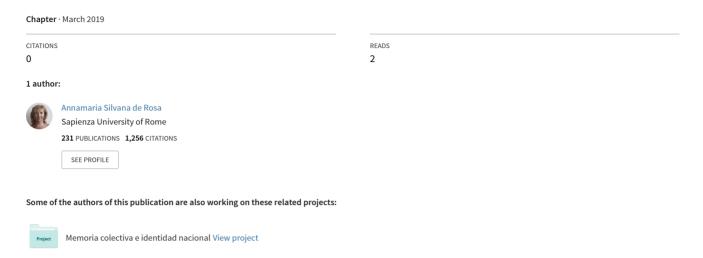
Experiences/Expertise in Joint-Innovative Doctorate and related digital infrastructure: the SoReCom "A.S. de Rosa" @-Library as Research tool for meta-theoretical analysis and spec...



2019

13th International Technology, Education and Development Conference

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CONFERENCE PROCEEDINGS



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EXPERIENCES/EXPERTISE IN JOINT INNOVATIVE DOCTORAL PROGRAM AND RELATED @-LIBRARY INFRASTRUCTURE AS RESEARCH TOOL FOR META-THEORETICAL ANALYSIS AND SPECIALISED REPOSITORIES

Annamaria Silvana de Rosa

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Abstract

The EC-funded *So.Re.Com. Joint Innovative Doctoral Program* (http://www.europhd.net/sorecom-joint-idp) selected with a total score of 98,80% (threshold 70/100) within the 7th FP-2013 People-ITN-IDP call and carried out from 1-10-2013 to 30-9-2017 was built on the sound experience of the European/International Joint PhD in Social Representations and Communication, a pioneer case of the integration of the triple "i" (international, interdisciplinary, intersectoral) awarding a recognized joint degree since 1996 (http://www.europhd.eu).

The scientific goal of the unified research program articulated into 13 research lines was of the to take stock of the scientific field developed in more than 50 years by conducting an empirical meta-theoretical analysis of the literature on Social Representations, mapping the development of different paradigms, the related research methods, the thematic areas and their impact on the various applied fields within the multi-generational community of scientists and across different geo-cultural contexts.

This comprehensive research framework was built on an on-going multi-year project launched and led since 1994 by the director of the *European/International Joint PhD in Social Representations and Communication* who has designed specific web-tools for the purpose of conducting an empirical meta-theoretical analysis of the literature on Social Representations.

Therefore it was supported by mediated access to the digital resources implemented on the website: full bibliographic repository, meta-theoretical analysis repository, specialised *So.Re.Com. "A.S. de Rosa"* @-*Library and* search engine connected with all the above mentioned repertoires, including a very rich documentation built up over two decades with an enormous effort of work team coordination and assessment and further developed through the research training of 13 early-stage-researchers (ESRs).

The insertion of all the meta-theoretical analyses in the specialised *SoReCom "A.S. de Rosa" @-Library* will make available to the scientific community the worldwide most comprehensive digital library specialised in the Social Representations and Communication literature, currently including 11.341 bibliographic items and big data and meta-data as solid background knowledge for further researches.

The high societal impact of the knowledge developed by the researchers working in Social Representations and Communication in many cross-thematic areas of supra-disciplinary interest (environment, health, education, science and technology, communication, politics, economics, etc.) is another added value of the knowledge produced thanks to this ambitious So.Re.Com. Joint-IDP program.

Keywords: Innovative Joint Doctoral Program, European/International Joint PhD in Social Representations and Communication, So.Re.Com. "A.S. de Rosa" @-Library.

1 INTRODUCTION

Built on the sound experience of both the European/International Joint PhD in Social Representations and Communication, awarding a recognized joint degree since 1996 (http://www.europhd.eu) [1], [2], [3], [4], [5], [6], [7], [8], [9], [10] and the EU approved So.Re.Com. THEmatic NETwork (http://www.europhd.net/sorecomthenet-summary) [11], the doctoral programme *SoReCom Joint-IDP* selected with a total score of 98,80% (threshold 70/100) within the 7th FP-2013 People-ITN-IDP call and carried out from 1-10-2013 to 30-9-2017 under the EU contract 607279 as "an innovative doctoral program in a networked international research training environment" included 8 universities, 2 private companies and 1 public research institute in 8 European countries (AT, CH, CZ, ES, FR, IT, RO, SE).

and 6 universities in United States, Canada, Brazil, Argentina, Mexico and China (http://www.europhd.net/sorecom-joint-idp).

