Commentary

EVALUATIVE CONVERSATIONS: TRANSLATING BETWEEN DIVERSE STAKEHOLDERS IN REGIONAL RRI PROJECTS

TJITSKE HOLTROP, INGEBORG MEIJER, PAULA OTERO-HERMIDA, ANESTIS AMANATIDIS, CHIARA BUONGIOVANNI, DONATELLA CASALE, CLAUDIA COLONNELLO, ALESSANDRO DESERTI, FABIO FEUDO, ALAN HARTMAN, MARIANNE HÖRLESBERGER, ILDIKO M. IPOLYI, NHIEN NGUYEN, MIKA NIEMINEN, GABRIELE QUINTI, TINE RAVN, FRANCESCA RIZZO, FELICITAS SCHMITTINGER, NORBERT STEINHAUS, ROGER STRAND, THOMAS VÖLKER, RENE WINTJES AND EMAD YAGHMAEI
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ABSTRACT

Since the summer of 2020, researchers from ten projects pertaining to the Horizon2020 Science with and for Society (SwafS) call have been meeting virtually as the SwafS14 Monitoring and Evaluation ecosystem. Topics of discussion were the trials and tribulations of their regional Responsible Research and Innovation (RRI) projects as well as their strategies for monitoring and evaluation. In this paper we make a first attempt at presenting these issues as problems of translation between different kinds of stakeholders. After an exploration of the diversity of stakeholders and the process of translation in regional RRI, we suggest *evaluative conversations* as a way of improving regional RRI. We intend to develop this idea in the future and that these conversations will facilitate more responsible and engaged monitoring and evaluation and contribute to better R&I policies.

INTRODUCTION

What is the best way to conduct evaluations of regional Responsible Research and Innovation (RRI)? We, the authors of this article, have been discussing this question since the summer of 2020 in a series of conversations. We represent 11 projects, all funded by the EU Horizon2020 Science with and for Society (SwafS) program. Ten projects – SeeRRI, TeRRItoria, TeRRIfica, SISCODE, CHERRIES, DigiTeRRI, RRI2SCALE, TRANSFORM, TetRRIs, and RIPEET –responded to the EU Horizon 2020 SwafS14 call "Supporting the development of territorial Responsible Research and Innovation" with the strategic aim to foster RRI in regional and local science and innovation systems. The 11th project – SUPER-MoRRI – is the host of our conversations. SUPER-MoRRI focuses on monitoring and evaluating RRI. It intends to develop an evaluation framework that adapts metrics to their specific contexts and actors, thereby promoting responsible use and interpretation of the results.

RRI is defined by the European Commission as the ambition to let diverse groups of societal actors (researchers, citizens, policymakers, entrepreneurs, social innovators, third sector organizations, etc) "work together during the whole research and innovation process in order to better align both the process and its outcomes with the values, needs and expectations of society." Our projects address regional RRI ("territorial RRI" in EC jargon), which refers to the support of more open, inclusive, responsive, and reflexive regional and local science and innovation systems to improve the governance of regional transformations and the response to regional challenges. Our projects generally aim to align science, innovation, and society by facilitating collaboration between local stakeholders such as research performing organizations (RPO), higher education institutions (HEI), public authorities, civil society organizations (CSO), and, to a lesser extent, research funding organizations (RFO), small and medium sized enterprises (SME), and industry. These stakeholders represent around 35 regions from 20 countries across Europe.

We came together as a group to discuss the possibility of a shared M&E plan, cocreated with the regional partners. Background for this were the following assumptions: Collaboration between regional RRI projects would provide detailed information on the monitoring of regional research and innovation projects with respect to the RRI keys developed in the MoRRI project and mentioned in the original EU Horizon 2020 call: Gender Equality, Science Literacy, Public Engagement, Ethics, Open Access, and Governance (Technopolis, 2020). Other "indicators" besides these keys might be added as well, possibly reflecting conditions such as sustainability and the ARRI process dimensions (anticipation, reflection, responsiveness, inclusion. Stilgoe, Owen, Macnaghten, 2013). Also, Sustainable Development Goals (SDG) and Smart Specialization (S3)-related indicators were expected to be part of the process.

