The Generativity and Attractiveness of Social Representations Theory from Multiple Paradigmatic Approaches in Various Thematic Domains: An Empirical Meta-theoretical Analysis on Big-data Sources from the Specialised Repository “SoReCom ‘A.S. de Rosa’ @-library”

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This paper is a systematic meta-theoretical literature review of publications inspired by the theory of social representations from diverse paradigmatic approaches in various thematic domains. Descriptive exploratory analysis of 9660 contributions filed in the specialised inventory “SoReCom ‘A.S.de Rosa’ @-library” (mainly articles in scientific journals, but also conference presentations, book chapters, theses and books) including the geo-mapping of the results with Tableau software is enriched by further empirical insight from textual data mining of abstracts and keywords using IRAMUTEQ software to perform descending hierarchical cluster analysis. As a result, four specific clusters emerge, labelled as follows: “Topics, Targets, Thematic Areas”, “Constructs”, “Theories, Disciplines, Authors, Epistemologies”, and “Method Techniques, Data Collection, Data Analysis”. The empirical review of each cluster provides a useful insight about the generativity and the attractiveness of Social Representations theory from multiple paradigmatic approaches along different

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decades and across various geo-cultural contexts-continents, showing the main trends in diverse thematic domains. The article allows researchers working on the theory of social representation to generate a “mental map” of the theory and highlights its many contributions around the world.

**Keywords:** social representations; geo-mapping; paradigmatic approaches; thematic areas

This paper presents collective results of a research project carried out within the EC-approved SoReCom-Joint-ID (http://www.europhd.eu/SoReComJointIDP) built on the top of an on-going project led since 1994 by A.S. de Rosa at the European/International Joint PhD on Social Representations and Communication Research Centre and Multimedia Lab. It addresses the dynamics of the knowledge epidemiology via the meta-theoretical analysis of diversified body of literature on Social Representations, extracted from a larger number of more than 10000 bibliographic references filed in the repositories of the SoReCom “A.S. de Rosa”@-library, built up over two decades with an enormous effort of work team coordination and assessment by the project leader (de Rosa, 2014b, 2015a, 2015b, 2017). This contribution offers the first systematic literature review of publications specifically referred to the taxonomy of social representations of diversified societal issues in a variety of thematic areas. The sources have been empirically analysed by multiple steps:

— First, a systematic meta-theoretical analysis (de Rosa, 1994, 2002, 2013a, 2013b) of publications on social representations that refer to taxonomy by using the very detailed grid designed by de Rosa (last version February 2014) has originated a rich set of data and meta-data used in following steps for descriptive and multidimensional analyses.

— Second, a snapshot of current and past trends in terms of years of publication, language, institutions of authors, as well as the thematic areas and its specific sub-topics relevant for each publication has enabled the reasoned descriptive view of the bibliographic sources selected for the meta-theoretical analyses;

— Third, a closer look at the institutions of authors by their countries and continents using the geo-mapping technique developed by de Rosa (2015b, 2016; de Rosa, Bocci, Dryjanska & Borrelli, 2016; de Rosa, Dryjanska & Bocci, 2015; de Rosa & Dryjanska,
2017 forthcoming; de Rosa, Dryjanska, & Bocci, 2017a, 2017b) and applying the Tableau software offers a further insight in the visualization of the descriptive results;

— Finally, the textual analysis of the abstracts and keywords of the selected bibliographic sources using IRAMUTEQ software has enriched with multidimensional analyses of the selected corpus.

This article is aimed at (1) showing the generativity of the social representations theory for multiple paradigmatic approaches along different decades and across various geocultural contexts-continents and in particular relating multiple paradigmatic approaches and levels of analysis to the “methodological polytheism” in the social representation literature; (2) offering empirical evidence of the relevance of the SRT in various thematic domains in order to show its attractiveness for various disciplinary, thematic domains and topics.

**From Moscovici’s Opera Prima to the dissemination to a world-wide scientific community**

Born in France in 1950’s by the initiative of Serge Moscovici, one of the founders of the European social psychology, this theory has been of progressive interest to an emerging supra-disciplinary field (Jodelet, 2016, 2018) beyond the borders of social psychology, in dialogue with sociology, anthropology, communication and media studies, and many related thematically oriented research fields and applied disciplines in the domain of health, environmental studies, education and sciences, politics, economy, etc. The first field of interest of the theory was psychoanalysis and its image among different types of social groups and through the media press. Moscovici’s doctoral dissertation, later published as a book in French entitled “Psychoanalysis: Its image and its public” (1961), has laid the foundations for the theory relevant until today. Although this seminal Opera Prima has been revised by the author and published as a second edition in 1976, it took almost fifty years before the version in English was available in 2008 (ed. by G. Duveen), followed by other multi-language integral editions including in Portuguese/Brazilian (ed. by P. Guareschi) and Italian (ed. by A.S. de Rosa) in 2011. Alongside many other factors, this may have influenced the development of the theory in certain geo-cultural contexts rather than others.

de Rosa (1994) highlights the three distinct levels at which Social Representations Theory must be accurately comprehended and, thus, well-represented: object of investigation, theory and meta-theory. At the first level (object of investigation), Social Representations have the status of a phenomenon describing the ways in which we acquire and elaborate the
dynamic knowledge we have of our social worlds through interpersonal communication. The theoretical level, the “system of interrelated propositions that should enable phenomena to be described, explained, predicted, and controlled” (Duldt & Griffin, 1985, p. 1) comprises Social Representations conceptual definitions, the methodological approaches employed when investigating them, and the characterization of their adjacent constructs. Thirdly (the meta-theory level), there is a pressing demand for Social Representations to be illustrated in a well-rendered fashion at the meta-theory level, which is a critical examination of the conceptual structures or lenses which have oriented empirical research in a particular scientific field of knowledge and also of the theoretical dimensions that stemmed from empirical studies in the respective scientific domain, and which should reflect, in the case of Social Representations, the critical debates unfolding around them, the objections this theory has encountered over various aspects of its conceptualizations and the respective replies to the aforementioned critical objections.