The goal was to provide doctoral training in Social Representations and Communication, a supradisciplinary research area of the social sciences that studies the social construction of everyday knowledge in social spheres and media, disseminating European excellence beyond the EU boundaries and attracting the best early-stage-researchers from abroad. Structured into transnational teams by common research area and complementary multi-methodological approaches, this SoReCom Joint-IDP has guaranteed a well-tested training structure including: a) an innovative integrated physical and virtual campus, where world-class academic scientists, internationally recognised experts, experienced researchers, early-stage-researchers (ESRs) at doctoral and master level cooperate face-to face and online "for" and "by" research; b) multiple supervision via tutoring and co-tutoring; c) individual mobility for ESR at research centres for secondments; d) collective international mobility of trainees and teaching staff during International Summer Schools and Lab meetings; e) learning by doing (including transferable skills) in academic and non-academic settings; f) worldwide access to common web platform, as tool for documentation, networking, training and monitoring trainees' progress; g) high tech infrastructure and lab facilities; h) quality evaluation system; i) officialisation of the joint degree; I) active integration in the world-wide SoReCom THEmatic NETwork; m) enhancement of career prospects both in and outside academia.

The So.Re.Com. Joint-IDP research training programme focuses on a supra-disciplinary area of the social sciences, and in particular of Social Psychology, inspired by the Social Representations Theory, one of the most important theories of the social construction of knowledge. Founded in 1961 by Serge Moscovici (honorary programme director of the European/International Joint PhD in Social Representations and Communication until his death in 2014: http://www.europhd.net/our-honoraryprogramme-director; http://www.europhd.net/sites/default/files/images/onda_1/01/cahiers/moscovici.html), the study of social representations, originally specifically European, is currently a multilingual, worldwide discipline with a substantial body of literature. It involves leading scholars from both social psychology and the social sciences: sociology, anthropology, education, economics, linguistics, semiotics and communication and media studies. Contrary to the fragmentation of traditional social science disciplines, the field of Social Representations represents a unifying meta-theoretical perspective on the social construction of knowledge and its relation to socially situated practices. Consequently the So.Re.Com.Joint-IDP project is open to trans-disciplinary and multi-methodological research approaches (experimental and field work). Studies of "what" people know - and "how" it relates to the social groups to which they belong and to the media - are concerned with the social construction and representation of a particular object (e.g. health-illness, environment, new technologies, politics, economics, European integration and enlargement, minority groups, immigrants and racism, human rights, etc.) and how its related scientific theories are transformed into everyday knowledge. The "objects" studied have a strong societal impact and important practical applications in political, economic and social spheres. [12], [13], [14], [15].

Given the wide range of the research sub-topics developed by the cross-national and cross-sectoral research teams, the project leader and director of the *European/International Joint PhD in Social Representations and Communication* has decided to issue a call for vacancy defining a priority list of projects guided by the main goal of evaluating the impact of the scientific production driven by the Social Representations theory in the social arena faced with social demand. The aim was to take stock of the scientific field developed in more than 50 years by conducting an empirical meta-theoretical analysis of the literature on Social Representations, mapping the development of different paradigms, the related research methods, the thematic areas and their impact on the various applied fields within the multi-generational community of scientists and across different geo-cultural contexts. [16], [17], [18], [19] [20], [21], [22], [23]

2 METHODOLOGY

This comprehensive research framework was built on an on-going multi-year project launched and led since 1994 by Annamaria Silvana de Rosa who has designed specific web-tools (including the on-line grid for the meta-theoretical analysis and the related web-repositories) for the purpose of conducting an empirical meta-theoretical analysis of the literature on Social Representations.

Therefore it was supported by mediated access to the digital resources implemented on the website (full bibliographic repository, meta-theoretical analysis repository, specialized SoReCom "A.S. de Rosa" @-Library and search engine connected with all the above mentioned repertoires, including a

very rich documentation built up over two decades with an enormous effort of work team coordination and assessment by the project leader), as well as access to the *physical library* worldwide specialized in the Social Representations and Communication literature currently available at the location of the *European/International Joint PhD in Social Representations and Communication Research Centre and Multimedia Lab* (Sapienza University of Rome, Italy) [24], [25], [26], [27]. As empirically demonstrated by a study that has compared the literature available on three academic social networks (Research Gate, Academia.edu and Mendeley), the *SoReCom "A.S. de Rosa"* @-*Library* is the most comprehensive library currently available world-wide specialized in the supra-discilpinary field of Social Representations and Communication, with repository including more than 70% of all the literature available in the three academic social networks all together [28], [29], [30].

The unified research project framework was articulated into 13 research lines, that according to the approved project were supposed to be developed by the 13 recruited ESRs (which was the top number of ESRs allowed according to the 7th FP-2013 People-ITN-IDP EC call for approved projects). Therefore the 13 ESRs were recruited by matching their own interests and area of prior expertise:

- Five research lines were focussed on the genesis and development of different paradigmatic approaches: a) the "structural paradigmatic approach", b) the "socio-dynamic paradigmatic approach", c) the "dialogical, conversational and narrative paradigmatic approaches", the "anthropological and ethnographic paradigmatic approach", d) the "modelling paradigmatic approach".
- Three research lines were aimed at "Mapping the impact and dissemination of the social representation theory across different geo-cultural contexts": a) "Europe", the theory's homeland; b) the "Latin America", the most fertilised scenario; c) the "North-America and other continents (Oceania, Asia, Africa)": the new emerging scenarios.
- Five research lines were aimed at "Taking stock of the literature in several thematic fields": a) "Science, Social Representations and Communication", b) "Social Representations and Environment", c) "Social Representations, Economy, Advertising, Marketing and Organizational Contexts"; d) "Social Representations, Community & Health", e) "Social Representations & Politics: Multidimensional identities, intergroup relations, social movements and active minorities"

Coherently with the main objectives and the specific focus on the individual research project, the following main tasks were defined:

- to detect and retrieve publications not yet inserted in the specialized SoReCom "A.S. de Rosa"
 @-Library, and meta-theoretically analyse the whole body of the literature on Social
 Representations produced according to the "specific focus on the individual research project"
 over the world and not only in the geo-cultural context/continent of the host institution for
 mobility stage;
- to fill the new information and upload the related PDF files into the specialized SoReCom "A.S. de Rosa" @-Library;
- to carry out statistical analyses on the complete meta-theoretically analyse the body (extracted from the SoReCom "A.S. de Rosa" @-Library inventories after the integration of the new information);
- to produce video-interviews according to an outline designed by the project leader and to be
 possibly integrated by the ESRs with the key scientists who contribute to the development of
 the "specific focus on the individual research project" to Social Representations;
- to fully describe, visualize and comment the results obtained.

The insertion of all the meta-theoretical analyses in the specialised *SoReCom "A.S. de Rosa"* @-Library (5093 entries including the revision of the 3855 meta-theoretical analyses already filled in the So.Re.Com "A.S. de Rosa" repository prior the work of the ESRs on 22-10-2014) will make available to the scientific community the worldwide most comprehensive digital library specialised in the Social Representations and Communication literature, currently including 11.341 bibliographic items and big data and meta-data as solid background knowledge for further researches.

3 RESULTS

The results can be viewed from two main perspectives: a) from training activities perspective; b) from the perspective of the research outcomes and their dissemination.

3.1 From the perspective of the training activities

The overall research training offered to the *SoReCom Joint-IDP* ESRs has been very rich and even wider than the planned events formally included as organizational commitment in the EC approved Grant Agreement (Annex I). In particular it included:

3.1.1 Main network training events

As foreseen in Annex I, 10 main network training events (http://www.europhd.net/sorecom-joint-idp-scientific-events) have been held at the main host institution and streamed via web-interactive video conference to participants from other network institutional partners:

- 4 International Summer Schools in 2014, 2015, 2016 and 2017 (http://www.europhd.net/international-summer-schools)
- 6 International Lab Meetings: 3 Winter and 3 Spring Sessions in 2015, 2016 and 2017 (http://www.europhd.net/international-lab-meetings)

In total 103 professors and key experts from associated partners and other international institutions from 19 countries (Argentina, Brazil, Canada, China, France, Hungary, India, Italy, Japan, Mexico, Moldavia, Poland, Portugal, Romania, Spain, Sweden, Switzerland, UK, USA) have been invited for the 10 training events organized within the framework of the *SoReCom Joint-IDP project*, for a total of 96 key lectures and of 10 seminars on transferable skills and sessions held by non academic partners.

211 participants – including the ESRs – from 23 countries (Argentine, Austria, Belarus, Brazil, Canada, China, Costa Rica, Croatia, Cyprus, France, Hungary, Iran, Italy, Macedonia, Mexico, Montenegro, Philippines, Portugal, Romania, Russia, Slovenia, Spain, Switzerland) attended the 10 events, and have contributed with 85 presentations and 13 thesis sessions open to other participants.

3.1.2 Methodological Training & Transferable skills workshops

In addition to the above mentioned training events formally included as organizational commitment in the EC approved SoReCom Joint - IDP contract

- 1 Seminars and Workshops on "Food for mind and Methodological Training & Transferable skills" have been organised at the European/International Joint PhD in S.R. & C. Research Centre and Multimedia Lab with the active participation of the doctoral trainees and supervisors. (http://www.europhd.net/sorecom-joint-idp-workshops-and-seminars_)
 - These seminars, involving coordination with other professors and other researchers not only from the European/International Joint PhD laboratory, but also from other Sapienza departments and partner institutions, were open to the active participation of all the ESRs and doctoral trainees enrolled in the European/International Joint PhD in Social Representations and Communication that were physically present at the lab.
 - The seminars with an active participation of professors from outside the lab streamed via web-interactive video conference have also been available through streaming to the European/International Joint PhD doctoral trainees who were outside of the lab in Rome.
- 2 Additional *individual methodological training* sessions (http://www.europhd.net/sorecom-joint-idp-individual-methodological-training)
 - have been organized at the European/International Joint PhD in S.R. & C. Research Center to provide the ESRs with the skills they needed to use the following software for the data analyses:
 - Tableau software for Visual Analytics and Geo-mapping of the research results related to the dissemination of the Social Representations theory across the world by continents and countries:
 - o *Iramuteq* to perform *Descending Hierarchical Cluster Analysis*, detecting *Word Clouds* for each class, Correspondence Factorial Analysis etc.
 - Spad to perform multi-dimensional analysis