When our meetings started in the summer of 2020 some of the projects had only just started, while others had been running for some time. All projects were struggling with the effects of COVID19. We soon realized that the differences between the approaches, emphases, collaborations, or timelines of the different projects were too big to consider a one-size M&E plan to fit all projects. We collectively decided to explore our differences further to see what other output or activities could follow. The SUPER MoRRI team compared several existing M&E plans (more about this later), from which four general differences emerged: 1) the RRI frameworks that projects draw on, 2) the diversity of stakeholders and how to engage them, 3) the evaluation practices adopted by the projects

and, 4) the indicators, what they mean and how to use them. We used the material collected in these conversations as a starting point for the analysis of RRI projects and their evaluations as processes of translations. This analysis inspired us to suggest "evaluative conversations" as answer to some of the translational issues in (evaluating) RRI.

In the following, we will first discuss the conversations we had around the general differences of RRI framing, stakeholders and how to engage them, evaluation practices and indicators. Secondly, we will reflect on these issues as problems related to translation, which reveal two crucial elements: 1) the diversity of stakeholders, and 2) a process of subsequent steps to integrate this diversity successfully and effectively. We will, thirdly, explore these two elements drawing on insights and building blocks from other projects and initiatives, to finally introduce our idea of evaluative conversations. We emphasize that this paper is a first attempt at understanding SwafS14 projects as projects of translating between heterogeneous stakeholders that could be strengthened by the approach of the evaluative conversations. We hope to elaborate on SwafS projects as projects of translation and on evaluative conversations in the future.

# EVALUATING REGIONAL RRI: WHAT ARE THE ISSUES?

In early 2021 we organized four focused conversations around one of the four issues we mentioned above. In the first focus group we invited the participants to reflect on how their own projects related to RRI frameworks and responsibility. The image here, taken from the RIPEET project, represents an RRI constellation based on the MoRRI keys of

ethics, gender, participation, science education, open access, and governance; the RRI dimensions of anticipation, reflexivity, inclusion, and responsiveness; and the quintuple helix stakeholders of industry, academia, government, civil society, and environment. In particular, the following two questions were discussed: How to incorporate all these skills, elements, and stakeholders successfully in a project? And what kinds of RRI-inspired trajectories of change are being pursued?

From the conversation around RRI frames we became aware of the diversity of approaches to RRI that our projects work with. Within each project a different focus, selection of stakeholders, ambition, and/or territory can be observed, with different aims as well. Some projects have a strong focus on systemic institutional or organizational change. Others focused on citizen engagement as crucial condition for grounding RRI. Again others argued that certain keys, such as governance, permeated all aspects of regional RRI. There was no consensus on the quintuple helix where some argued that the environment cannot be considered an actor. Instead, we should stick with the idea of the quadruple helix and consider sustainability to be an overarching feature of RRI. Participating researchers from all projects shared the opinion that response-able and inclusive engagement with a host of relevant, yet heterogeneous actors, concerns and languages is both a key feature and challenge of RRI.

Amanatidis and Meijer offer a useful framework for making sense of the diversity (SUPER MoRRI, 2021). They conducted a survey among 29 SwafS funded RRI projects. They analyzed the diversity they encountered in terms of three kinds of RRI. They refer to these kinds of RRIs as multistabilities: relative stable results of processes in which many actors, ambitions, resources, and contexts come together around one of many possible versions of RRI. The first (1) are projects that create value *for* specific societal groups. RRI projects offer resources such as knowledge, funding, and networks, encourage stakeholders to define their preferred