In the 1990’s, de Rosa has initiated the arduous, never-ending task of archiving and registering in her library all available contributions inspired by the theory of social representations. This treasure of information has enabled her to propose a “biography of a theory”, since its inception until the present moment in time and in different geo-cultural contexts, geo-mapping the entire empirical and theoretical contributions inspired by it, published by the world-wide scientific community, and thus identifying different paths of its dissemination.

THE GENERATIVITY OF THE SOCIAL REPRESENTATIONS THEORY:
ONE THEORY, MULTIPLE PARADIGMATIC APPROACHES

The generativity of the social representations theory has inspired different schools of thought adopting diverse methodological approaches and techniques. Two of them are identified not only by the key authors who have contributed to shape or develop a specific approach, but also due to their institutional belonging affiliation: the so-called “Aix-en Provence school” for the “structural approach” and the so-called “Geneva school” for the “socio-dynamic approach”.

The “structural approach” to social representations, also referred to as the “central core theory” (Rateau et al., 2011), postulates that “a social representation is a hierarchized and organized system, composed of two interactive sub-systems: a central system and a peripheral system” (Dany, Urdapilleta & Lo Monaco, 2015, p. 490). According to Abric (2001), the
central core of a social representation includes a limited number of elements which constitute the common and consensual base of the collective memory and the system of norms to which a group refers. The Structural Approach thus emphasizes the “central core” of a social representation, its organizing function and its projection by the peripheral system, as well as “la zone muette” (the mute zone), cognitive scheme dimensions in the relations between representations and practices, representation transformations and interaction context effect, often valorising experimental methods. Among researchers who contributed to the development of this approach we can mention Abric, Flament, Deschamps, Guimelli, Rouquette, Moliner, Rateau, Dany, Lo Monaco, Piermatté, Tafani and others.

The “socio-dynamic approach” highlights the social nature of social representations and stresses the group belonging as crucial to the shared meaning-making a representation, illustrating the dynamic of shared knowledge, group effects and individual positioning through various statistical quantitative data-analysis techniques (Doise, Clémence & Lorenzi-Cioldi, 1992, 1993).

The “anthropological approach” has been emphasized by Denise Jodelet (2008) as the leading representative of this perspective influencing many of her doctoral students, currently professors and key voices of this approach within the scientific community. One of the most often cited when discussing Social Representations in this particular paradigmatic approach is the Jodelet's (1991) seminal work on the Social Representations of mental illness in a French village, where the resident families had a long tradition of housing and caring for ex-patients of mental institutions. In order to explore how these social representations organized the daily interactions of these people with the mentally ill, she used ethnographic and anthropological methods. This research has continued to inspire new generations of scientists across the world, and it is well articulated with the “ethnographic approach” inspiring many studies conducted in school settings valorising the dimension of culture and contexts by Duveen and Lloyd, Carugati and Gilly (1993), among others. Emphasizing their symbolic and cultural dimensions, this paradigm claims that social representations need to be explored within the socio-cultural context in which they occur, and that only offering a formal account of the cognitive processes that come into play in their construction may be reductionist (Lloyd & Duveen, 1993). The genesis of our social knowledge is considered within the social and interactionist framework in which it is created (Duveen & de Rosa, 1992).
The “dialogical approach” identifies in the interactionist relevance of the Ego-Alter “the fundamental feature of the dialogically conceived theory of social representations” (Markova, 2006, p. 128), within the semeiotic triangle valorised by Moscovici (Ego-Alter-Object) to overcome the binary linear relation Subject-Object. Markova proposes an interdisciplinary dialogue between philosophy, linguistics and social representations theory, concentrating on the processes related to methods and explanations (Markova, 2008). She emphasizes that already in his seminal study Moscovici explored how psychoanalysis was transformed from a purely professional and scientific endeavour into a phenomenon that infiltrated everyday thinking by studying different kinds of discourses of various social groups, their percolation into reports of the mass media and everyday activities. Markova (2012) highlights both the interdependence between historical events and social psychological phenomena and the importance of single case studies, which cannot be taken out of their context. The relevance of language and communication in the dialogical approach to social representations has been stressed and complemented also by the “narrative approach” by other key authors including Laszlo, Contarello, Volpato and others.