- o *Open source software R* (welcoming the ESRs' request) to perform multi-dimensional analyses by using an *open source software*, rather than a software requiring commercial license available only at the lab, thus allowing the ESRs to work independently from home.
- 3 Participation of the ESRs in complementary training and scientific events external to the European/International Joint PhD in Social Representations and Communication Research Centre and Multimedia Lab (http://www.europhd.net/sorecom-joint-idp-participation-esrs-events-external-project#workshops):
 - http://www.europhd.net/sorecom-joint-idp-participation-esrs-events-externalproject#contribution): 28 presentations at 20 conferences by the 13 ESRs (for a cumulated number of 37 ESRs)
 - (http://www.europhd.net/sorecom-joint-idp-participation-esrs-events-externalproject#attendance): Passive participation to 16 conferences by the 13 ESRs (for a cumulated number of 20 ESRs)
 - (http://www.europhd.net/sorecom-joint-idp-participation-esrs-events-external-project#workshops): Participation to 35 workshops / seminars / courses by the 13 ESRs (for a cumulated number of 83 ESRs)
 - (http://www.europhd.net/sorecom-joint-idp-participation-esrs-events-external-project#lectures): 5 lectures held by 3 ESRs during their secondment abroad

3.2 From the perspective of research outcomes and their dissemination.

All the 13 ESRs have successfully submitted and defended their thesis according to the planned day-time schedule during the 2017 International Summer School (http://www.europhd.net/summer-school-2017-scientific-programme). Both the main tutor and the co-tutors in admitting all the ESRs to the thesis defense and the 9 external members of the three Final Juries have evaluated the ESRs' outcomes recurring to the whole evaluative ranges of grades taking into account the quality of the thesis, independently on its degree of coherence with the approved project.

The final evaluation by the members of the three independent Final Jury ranged from Acceptable / Good / Very Good / Very Good / Excellent / Excellent with Laude, depending exclusively on the ESR's final individual outcomes of the thesis report and oral defense.

Regarding both the "overall level of the recruited researcher(s) integration in the research team and the host organisation" and "the overall performance of the recruited researcher(s)", it should be noted that individual differences were however relevant.

The program, in fact, involved students with different backgrounds (e.g. different nationalities, disciplinary and academic formation, prior methodological training and languages communication skills) and diverse prospective career expectations in or outside the academic context (as shown in their individual career plans). Individual differences were also relevant in term of personality, collaborative/individualistic attitudes, prior experience in research team and more of less mature management of group dynamics, etc. As honestly declared in one of the work progress reports, not all the fellows have collaborated with the same commitment and efficacy: some of them with background on statistics have inserted the data in an excel file, with the double disadvantage to do not be guided by the automatic control provided by the web platform for controlling the quality of data since the phase of data input and not optimising the integrated and comparative analyses between the different research lines.

Overall, besides the *very good* generalised participation in the training events, the level of integration in the collaborative research team and co-operation with other team members - aimed at the realisation of the approved unified research program articulated in 13 individual research focuses - was quite unbalanced, ranging from very good to very poor, thus leading to an evaluation of fair by the project leader, in agreement with the other members of the Supervisory Board.

This also applies to the *originality of fellow(s) approach towards research (initiative/independent thinking)*, which was very diversified among those who were able to promote some initiatives to contribute to the overall project outcomes (such as suggesting the use of alternative open access software R, which allowed all the ESRs to proceed autonomously with the data analyses, rather than using commercial license software available only at the lab), those who contributed to the overall research with their insights, and those who mis-interpreted the autonomy, which lead to problems

such as the lack of communication about the progress of their work, the disconnection from the tutoring and co-tutoring activities, neglecting the advices and feedbacks received).

The project leader and all the members of the Supervisory Board have invested a lot of energies with the support of the Head of the Department, to proceed to the end of the contract with a successful outcomes for all the ESRs, offering to all of them collective and individualised opportunities for training and scientific networking and for achieving at the same time the best results possible of the approved scientific project, keeping all the contractual commitments taken as defined in the Annex I.

4 CONCLUSIONS

In conclusion, the outcomes realised can be considered satisfactory – despite the management difficulties derived by the mis-interpretation of the "individualisation" of the project by some of the ESRs who deviated from the originally approved project for which they were recruited, making difficult to fully achieve the ambitious goals initially planes.

In term of one of the final successful outcomes of the SoReCom Joint-IDP contract, as above mentioned, all the 13 ESRs have successfully defended their thesis according to plan scheduled in the contract by their 3rd year PhD training.