Figure 1: RRI constellation based on RRI dimensions, MoRRI keys and quintuple helix stakeholders. http://ripeet.eu
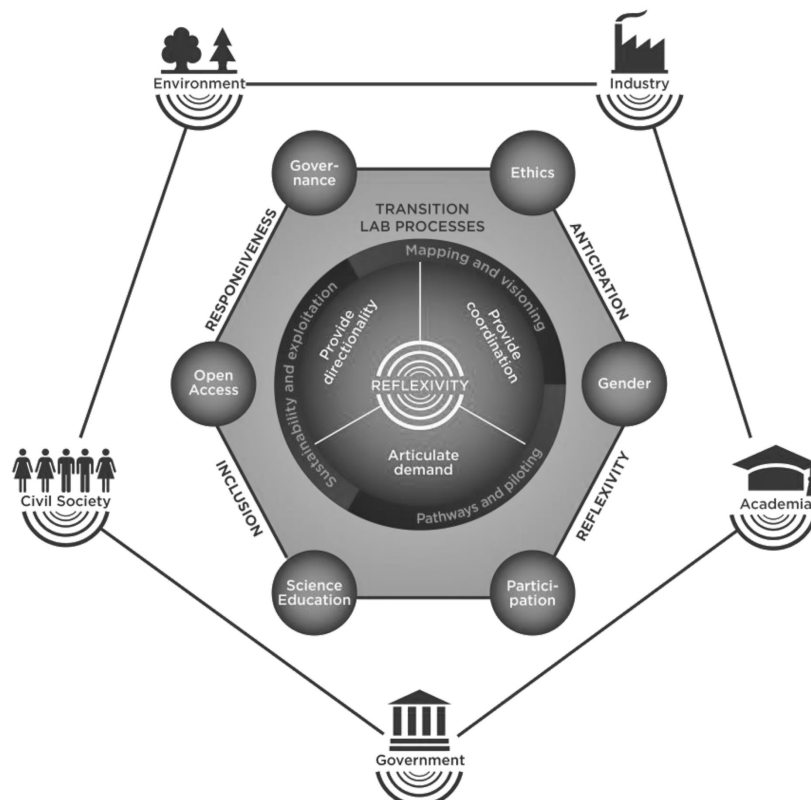
transformations, and facilitate the process towards this direction. In such constellations, the challenge is to connect ideas and practices of RRI to the worlds of local stakeholders. The second (2) kind of RRI project are those that focus on democratizing research and innovation, by creating common views across all actors and holding each actor equally account-able for decisions and actions taken throughout the process. For these projects it is a challenge to balance the expectations of non-consortium members, especially regarding the time and effort the engagement takes. The third (3) kind of RRI project is concerned with mobilizing actors around already existing RRI conceptualizations. In these projects, a lot of investment is usually needed to make the RRI framework accessible to stakeholders.

The second conversation was about the engagement of stakehold-ers as key concern and *strategy* for RRI. Engaging stakeholders effec-tively is not straightforward. It is important to keep in mind that these regional RRI projects work with different kinds of stakeholders. There are often multiple regional and non-regional partners involved in the project consortium who organize and manage regional coalition building. Then, there are regional stakeholders who become part of these coalitions, while having their own stakeholders as well. So there was a need to

discuss how to involve all these actors, what is at stake for them and who makes the decisions.

Finding and enrolling stakeholders is a complicated process. Keeping them committed for a longer period even more so. Issues are the build-ing of trust between stakeholders, understanding each other's concerns and ambitions within the language of RRI, subscribing to the need and method of regular assessments, and all in the context of additional COV-ID19 restrictions. The drive to contribute to change and innovation ideally comes from the stakeholders, but this is not always the case. Commit-ment needs a lot of maintenance and care, communicating the benefits of RRI and projects protocols to stakeholders and translating between stakeholders' different needs and languages.

The third conversation was about evaluation logics and practices. If conducting regional RRI projects is already complicated, then what about evaluating them? Not all projects had designed a monitoring and evaluation plan yet, or at all. We compared four available evaluation plans – of SISCODE, CHERRIES, TeRRItoria, and SeeRRI – for their pur-poses and justification of M&E; the approaches to M&E; and the tools and instruments applied. Table 1 below gives a comprehensive overview of the aims, approaches, and tools.

Table 1 Listing the different elements of our SwafS14 M&E plans

M&E plans	
purposes and justification	long-term durability and sustainability; framework for self-sustaining RRI ecosystems; recommendations on policy and governance structures; feedback to internal, organizational and institutional contexts; demonstration of benefits of RRI; raising awareness of potential challenges; sustainability and transferability; accountability
approaches to and aspects of M&E	problem-solving orientation; developmental evaluation; a quality orientation (evaluation is understood as a managerial procedure); a realist evaluation and co-production model; a formative process evaluation (formative evaluation, inspired by the deliberative democratic evaluation perspective); a summative impact assessment ("theory-based evaluation"); a relational approach to evaluation of social innovation; theories of change (Schwandt, 2015); theories of organizational change
tools and instruments applied	collect evaluative data and input through deliverables and virtual talks; evaluation questionnaires, time series; relevance/ effectiveness/ efficiency/ impact; focus on context-mechanism-outcome; implement a participatory and inclusive approach that relies on partners and stakeholders; attendants' satisfaction on involvement, degree of influence, decision making, transparency of processes, incentive mechanisms, voluntariness, implementation and perceived benefits; inspirational catalogue of indicators for the co-creation of context-specific success criteria; selection of indicators includes relevant MoRRI-indicators, Sustainable Development Goals; on-site visits; discussion/focus groups; semi-structured interviews.