Finally, according to the “modelling approach” (de Rosa, 2013a, 2013b, 2014a), the element of prior knowledge may include interrelated social representations systems of inherent cultural objects as a framework, not restricting the focus of the investigation to isolated “objects”. Therefore it is crucial to operationalize one of the key epistemological assumptions founding the Social Representation theory: i.e. to assume the interplay between the social actors (and their positioning), the social objects and multiple forms, channels, tools, contexts and scenarios of communication, essential to explore the social process of knowledge building, as a set of interrelated system of social representations dynamically co-constructed and circulating within society (de Rosa, 2007). This statement implies an effort of the principal investigator in order to concretely translate the complexity into well-defined research designs (de Rosa, 2014a). The modelling approach has been conceived in order to empirically detect the articulation of social representations with its different constitutive dimensions and other socio-psychological constructs (also anchored in diverse multi-theoretical perspectives, like for example: multidimensional identities, place-identity and identity theories, collective memory, social emotions, etc.), selected in function of the target research object investigated within and by the specific communicative contexts/channels. This implies designing adequate methods and techniques able to lead the empirical verification process based on theoretically driven hypotheses concerning the interaction between
constructs under investigation, techniques, multi-step data analysis strategies and expected results in relation to the research topic and the nature of the communicative context. In this perspective, the modelling approach also allows the integration of multiple paradigmatic and methodological approaches, articulated in multi-level research designs, well beyond the cumulative approach of the traditional multi-method, adequate to the complexity of the social representations theory.

THE ATTRACTIVENESS OF THE SOCIAL REPRESENTATION THEORY FOR VARIOUS DISCIPLINARY, THEMATIC DOMAINS AND TOPICS

The theory of social representations has been applied to infinite number of specific objects in a truly supra-disciplinary manner, which is diverse from multi- or trans-disciplinary approach (Jodelet, 2016). From academicians to practitioners in such fields as healthcare (including nursing, disease prevention, psychological intervention, etc.) and education, or even volcanology, there has been a myriad of topics. The classification of the main thematic areas in de Rosa’s Grid for Meta-theoretical Analysis includes the following dozen, each of them including a large and ever increasing number of related sub-topics:

1. Communication and multi-media
2. Culture
3. Deviance
4. Development-Education
5. Gender and family roles
6. Economics-Work-Organization
7. Environment
8. Health-Illness
9. Identity
10. Interpersonal or Intergroup Relations and Dimensions
11. Politics-Ideology

The Social Representation theory is without doubt a supra-disciplinary field, characterized by a great diversity in both theoretical and methodological approaches. The phenomena studied within the realm of the Social Representations theory, have a strong societal impact in various spheres of the “social arena”, as those enlisted above.
considerable number of studies have been conducted on an extensive range of different thematic objects, from Moscovici’s study of psychoanalysis, to the public understanding of science and new technology, through popular ideas of health and illness, constructions of identities, human rights and so forth. Therefore, Social Representation theory applied to various contexts becomes a “heuristic tool for addressing and understanding relevant societal issues faced with social demand” (de Rosa, 2013a, p. 33).

**METHODOLOGY**

In order to review in a systematic manner current theoretical and applied work in literature on social representations, by checking all major scientific databases (Google Scholar, EBSCO, PsyArticles), academic social networks (ResearchGate, Academia.edu, Mendeley), and first and foremost the So.ReCom“A.S. de Rosa”@-library repository (de Rosa, 2014b, 2015a, 2015b, 2016), 9660 publications specifically related to social representations and communication were extracted from a larger number of 10.698 bibliographic references (as of June 5, 2016), which constitute a circumscribed “population”. These sources can be assumed as “big data” for the literature in the social representations field, given the most worldwide comprehensive nature of the So.ReCom“A.S. de Rosa”@-library repository, as shown by the comparative empirical analysis with the sources available in the academic social networks (de Rosa, 2015b; de Rosa, et Al., 2017a, 2017b).

Mining big-data sources and related meta-data filed in the specialised repository, in order to visualize the geo-cultural dissemination of the literature, the geo-mapping technique developed by de Rosa, later performed by Tableau software, made possible an outlook on frequencies by country/continent related to the institutional affiliation of first-authors.

The *descending hierarchical analysis of correspondence* performed using IRAMUTEQ software on abstracts and keywords allowed identifying main clusters that organize textual corpus. Enriched by similarity analysis to explore links with specific illustrative variables, it offered a further exploration of specific topics in the literature on social representations.

**Guiding Hypotheses**

Driven by a series of research questions and specific hypotheses, our general hypotheses assume that empirical findings will confirm that Europe as “homeland” and Latin America are currently the most fertilized geo-cultural contexts with different paths in what regards the
dissemination of SRT over the decades. We also expected a different pattern of dissemination and impact of the multiple paradigmatic and methodological approaches in different geo-cultural contexts over several decades and a wide attractiveness of different thematic areas involving cross-cutting topic of supra-disciplinary interest.

Regarding the taxonomy of the social representations (hegemonic, emancipated and polemical), we expect more interest for “polemical” representation in the literature concerning science and communication, especially in relation to controversial cross-thematic supra-disciplinary subjects (like health, genetic manipulation and bio-technology, the relation between nature-society and environment-ethics-work-organisations, etc.)

SELECTED RESULTS

Articulated in multiple research lines – around three main focuses (paradigmatic, thematic and geo-cultural) – this paper is aimed at mapping: the development of different paradigms and their related research methods, the thematic areas and specific topics in various applied fields, the taxonomy of the social representations investigated in the literature the dissemination within the multi-generational community of scientists and across different geo-cultural contexts the impact of the social representation scientific production in the bibliometric era and social networks.