From this perspective the final outcome achieved by the *SoReCom Joint-IDP* may be estimated "very good", despite the higher expectations of the project leader. On 31 May 2018 the Research Executive Agency (REA) has approved the final report and the financial statement relating to the grant agreement, proceeding to the transfer of the final payment.

The approval of the Final Report in 2018 – eight months after the conclusion of the contract at the end of September 2017 - provides a post-hoc validation of the overall comment provided 5 years before (2013) in the "evaluation summary report": "This is an excellent project with important impacts", highlighting its "strengths" in terms of the "quality" criterion (with a score: 5.00/5.00) as follows:

- "The research topic is clearly defined and the research objectives are well outlined in the proposed project.
- The proposal has a broad perspective and involves many aspects of social science.
- The proposal includes the interdisciplinary methodology to emerge supra-disciplinary fields.
- The research-training programme and research methodology are clearly presented in the proposal.
- The originality of the proposal is evidently presented.
- The innovative contribution of the research-training programme is presented in detail beyond the interdisciplinary approach.
- The proposal provides a wide and crucial participation of private and non-academic partners in the research and training activities.
- Contribution of private sector is distributed in the course of each sub-research programme."

In term of contribution to the scientific field, the high societal impact of the knowledge developed by the researchers working in Social Representations and Communication in many cross-thematic areas of supra-disciplinary interest (environment, health, education, science and technology, communication, politics, economics, etc.) is another added value of the knowledge produced thanks to the ambitious *SoReCom Joint-IDP* program led from 2013 to 2017. See among others: [31], [32], [33].

Besides the extensive list of conferences, seminars, lectures aimed at disseminating the scientific outcomes (http://www.europhd.net/dissemination-conferences-project-coordinator; http://www.europhd.net/dissemination-events-esrs; http://www.europhd.net/publications-conference-presentations-and-oral-communications-esrs) - the SoReCom THEmatic NETwork @-NEWS (http://www.europhd.net/sorecom-newsletter) - disseminated regularly each month to almost two thousand of individual members and to more than 150 institutions (http://www.europhd.net/sorecom-thenet-news) - has contributed to a mutual exposure from one side to information, contacts and opportunities related to the scientific events and initiatives promoted worldwide by members of the SoReCom THEmatic NETwork and related Associations/Institutions and from the other side to the team and individual activities realised during the SoReCom Joint-IDP project life, continuing even beyond its EC-funded contractual period.

On the basis of the 4 years management of this *SoReCom Joint-IDP contract* approved within the FP-2013 People-ITN-IDP, some suggestions by the project leader are advanced anchored into long term experience (1994-2017) as co-ordinator of Marie Curie Actions and previous Training Mobility Researcher programs since the 3rd Framework Program along the 4th, 5th 6th, 7th.FPs. In particular:

- From 1994-1995: as coordinator of the EU DG XII-Research funded Marie Curie Research Training Grants under the HCM Program contract n°. CE CHRX-CT94-0687
- In 1996: EU DG XII-Research funded the co-ordinator of the European Ph.D. on Social Representations and Communication was also invited for 3 months (Jan.-March) as senior fellow to Surrey University (S.P.E.R.I. - Social Psychology European Institute) under TMR Program: Marie Curie Research Training Grants
- From 1995 to 1997: as coordinator of the EU DG XII-Research funded Marie Curie Research Training Grants under the TMR Program for European PhD fellows - contract n° ERB400GT963929
- From 1995-1999: as coordinator of the EU DG XII-Research, under the Training Mobility Researcher (TMR) program provided funding for a four-year cycle of European PhD International Summer Schools - contract n° ERBFMMACT960165
- From 2000-2004: as co-ordinator of a Marie Curie Training Site Multi-Partner Organization under the program Improving Human Research Potential and the Socio-Economic Knowledge Base by the EU DG XII-Research that funded the European PhD on Social Representations and Communication network (contract n°. HPMT-CT-2000-00152)
- From 2013 to 2017: as co-ordinator of the SoReCom-Joint-IDP (People-ITN-2013 call for IDP).

The main difference between the previous Marie Curie Actions and the SoReCom-Joint-IDP contract approved within the People-ITN-2013 call for IDP - consists of the nature of the research project in itself, as in the approved contract: "individual based" versus "integrated team based". In fact, both the individual training mobility programs and the previous Marie Curie Training Network site, which we have coordinated in 2000-2004, were based on fully 'bottom-up' approach and therefore the ESRs were recruited on the basis of their individual project to be developed with the support of tutor, cotutors at the host network institutions, promoting international mobility. This traditional ITN schema still persisted in the People call for ITN, but it was very different in the approach to the specificity of the SoReCom scientific project approved as "excellent" within the action IDP. In fact contrary to the traditional ITN bottom-up approach - on the basis the 2013-2017 SoReCom Joint-IDP contract - the ESRs have not been admitted on the basis of their own original research project, but to collaborate to an on-going research program characterised by the special integrated and team based nature - with its own specific background, objectives, hypotheses, research designs, methodological tools, data analysis plans, ad hoc developed digital infrastructure - as clearly described in the approved SoReCom Joint- IDP Annex I and in the call for recruitment. The specificity of this scientific project and its unconventional and innovative nature in the domain of social sciences (still too much anchored to individualistic research approach, compared to the collaborative research practices more developed in hard sciences labs) was one of the elements highly valorised in the evaluation summary report, mentioning precisely quality strength elements such as among others: "the research topic clearly defined and the research objectives well outlined", "broad perspective involving many aspects of social sciences", "interdisciplinary methodology to emerge supra-disciplinary field", "research methodology clearly presented", "originality of the proposal evidently presented", "innovative contribution presented in detail beyond the interdisciplinary approach".