Three themes permeated the conversation about evaluation practices. In line with the other conversations, the problem of engaging stakehold-ers in evaluation practices existed for many. It remained a struggle to explain the benefits to stakeholders of RRI and the need for regular as-sessments. A second theme was the difficulty of accounting for regional differences. Many regional RRI projects weave together various interven-tions or forms of collective experimentation in different regions. Compar-ing these is difficult, and so is making quantitative statements about the changes seemingly caused by these interventions. Lastly, evaluations have several formal and informal goals and effects. Stakeholders may

have different needs or opinions about these. Evaluation protocols are crucial for accountability and governance purposes, but informally they are also a way of being in touch with stakeholders, or a way of raising awareness around RRI, and a means of learning about issues that are occurring in the project and solving them. Sometimes things take time to come to fruition, and at other times good things happen that were not anticipated or are not easily measurable. These phenomena escape the protocolized, formalized style of evaluation that comes in long surveys with closed-ended questions.

The problem with indicators – the subject of the last conversation – is similar to the one we mentioned in the context of evaluation practices. Indicators play different roles in different stages of the RRI and evaluation process. During the project they can point out to partners what might be important or needs to be addressed. After the project, indicators can be used for evaluating the project or communicating project outcomes. Moreover, they are useful in terms of accountability and the conceptualization of new projects and funding applications. Even if indicators are not informative or useful during the project, stakeholders and project partners might still need them to account for and communicate results. A case in point have been the MoRRI indicators, as indicators derived from the MoRRI project have been included in many of the SwafS calls. Since the MoRRI indicators are oriented towards the national level, several projects struggled to use them in their regional contexts. In addition, not all projects focus on the RRI keys and consequently MoRRI indicators are not suitable for those projects. A last issue that needs mentioning, is that institutional or systemic change needs much more time than the duration of our projects. With the available indicators, these benefits of RRI, which take a long time to manifest themselves, can neither be assessed nor predicted.

Two topics stand out in these conversations. The first is the issue of productive engagement of stakeholders in which the translation of the benefits of RRI and the need for regular evaluations play a central role. The second is the confusion around different informal and formal uses and needs of assessments and indicators. In the following, we draw on the sociology of translation to make sense of these issues.

(EVALUATING) REGIONAL RRI AS PROCESSES OF TRANSLATION

The challenge of translation is key to regional RRI and its monitoring and evaluation. In this context, the following questions arise in particular: How to move from RRI conceptual frameworks to innovation done responsibly? How do EU government policies transform regional activities? How to translate effects and change into indicators? How to translate between the needs and wishes of the European Commission, expert networks, regional projects, local partners, and stakeholders? In this section we turn to the sociological concept of translation to understand issues around the engagement of stakeholders and uses of indicators and evaluation systems better.

We turn to Michel Callon's Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay (1984) to make clear our use of the concept of translation. In short, the paper describes the scientific and economic controversy about the causes for the decline in the population of scallops in St Brieuc Bay and the attempts by three marine biologists to develop a conservation strategy for that population. Callon treats these attempts as a process of translation. Two insights are relevant for our purposes. First, there is a diversity of actors, and second, as these actors come together, their diversity is being translated, which is a process of different stages. Let's investigate these insights through the lens of the regional RRI projects.

DIVERSITY OF ACTORS

The actors that participate are diverse, as we already noted above. It is important to see these actors as occupying different realms or worlds. What makes for good RRI guidelines in one sphere doesn't make for good RRI practices in another. This is because good RRI is not an external state that is measured, but a social practice of interpretation of the why, how, what, when and with and for whom of responsible research and innovation. Grasping the diversity of stakeholders is a first step in understanding RRI projects as projects of translation. The Critical Making project developed a framework to get a sense of the ways in which stakeholders can be different (see figure 2).

In the model we see four interrelated concepts that may be used to understand who the stakeholders are, where they come from, what they want for the future, and how they want to achieve it. There is the concept of context, which indicates all the historical, political, economic, cultural, religious conditions, as well as other circumstances, issues or situations that matter to the stakeholders and their ability to cocreate. Framings are related to contexts and similarly influential on how stakeholders can participate, yet they determine the stakeholder more specifically. Framings are powerful narratives such as identities or shared meanings. They work as underlying assumptions through social, economic, or political issues, as well as technological frames. Spaces are the arenas that stakeholders want to intervene in meaningfully and these spaces come with different rules and expectations that make specific strategies possible and others not. Spaces can be physical, but obviously social, discursive, or institutional as well. Lastly, the concept of pathways sensitizes us to the plurality of possible ways towards change and innovation. It is useful to keep in mind that there is never one best way, and each way will likely be windy.