Descriptive Statistics by Resource Type, Years of Publications and Languages

This paper shows the distribution of the total of 9660 publications specifically related to social representations and communication, extracted from a larger number of 10,698 bibliographic references (as of June 5, 2016) - a number progressively increasing on daily basis (including also books, book chapters, conference presentations, web documents, manuscripts, university reports, Master and PhD theses, etc.) filed in the repositories of the SoReCom “A.S. de Rosa” @-Library (de Rosa, 2014b, 2015a, 2015b, 2016), see Figure 1 below.
It is also interesting to observe the growth trend of the number of contributions published by year until the date of the sources retrieval for this article (June, 5 2016), since the first article by Moscovici (1952), in which he pre-announced the construct of social representations. Following a latency period of almost 20 years and the progressive dissemination is also shown by the higher number of publications during even years, due to the bi-annual International Conference on Social Representations that stimulates scientific community (Figure 2) together with the JIRSSs and other dedicated events in Latin America.
It is worth noting that the seeming drop to 10 publications in 2016 is due to the retrieval process of sources accumulation (from the oldest to the most recent), the fact that this year was still ongoing on the date of the retrieval of this dataset on June 5, 2016 and that this date was before the 13th International Conference on Social Representations, which later on provided a high number of references.

Concerning the language in which publications were written, English appears as the most widespread one, with 35.34% of the total, as shown in Figure 3 below, showing the impressive wide range of diverse languages from all continents, that in subsequent data analyses on improved sources of our repertory also include other languages, like Japanese.

![Language of publication](figure3.png)

**Figure 3. Language of publication**

**Geo-mapping the worldwide dissemination of the literature on social representations**

Concerning the institutional belonging of authors who have published on social representations, the distribution across the world can be seen in Figure 4, which shows the prominence of Europe, as the “theory’s homeland” and Latin America, as the most fertilised geo-cultural context”, but also North America. More recently the theory has been disseminated also in many countries in the other continents.
Figure 4. The frequencies distribution of items specifically related to the representations filed in the repositories of the SoReCom “A.S. de Rosa” Library by the “Author’s Institution Country” across the world

A closer look at Europe reveals that France, followed by United Kingdom, Italy, Spain and Portugal constitute the top countries, but contributions from a wide variety of institutions located in other nations are also present, as shown in Figure 5.
Figure 5. The frequencies distribution of items specifically related to the social representations filed in the repositories of the SoReCom “A.S. de Rosa” @-Library by the “Author’s Institution Country” across Europe

In a similar way, the contributions in Latin America appear with the dominating geocultural scenario of Brazil, a strong position of Mexico and Argentina, as well as a number of diverse countries with a much lower frequency, as demonstrated in Figure 6 below.
Figure 6. The frequencies distribution of items specifically related to the social representations filed in the repositories of the SoReCom “A.S. de Rosa” @-Library by the “Author’s Institution Country” across Latin America

Finally, it is also worthwhile to take a closer look at North America shown in Figure 7, due to the fact that contrary to the widespread historical assumption concerning the leading role of Canada, in recent year the number of publications from the United States has actually surpassed Canada, although the two scenarios remain very close.
The remaining geo-cultural scenarios of Oceania, Asia and Africa still constitute the “emerging scenarios”, with a lower number of contributions, but numerous countries represented.
filed in the repositories of the SoReCom “A.S. de Rosa” @-Library
by the “Author’s Institution Country” across Oceania

Figure 9. The frequencies distribution of items specifically related to the social representations
filed in the repositories of the SoReCom “A.S. de Rosa” @-Library
by the “Author’s Institution Country” across Asia
Textual analysis on the entire corpus and on corpora selected by the five paradigmatic approaches, the three geo-cultural scenarios, the five thematic areas and the taxonomy of social representations.

The textual analysis using IRAMUTEQ software was carried out by deleting not recognized forms, numbers and articles, which resulted in 9660 texts, 42913 text segments, 32382 occurrences and 9592 forms, ensuring the stability of analysis as a result of lemmatisation. The descending hierarchical analysis produced the following four clusters: (1) “Topics, Targets, Thematic Areas”; (2) “Constructs”; (3) “Theories, Disciplines, Authors, Epistemologies”; (4) “Method Techniques, Data Collection, Data Analysis”. Figure 8 below shows the dendrogram produced as a result of the descending hierarchical cluster (DHC) analysis, resulting in four clusters with the most significant words for each one of them.
In order to better comprehend the distribution of clusters, correspondence factorial analysis situates each one on a factorial plane. In Figure 9 below, it is possible to observe that the fourth cluster’s position on the negative side of the X axis and a positive side of the Y axis singles it out as clearly distinct from other clusters, in particular the first cluster dedicated to the “Topics, Targets, Thematic Areas”.

Figure 11. Descending Hierarchical Cluster (DHC) analysis dendrogram
In order to gain a deeper understanding of clusters, it is necessary to consider the illustrative variables. The significant positioning on the Cluster 4 of the illustrative variables shows the wide dissemination of the scientific production significantly across the geo-cultural context of Latin America (in particular Brazil) and in Portuguese language. While the resource type of “conference presentation” appears as a significant illustrative variable in this cluster, in Cluster 3 that concentrates on theories, disciplines, authors and epistemologies, the resource type of “book chapter” stands out. Figure 13 shows the distribution of illustrative variables as a result of correspondence factorial analysis, with the most significant ones written in larger font.