To realise the approved project and to achieve at most the target outcomes as planned in the Annex I has required a strong perseverance by the project leader and institutional commitment also by other members of the supervisory board, and at the same time the needed flexibility to cope with tensions deriving from the misleading interpretation of the recommendation promoting "individualisation" of the project by some of the ESRs who felt legitimated to start a brand new project, on subjects completely outside of the approved project. This "individualistic" – rather than "individualised" approach – led some of the ESRs to neglect the advice provided by the Supervisory Board, who – coherently with the replies to the recommendations approved by the EC - has promoted the originality of the ESR's work in interviewing the data set with original questions and individual curiosity, as well as interpreting and discussing the results also on the basis of their own intellectual background and therefore proposing the individualisation strategy performing different paths of data-analysis by crossing different data and meta-data to be defined in relation to each ERS' specific individual focus within the overall approved

scientific project. Depending on the interpretation of the individualization of the project, it has been possible to fully or partially ensure the expected outcomes. In fact – as indicated in the reports submitted to the REA the members of the Supervisory Board "have however been open to welcome further measures suggested by the REA, despite the consequences that certain interpretation of the individualisation of the project might have on the overall implementation of the scientific project originally approved, as analytically described in the Annex I."

Still convinced of the added value to improve collaborative research practices in the field of social sciences to afford the challenge to explore complex societal phenomena through big integrated supradisciplinary projects – rather than encouraging a myriad of fragmented individual small projects - and to overcome the individualistic attitudes still prevailing in the social sciences and humanities compared to the level of interconnected collaborative research labs in natural or applied scientific fields, we believe crucial:

- a) to reflect on the research training through research in a collaborative environment and the related issue of 'originality' and IPR preventing opposition rather than integration between individual and team based contributions to research:
- b) to pursue coherence between approved projects as defined in the Annex I and the recommendations for their implementation, in light of the nature of the approved projects;
- c) to promote full responsibility in all the actors involved in the realisation of approved projects in the light of their respective roles; these include the need to promote a research environment culture where the contractual statement "The Marie Curie Researcher" shall be responsible if, due to his/her behaviour, the University will be not able, totally or partially, to fulfil its obligations towards the REA according to the Grant Agreement" will be a shared value and attitude;
- d) to adopt communicative strategies aware of the effects of the non transparent or triangulated communication based on non verifiable information in the management of the contracts.

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REFERENCES

- [1] de Rosa, A.S. "New Forms of International Co-operation in Doctoral Training: Internationalisation and International Doctorate: One Goal, Two Distinct Models". UNESCO-CEPES Journal "Higher Education in Europe", 33 (1): 3-25, 2008.
- [2] de Rosa, A.S. "The So.Re.Com. EuroPhD World: Combining Partnerships with Innovation". In A. Klucznik-Tòrò, A. Csépe, D. Kwiatkowska-Ciotucha (Eds.) Higher Education Partnership, Innovation, IHEPI, pp. 203-212, Budapest.:Publikon Publisher/IDResearch Ltd., 2009.
- [3] de Rosa, A.S. "Promoting Joint European/International Doctorates in a global scenario: Opening the European PhD on Social Representations and Communication to the World". In M. Gaebel, L. Purser, B. Wächter, L. Wilson (Eds.) *Internationalisation of European Higher Education. An EUA/ACA Handbook*. (HBI 1 04 09 11 C.2.4. pp. 1-35) Berlin. Stuttgart: RAABE, 2009. Republished DUZ Verlags- und Medienhaus GmbH, Berlin, E-Book: 978-3-96037-226-4, 2017
- [4] de Rosa, A.S. "The Joint European/International Doctorate on Social Representations and Communication: an experience anticipating the Bologna process". Task Force 4 "Development and administration of Joint Programmes at Doctoral Level" of the Joiman EC-funded Project, 2010, retrieved from: https://www.joiman.eu/activities/Lists/DevelopmentActivities/DispForm.aspx?ID=16&Source=https %3A%2F%2Fwww%2Ejoiman%2Eeu%2Factivities%2Fdefault%2Easpx
- [5] de Rosa, A.S. "Internationalisation of collaborative doctorates and Joint International Doctorates: requirements and guidelines for each distinct model". In *Higher Education Partnership and Innovation*, pp. 219-242, Budapest: IHEPI, Publikon Publisher/IDResearch Ltd, 2010.

