via the North-South border) than via identification with their own country, with a few exceptions. On one hand, the WSSA1 results in which subjects' nationality is introduced as external variable (fig. 2) in which only some cases show a significant relationship between the attitude towards the 38 Countries and the subject's nationality.

On the other hand, the results of the Facet Analysis (fig.4) show a significant effect of EU membership on the attitude of subjects who are mainly EU citizens towards the EU.

In addition to the structure of the data concerning attitudes towards European countries, we referred to the direction of those attitudes (using the averages) that is positive towards countries of the EU member facet.

Faced with this idealized representation of Europe, one cannot say that the WSSA1 results support the representation of a strongly integrated Europe: in contrast with the region occupied by the European Mediterranean countries (delineated by the triangulation of the 3 Positive P.I., for nation, Europe and world, and the negative polarity index for world), we find those areas occupied respectively by the Eastern countries, delineated by the Negative and Neutral P.I. for nation and the Negative P.I. for Europe and those occupied by all the other European countries marked by the position of Neutral P.I. (for nation and Europe).

References

- Cohen, E. H., & Amar, R. (2002). External Variables as Points in Smallest Space Analysis: A Theoretical, Mathematical and Computer-Based Contribution. Bulletin de Méthodologie Sociologique, 75, 40-56.
- De Rosa, A. S. (1996). Reality changes faster than research. National and supranational identity in Social Representations of European Community in the context of changes in International relations. In: Breakwell & Lyons (Eds.) Changing European Identities. Advances in Social Psychology (pp. 381-402). Oxford: Butterworth Heinemann.
- De Rosa, A. S. (2002). The "associative network": a technique for detecting structure, contents, polarity and stereotyping indexes of the semantic fields, *European Review of Applied Psychology*, 52, (3-4), 181-200.
- Guttman, L. (1982) Facet Theory, Smallest Space Analysis and Factor Analysis, Perceptual and Motor Skills, 454, 491-493.
- Levy, S. (1985) Lawful Roles Of Facets In Social Theories. In Canter, D. (Ed.) Facet Theory: Approaches To Social Research (pp. 59-96). New York: Springer Verlag,









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