Figure 12. Distribution of the four clusters in the factorial space
The textual analysis was performed not only for the entire corpus, but also for the five paradigmatic approaches, three geo-cultural scenarios, five thematic areas, and the specific corpus related to the taxonomy of social representations. Due to limited space, it is impossible to include detailed comments on all the analyses for each textual corpus in this paper; the interpretations of the clusters for each specific corpus showing transversal shared or specific distinct dimensions are summarized in Table 1.

Table 1. Results of the Descending Hierarchical Cluster (DHC) analysis on separate text corpora selected by the five paradigmatic approaches, the three geo-cultural scenarios, the five thematic areas and the taxonomy of social representations.

<table>
<thead>
<tr>
<th>Paradigmatic Approaches</th>
<th>Textual corpus</th>
<th>Cluster 1</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
<th>Cluster 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural paradigmatic approach</td>
<td>1010 texts</td>
<td>Dimensional levels, relevant constructs also in the mainstream social psychology</td>
<td>Methods, Techniques, Research Population Targets, Thematic Area</td>
<td>Theory, Structural Paradigmatic Approach constructs</td>
<td>Named authors from the founder of the structural paradigmatic</td>
<td>n/a</td>
</tr>
<tr>
<td>Approach</td>
<td>Texts</td>
<td>Relevant Constructs/Processes</td>
<td>Approach to Its Developers</td>
<td>Thematic Areas</td>
<td></td>
<td></td>
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<tr>
<td>----------------------------------------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Socio-dynamic paradigmatic approach</td>
<td>345</td>
<td>Relevant constructs also in the mainstream social psychology and Knowledge-Development-Intelligence as Thematic topics</td>
<td>Theory, Scientific activity, Science and other Thematic topics (violence, health)</td>
<td>Levels of analysis, Processes, Societal and normative Thematic topics (immigration, friendship, citizenship, equality)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dialogue, conversational and narrative paradigmatic approaches</td>
<td>253</td>
<td>Relevant Concepts, Constructs and Processes referring to semiotic and social psychology</td>
<td>Theory, Scientific activity and Constructs</td>
<td>Public sphere, Community and Collective Memory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthropological and ethnographic paradigmatic approach</td>
<td>285</td>
<td>Methods, Techniques (interview, observation, methodology, datum), Research Population Targets (student, professional, teacher, woman, participants), and Research Context (class, school, city)</td>
<td>Relevant Concepts, Constructs and Process referring to semiotic and social psychology</td>
<td>Methods, Techniques, Research Population Targets, Thematic Area and dissemination impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modelling paradigmatic approach</td>
<td>260</td>
<td>Beyond the simple cumulative “multi-method and mixed method”</td>
<td>The epistemological triangle, driven by hypotheses concerning: Theory Dimensions, Constructs and Paradigms - Multiple diversified Methods and Channels-Thematic Area</td>
<td>Madness as Thematic Research Area at the genesis of the Modelling Approach to Social Representation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Results of the DHC analysis on separate text corpora selected by the three geo-cultural scenarios**

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Texts</th>
<th>Theory, Disciplines, Authors</th>
<th>Constructs and Processes and Functions</th>
<th>Communication</th>
<th>Methods, Techniques, Research Population Targets</th>
<th>Thematic Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe: “the theory’s homeland”</td>
<td>5489</td>
<td>Theory, Disciplines, Authors</td>
<td>Constructs and Processes and Functions</td>
<td>Communication</td>
<td>Methods, Techniques, Research Population Targets</td>
<td>n/a</td>
</tr>
<tr>
<td>Latin America “the most fertilised scenario”</td>
<td>3285</td>
<td>Health</td>
<td>Constructs, Processes and Functions</td>
<td>Theory, Disciplines</td>
<td>Political and Environmental Issues</td>
<td>n/a</td>
</tr>
<tr>
<td>North-America and other continents</td>
<td>885</td>
<td>Theory, Disciplines and Constructs and Thematic Areas</td>
<td>Methods, Techniques, Research Population Targets and Thematic Areas</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

### Results of the DHCA on separate text corpora selected by five thematic areas

<table>
<thead>
<tr>
<th>Thematic Area</th>
<th>Texts</th>
<th>Results of the DHCA</th>
<th>Social representations and common-sense knowledge: the raw of social psychology</th>
<th>Environment as context at Risk, claiming for actions, conservation, change, involvement, strategies regarding hot issues (climate, pollution, health)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Science, Social Representations and Communication</strong></td>
<td>655 texts</td>
<td>Education, professionalization, and their context and target/actors</td>
<td>Communication, science and system of knowledge production and transmission</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Social Representations and Environment</strong></td>
<td>390 texts</td>
<td>Environmental Development, sustainability challenge, conflict management of controversial issues and psychology contribution</td>
<td>Verbal and Figurative Techniques, Research Operational Processes, Population Targets and institutional contexts</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Social Representation, Economy, Advertising, Marketing and Organizational Contexts</strong></td>
<td>412 texts</td>
<td>Thematic Focus on Economic Business World (especially Work and Market), the cultural and organisational contexts and the social processes involved among their actors and society at large</td>
<td>Techniques, Research Operational Processes, Population Targets</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Social Representation, Community &amp; Health</strong></td>
<td>477 texts</td>
<td>Thematic Focus on both Health-Illness and Community with attention to theoretical constructs and societal contexts for intervention and policies</td>
<td>Thematic Focus on Risk and on Prevention Behaviour</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Social Representations &amp; Politics: Multidimensional identities, intergroup relations, social movements and active minorities</strong></td>
<td>(see note below the table)</td>
<td>Conflict and minority</td>
<td>Identity and social memory</td>
<td>Governance and politics</td>
</tr>
</tbody>
</table>