- [6] de Rosa, A.S., "De Nouvelles Formes de Coopération internationale dans la formation doctorale: Internationalisation et doctorat international: un objectif, deux modlèes distincts". In V.Baidenko (ed.) *The Bologna Process: resume of the decade,* Ministry of Education and Science of the Russian Federation, Institute for Higher Education Quality, pp.357-363, Moscow, 2011.
- [7] de Rosa, A.S. "Complementary on-line and face-to-face structured training activities in a joint networked international doctorate." The Open and Flexible Higher Education Conference 2013 Proceedings: Transition to open and on-line education in European universities" (Paris 24th-25th October 2013), 2013.
- [8] de Rosa, A.S. "The European/International Joint Phd In Social Representations and Communication: a Pioneer Case of Triple "I" (International, Interdisciplinary, Intersectoral) Networked Joint Doctorate", 9th International Technology, Education and Development Conference, INTED2015, (Madrid, SPAIN, 2-4th of March, 2015). In Inted 2015 Proceedings, (pp. 5449-5460), Madrid: INTED Publications, 2015. Retrieved from: http://library.iated.org/publications/INTED2015
- [9] de Rosa, A.S. "The European/International Joint PhD in Social Representations and Communication:a triple "I" networked joint doctorate", Book of Proceedings of the 2nd International Conference on Development in Doctoral Education and Training (Oxford, UK, 30th -31st March 2015) (D. Halliday & G. Clarke Eds.), pp. 47-60, London: Epigeum part of Oxford University Press, 2016.
- [10] de Rosa, A.S. (2018 in press). "Innovative Doctorates: A 'Must' for the Policy Agenda of the European Research And Higher Education Areas (Era-Ehea)", Book of Proceedings of the 3rd International Conference on Development in Doctoral Education and Training (Sradford-Avon UK) 3-4 April 2017) London: Epigeum part of Oxford University Press, 2018.
- [11] de Rosa, A.S. (2006). "Social Representation and Communication Thematic Network: A case study for monitoring the development of a scientific Community". In I. Labhrainn, C. McDonald Legg, D. Schneckenberg & J. Wildt (Eds.), *The Challenge of eCompetence in Academic Staff Development* (pp. 49-57). Galway: CELT, NUI, [ISBN: 13-0-9551698-1-6]
- [12] Moscovici, S. *La psychanalyse son image et son public. Etude sur la répresentation sociale de la psychanalyse*. Paris, France: Presses Universitaires de France,1961/1976. Portuguese translation of the First Part by A. Cabral, A representaçao social da psicanálise, Zahar, Rio de Janeiro, 1978; Portuguese Edition of the integral book by P. Guareschi,A psicoanalise: sua imagem e seu público, Vozes, Rio de Janeiro, 2011; English edition by G. Duveen, 2008, Psychoanalysis. Its Image and Its Public, Polity Press, Cambridge; Italian Edition by de Rosa, A.S. La psicoanalisi, la sua immagine, il suo pubblico, Edizioni Unicopli: Milano, p. 450, 2011.
- [13] Moscovici, S. Social representations: Essays in social psychology, NYU Press, 2001.
- [14] de Rosa, A.S (Ed.) Social Representations in the 'Social Arena', p. 280, New York London: Routledge, 2013.
- [15] Lo Monaco, G. Delouvée, S. and Rateaux, P. (Eds.), *Les représentations sociales,* Brussels, Belgium: Editions de Boeck, 2016.
- [16] de Rosa, A.S. "From theory to meta-theory in S.R.: the lines of argument of a theoretical-methodological debate." *Social Science Information*, 33(2), pp. 273-304,1994.
- [17] de Rosa, A.S. "Le besoin d'une 'théorie de la méthode". In C. Garnier (Ed.), Les formes de la pensée sociale, pp. 151-187, Paris: P.U.F., 2002.
- [18] de Rosa, A.S (Ed.) 'Looking at the history of social psychology and social representations: Snapshot views from two sides of the Atlantic', *Rassegna di Psicologia* [Special Issue], 2, 2008.
- [19] de Rosa, A.S. "50 anos depois: a 'Psychanalyse, son image et son public' na era do Facebook." In A. Almeida, Z. Trindade, F. Santos (Eds.) Teoria das Representações sociais - 50 anos., pp. 491-561, Technopolitik e Centro Moscovici, Brasilia: MEMORES/UERJ, REPSO/UFES, LABINT/UFPE, 2011.
- [20] de Rosa, A.S. "La psicoanalisi, la sua immagine, il suo pubblico: 1961-2011. Compiere 50 anni nell'era dei social networks." In I. Galli (Ed.) *Cinquant'anni di Rappresentazioni sociali. Bilanci e prospettive di una Teoria in continuo divenire*, pp. 59-101, Milano: Edizioni Unicopli, 2012.