### Results of the DHC analysis on separate text corpora selected by the taxonomy of social representations

<table>
<thead>
<tr>
<th>Taxonomy of Social Representations</th>
<th>Texts</th>
<th>The Agentic Model developed by Social Representation Theory</th>
<th>Thematic Focus on Violence, discriminatory communication about minority groups and Activist’s role</th>
<th>Techniques, Research Operational Processes, Population Targets</th>
<th>Theoretical and Thematic relevance of History for Social Representations: a controversial geo-political arena for investigating the taxonomy of social representations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Taxonomy of Social Representations</strong></td>
<td>187 texts</td>
<td>The Agentic Model developed by Social Representation Theory</td>
<td>Thematic Focus on Violence, discriminatory communication about minority groups and Activist’s role</td>
<td>Techniques, Research Operational Processes, Population Targets</td>
<td>Theoretical and Thematic relevance of History for Social Representations: a controversial geo-political arena for investigating the taxonomy of social representations</td>
</tr>
</tbody>
</table>

**Note:** For the thematic area “Social Representations & Politics: Multidimensional identities, intergroup relations, social movements and active minorities”, the analysis here presented refers to the entire textual
corpus of 9660 texts (de Rosa et al., 2016). Moreover, in case of this specific thematic focus, there are additional results based on the Multiple Analysis of Correspondence (performed by SPAD software on 321 empirical articles selected from the corpus on Social Representations and Politics) that offer an empirical evidence of the “methodological polytheism” inspiring the production on social representations (Moscovici, 2001). The paradigmatic and methodological geo-mapping of the literature on Social Representations and Politics shows the INCLUSION of all the approaches (experimental, quasi-experimental, field, ethnographic and media studies), but also OPPOSE them in the semantic factorial space. The paradigmatic and methodological distinct options are also anchored into specific geo-cultural contexts, identified with the country and continents associated to the authors’ institutional affiliation, over different decades and publishing editorial sources, opposing the journals included or not in the bibliometric databases.

**DISCUSSION**

In this section we shall concentrate on similarities and differences resulting from the textual analysis, interpreting the clusters emerging from the corpora selected by two focus dimensions: the geo-cultural contexts of the scientific production and the thematic areas.

**Discussing clusters emerged from the corpus selected by Geo-cultural Contexts**

Common categorization of clusters emerged from corpus based on sources anchored into all geo-cultural contexts – easily identified through the inclusion of many common words in all the three corpora as referring to:

1. “Theory, Multidisciplinary contributions, Processes, Constructs, Functions, and Authors”
   - 2 clusters from the “European” corpus:
     i. cluster 1 (Theory, Disciplines, Authors) includes words referring to: theory and disciplines (psychology, sociology, science, approach, discipline), their activity (to discuss, propose), their study domains and frame (framework, phenomenon, concept, paradigm, issue, recent, present), scientific production (research, social perspective, field, chapter, book, contribution, work, paper, review) other construct or component of social representations (cognition) and the father of the theory is remembered as author (Serge)
     ii. cluster 2 (Constructs and Processes and Functions) includes words referring to constructs (identity, memory, action, common sense), dimensional levels (collective, social, individual) and functions (to construct, form, share, change, understand), their characteristics and contextual domains (society, reality, context, world)

   - 2 clusters from the “Latin American” corpus:
     iii. cluster 3 (Theory, Disciplines, Unnamed Authors) includes words referring to: theory and disciplines (psychology, sociology, epistemology, science, approach), their
activity (discussion, propose, address, criticism, argument, understand, development), their study domains and frame (framework, phenomenon, concept, hypothesis, contemporary, knowledge) production (articles) and unnamed authors (researcher)

di. cluster 2 (Constructs and Processes and Functions) includes words referring to:
constructs (representation, meaning, identity, memory, action, common sense),
processual dimensions (collective) and functions (to construct, act(or), play, form, share, construct), their characteristics and contextual domains (reality, society, interaction, experience)

- 1 cluster from the “North-American and the new emerging scenarios: Oceania, Africa, Asia” corpus:

v. cluster 1 includes in one single class words that above were split in two clusters in the corpora related to the European and Latin-America geo-cultural contexts, like:
theory and disciplines (psychology, communication, science), their activity (construction, think), their study domains and frame (framework, concept, perspective), production (paper) and unnamed authors (researcher), Constructs (identity, discourse), dimensional levels and process (individual, collective, process), functions (to construct, act(or), play, form, share, construct), their characteristics and contextual domains (reality, society, contemporary, tradition)

2. “Methods, Techniques, Research Population Targets”

- 1 cluster from each geo-cultural context corpus:

i. cluster 4 in the “European” corpus, shows big relevance of questionnaire, association, interview, test among the most common words referring to techniques, evoking also frequently free (in relation to association and interview)

ii. cluster 6 in the “Latin-American” corpus, that in addition to the research tools already as above mentioned, among the first 30 words also includes observation (due to the impact of the anthropological and ethnographic approach), but also structure, evocation (in this case due to the impact of the structural approach among Latin-American researchers)
iii. cluster 2 in the “North-American and the new emerging scenarios” corpus, that includes also survey among the other popular techniques like: interview, questionnaire, association,

Distinct categorization of clusters emerged from corpus based on sources anchored into all geo-cultural contexts – referring to:

1. “Communication” - cluster 3 the European corpus, with significant contribution of the illustrative variables – among others - of Italy, as author’s contribution country and Book Chapter as resource type. This cluster includes elements with trivalent relevance both:
   - from the “theoretical point of view” - as indicated by the systems of communication “diffusion”, “propagation”, “propaganda”
   - from the “methodological point of view”, referring to communicative tools and channels used both for disseminating and investigating the social representations (newspaper, press, advertise, news, conference, publish, coverage, mobile, print, television) and
   - from the “thematic perspective”, as shown by the inclusion of words like: biotechnology, technology, psychoanalysis, madness, psychiatry, controversy, war.

2. “Collective Memory, National and Local History” (war, century, military, struggle, revolution, nation, local, history, period, imaginary, past, territory, economy, tourism, argentine), Geo-political country’s context and social agents (party, government, movement, resident, politician, legitimise) – cluster 4 the Latin American corpus, with bivalent relevance both:
   - from the “theoretical point of view”, as evident from one side from the localisation in the factorial space of the Correspondence Analysis close to the clusters 3 (related to the interdisciplinary theory-epistemology between social psychology and sociology) and cluster 2 (related to its social nature regarding process, the dynamic of identity, meaning and representation as constructed in interaction, relations and experience);
   - from the “thematic point of views”, as evident from the inclusion of words related to: political topics anchored in the historical scenario (war, century, military, struggle, revolution, nation, history, past) or contemporary arena (party, government, movement, resident, politician, legitimise) and environmental issues (tourism, territory, economy, resident).
This cluster was characterized by significant positioning of the illustrative variables of Mexico, Venezuela, Puerto Rico, Argentina, Costa Rica and Peru as author’s institution country, Spanish, French and English as language of publication, and the 2000-2009 as decade of publication, and conference presentations as resource type.

It is interesting also to note that the articulation of the clusters detected from the corpora related to Europe and Latin-America - the geo-cultural contexts where the theory is much more disseminated and developed - is more complex compared to the North-American and the new emerging scenario for the theory development in Oceania, Africa and Asia.

**Discussing clusters emerged from the corpus selected by Thematic Areas**

Common categorization of clusters based on sources anchored into all 5 thematic areas – easily identified through the inclusion of many common words in all the five corpora – refer to:

1. *“Methods, Techniques, Research Operational Processes, Research Population Targets”* - one cluster from each thematic area corpus has been identified as follows:
   - cluster 3 in the “Science, Social Representations and Communication” corpus (research operations processes like: justify, propose, criticise…)
   - cluster 2 in the “Social Representations and Environment” corpus (“questionnaire”, “interview”, “free association”)
   - cluster 2 in the “Social Representations, Economy, Advertising, Marketing and Organizational Contexts” corpus (“interview”, “free association”, “structure”)
   - cluster 3 in the “Social Representations, Community & Health” corpus (“interview”, “free association”, “questionnaire”)
   - First and Second Factor of MCA in the “Social Representations and Politics” corpus (all methods and techniques have been detected)
   - cluster 1 in the “Taxonomy of Social Representations” corpus (“interview”, “questionnaire”)

2. *“Communication”* as Topic or Constitutive and Genetic Dimension of Social Representations has been identified in:
   - cluster 2 in the “Science, Social Representations and Communication” corpus (“medium”, “communication”)
Distinct categorization of clusters emerged from corpus based on sources anchored into all thematic areas – easily identified through unique prevalent words for each corpus as referring to topics of:

1. “Education, professionalization and their context and target” and “Communication, science and system of knowledge transmission” from the corpus on Science
2. “Environmental Development”, “City” and “Risk” from the corpus on Environment
3. “Currency” and “Work” from the corpus on Economy
4. “Health” and “Risk” from the corpus on Health
5. “Conflict” from the corpus on Politics
6. “Violence” and “History” from the corpus on Taxonomy

**SOME CONCLUDING REMARKS**

The empirical findings have confirmed our explorative hypotheses that Europe as “homeland” and Latin-America are currently the most fertilized geo-cultural contexts with different paths in what regards the dissemination of SRT over the decades. We also detected a higher focus on the theoretical development and refinement of the theory in Europe, generating multiple paradigmatic approaches (structural, socio-dynamic, anthropological, narrative, modelling), as opposed to Latin America and Africa, where SRT is mainly used as a framework for empirically analysing social phenomena of high social relevance. In North-America, Asia, and Oceania, the structural and the socio-dynamic approaches were preferred, in correlation with their quantitative methodologies, which seem to be more compatible with mainstream social psychology.