- [21] de Rosa, A.S. "Taking stock: a theory with more than half a century of history." Introduction to: A.S. de Rosa (Ed.), *Social Representations in the "social arena"*, pp. 1- 63. New York London: Routledge, 2013.
- [22] de Rosa, A.S. "Research fields in social representations: snapshot views from a meta-theoretical analysis." In A.S. de Rosa (Ed.), *Social Representations in the "social arena"*, pp. 89-124, New York London: Routledge, 2013.
- [23] de Rosa, A.S. "Mise en réseau scientifique et cartographie de la dissémination de la théorie des représentations sociales et son impact à l'ère de la culture bibliométrique", In G. Lo Monaco, S. Delouvée and P. Rateaux (Eds.), Les représentations sociales, pp. 51-68, Brussels, Belgium: Editions de Boeck, 2016.
- [24] de Rosa, A.S. "The So.Re.Com. "A.S. de Rosa" @-Library: A Multi-Purpose Web- Platform in the supra-disciplinary field of Social Representations and Communication." In *INTED 2014 Proceedings*, pp. 7413-7423, Valencia: INTED Publications, 2014. Retrieved from http://library.iated.org/?search_text=publication%3AINTED2014&adv_title=&rpp=25&adv_authors =&adv_keywords=&orderby=page&refined_text=de+Rosa
- [25] de Rosa, A.S. "The Use of Big-Data and Meta-Data from the So.Re.Com A.S. de Rosa @-Library for Geo-Mapping the Social Representation Theory's Diffusion over the World and its Bibliometric Impact." INTED2015 Proceedings "9th International Technology, Education and Development Conference", Madrid, 2-4 March, 2015, pp. 5410-5425. Madrid, Spain: IATED2015Publications, 2015b. Retrieved from http://library.iated.org/publications/INTED2015 ISBN: 978-84-606-5763-7 / ISSN: 2340- 1079 http://library.iated.org/view/DEROSA2015USE
- [26] de Rosa, A.S. "Mission, Tools and Ongoing Developments in the So.Re.Com. "A.S. de Rosa" @-library." In M. Khosrow-Pour (Ed.) *Encyclopedia of Information Science and Technology 4th Edition*, pp. 5237-5251, Hershey, Pennsylvania: IGI Global, 2017.
- [27] de Rosa, A.S. Dryjanska, L. Bocci, E. "The impact of the impact: Meta-Data Mining from the SoReCom "A.S. de Rosa" @ Library." In M. Khosrow-Pour (Ed.) *Encyclopedia of Information Science and Technology 4th Edition*, pp. 4404-4421, IGI Global: Hershey, Pennsylvania, 2017.
- [28] de Rosa, A.S., Bocci, E., Dryjanska, L., Borrelli, F. "The Role of Academic Social Networking in the Dissemination of the Social Representations Literature", 10h International Technology, Education and Development Conference, INTED2016, Valencia, SPAIN, 7-9th of March, 2016. In *Inted 2016 Proceedings*, pp. 1051-1060. Madrid: INTED Publications, 2016.
- [29] de Rosa, A.S., Dryjanska, L., Bocci, E., "Mapping the dissemination of the Theory of Social Representations via Academic Social Networks" In M. Khosrow-Pour (Ed.) *Encyclopedia of Information Science and Technology 4th Edition*, pp. 7044-7056, IGI Global: Hershey, Pennsylvania, 2017.
- [30] de Rosa, A.S., Dryjanska, L., & Bocci, E. (2017). Profiling authors based on their participation in academic social networks. 11th International Technology, Education and Development Conference, INTED2017, (Valencia, SPAIN, 7-8th of March 2017). In Inted 2017 Proceedings, (pp. 1061-1072), Madrid: INTED Publications. http://library.iated.org/publications/INTED2017 ISBN: 978-84-617-8491-2 / ISSN: 2340-1079.
- [31] de Rosa, A.S., & Dryjanska, L. "Social Representations, Health and Community. Visualizing selected results from the meta-theoretical analysis through the Geo-mapping technique." In A. Oliveira, B. Camargo Vizieu (Eds.) *Representações sociais do envelhecimento e da saúde*, pp. 338-366, João Pessoa, Brasil: Editora Universitária da UFPB; 2017. Retrieved from http://repositorio.ufrn.br
- [32] de Rosa, A.S., Bocci, E., Dryjanska, L "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", Papers on Social Representations, 27 (1), pp.6.1-6.35, 2018. Retrieved from http://psr.iscte-iul.pt/index.php/PSR/index
- [33] de Rosa, A.S. Gherman, M.A. "State of the art of Social Representations Theory in Asia: an empirical Meta-Theoretical Analysis", *Journal of Pacific Rim Psychology*, 2019 in press.