The comparative view emerging from our meta-theoretical analysis as regards the geo-cultural anchoring of the scientific production on social representation into various contexts – in particular as far it concerns Brazil - receives external confirmation by other contributions in
the literature of different nature. The Jodelet’s article (2011) *Ponto de Vista: sobre o movimento das representaçoes sociais na comunidade científica brasileira*, based on a well-informed autobiographic account of narrative style as one of the eminent Ambassadors of the S.R.T. in Latin America. According to Denise Jodelet, beyond the different thematic and methodological interests, there is a unified way to deal with the Social Representations in Brazil that – assimilates this “archipelago of research centres and scientific community to a “movement”, more than a “traditional” so-called School (like the so-called Aix-school, for the structural approach, the Geneva school for the socio-dynamic approach, etc.). In a following article - stressing further the societal, contextual and community-values oriented research tradition and model of actions (also involving professionalization practices and community policy oriented research practices especially in health and education – Denise Jodelet (2013) “presents a research current that has spread over Brazil: the Community Psychology that is now recognized as an autonomous subject and that is supported by Anglo-Saxon and European countries where national and international associations are being multiplied.”.

The Joao Wachelke et Al.’s article (2015) “Um Panorama da Literatura Relacionada às Representações Sociais Publicada em Periódicos Científicos” presents results based on sistematic empirical analysis adopting a selection of variables already adopted in our Meta-Theoretical Analyses, like the country in which the 1st author’s institution was located, publication year, journal discipline and categorized information relative to the studied group and social objects. Although limited to the analysis of sources restricted to journal articles and only on their title, keywords and abstracts (rather than the full texts), the results confirmed our previously conducted meta-theoretical analyses on wider sources of the literature (de Rosa, 2013) and further extended in the larger corpus analysed in the present article. In particular they provide “evidence of a contrast between applied studies in the health area involving related groups and objects, more typical from South America and Brazil, and psychosocial research linked to the psychology field and carried out mostly by European researchers. A considerable increase in the importance of the participation of Brazilian and South American authors relative to the total production was also noticed, replacing authors from European institutions as leaders according to that criterion.”

We have interviewed our data and meta-data in order to know which were the societal issues in the different thematic fields of Science, Economy, Environment, Politics, Health arising a hot debate in the public sphere and what was the destiny of popularity in the literature over the decades when the “polemical” social representations become
“emancipated” if not yet “hegemonic”. We have detected that in different thematic areas the paradigmatic conjunction of social representation with other theories and constructs had stimulated the impetus for a methodological pluralism that can be pursued by scholars who do not comply with the dominant trend. From a cross-thematic perspective we have found more studies on polemical representations in the field of Politics, due to the inclusion of studies on active minorities and on social movements, and the role played by controversies for potential societal changes. However, contrary to one of the preliminary guiding hypotheses, the thematic area of Science has emerged less powerfully in terms of polemical representations, although there were some exemplary studies driven by hot societal issues concerning the controversial application of innovative bio-technology to the manipulation of the relation between science, society and nature.

Coherently with the modelling approach to Social Representations (de Rosa, 2013), we hope that – honouring the complexity of the Social Representation theory – future directions of researches will consider the multi-level concurrent integration (rather than opposition) of the multiple constructs, paradigmatic and methodological approaches. A genuine integration is possible at the condition that each methodological option will be theoretically justified in complex integrated research designs (rather than in subsequent linearly juxtaposed studies number 1, 2,3,…). Thus, it will contribute to innovate also the editorial format of journals, too often working as normative regulatory standard, inducing the thinking format and conformist scientific writing practices, just cloned by the authors.

This is an ambitious task, since the discipline of social psychology does not always welcome the diversity of social representations. As stated in the recently released findings of the report on diversity of the European Association of Social Psychology - EASP (Lantos, Nyul, Kende, Reicher, & Lindholm, 2017), this entity has not yet realised its aspiration to be an Association for all social psychologists in all of Europe. Rather, as things stand, it is still an Association for mainstream social psychologists in Western Europe. On the other hand, as noted by Ernst-Vintila, Ben-Alaya, de Rosa and Neculau (2016), the social representations community differs from EASP in terms of values, hierarchy, boundaries, and in the evolution of their respective geo-cultural diversity in time. The evolution in time of the social representations community’s geographic diversity may be related to Moscovici’s care for diversity and inclusion, which fortunately continues even after his death.
ACKNOWLEDGEMENTS

This contribution presents collective results of a research project carried out within the EC-approved SoReCom-Joint-IDP (http://www.europhd.eu/SoReComJointIDP), according to the Grant Agreement PITN-GA-2013-607279 - So.Re.Com. Joint-IDP, built on the top of an ongoing project led since 20 years by A.S. de Rosa at the European/International Joint PhD on Social Representations and Communication Research Centre and Multimedia La. The project has involved the following early stage researchers: Laura Arhiri, Filomena Berardi, Borja De Madaria, Teresa Forte, Mihaela Alexandra Gherman, Marija Adela Gjorgjioska, Ioana Guraliuc, Maryia Kukharava, Carlos Filiberto Miguel Aguilar, Monica Panzaru, Agnese Pastorino, Aminat Ramazanova, and Ana Tomicic, as well as a former EuroPhD trainee Tania Santos. The authors wish to thank the Sapienza graduate Martina Latini for her help with data entry and analysis.

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