Figure 2 Critical Making Baseline model
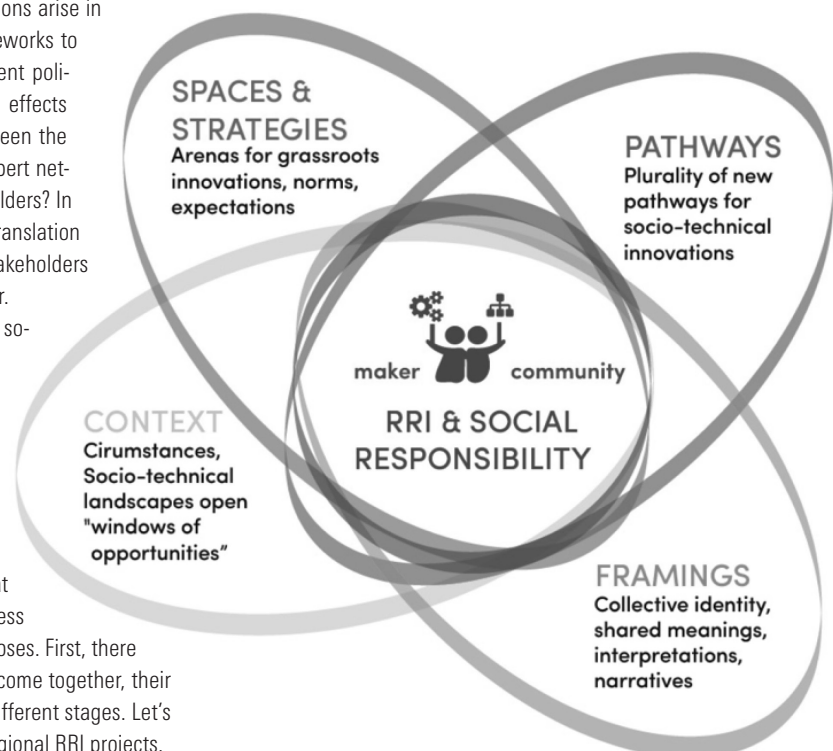
THE PROCESS OF TRANSLATING THE DIVERSITY OF THE ACTORS

Callon describes the process of translation as unfolding in four stages. The first is the stage of problematization, where researchers enter the scene and define the problem, the solution, and the actors who are part of the arrangement. The second stage is the one of involvement (Callon calls this *interessement*) where researchers try to lock in the actors into the roles of the research protocol. It is not enough for the actors to be identified in the initial stage of the problematization, they must become "interested" in the project, i.e. involve themselves by embodying the roles and relations as defined by the problematization. The third stage is that of enrolment, where things start to move, where the identity of the actors is being tested as they start to negotiate, forge, seduce, consent, or concede into an arrangement, or "multistability", to use the term of Amanatidis and Meijer. Last, there is the stage of representation (Callon calls this mobilization), which designates the process of coming to a characterization of a reality that represents all actors involved. How does this process and language relate to our own regional RRI projects?

START

The first phase combines problem formulation and involvement. Regional RRI projects start with an application process that articulates a problem and hypothesizes around central issues, relevant partners and stakeholders, their interdependencies, and ways to address these issues. The RRI or related regional innovative frameworks that a project subscribes to obviously influences the kinds of partners and stakeholders it seeks out. If citizen engagement is considered crucial for grounding regional RRI, citizen groups should be invited as key stakeholders. If responsible and inclusive engagement is the goal, then co-creation as a method for this makes sense.

Part of this phase is to get stakeholders interested and involved. For this, they need to agree and identify with their role in the problematization, the hypotheses, plan of action and fellow partners and stakeholders. To what extent this involvement really happens is uncertain, as the regional RRI projects reported. Making sure partners and stakeholders fully subscribe to the problematization or the challenge, i.e. take "ownership," is key to successful involvement.

IMPLEMENTATION

The next phase in the process is the execution of the project itself. Within many different work packages, in collaboration with many stakeholders, and in several regions, data collection and analysis are carried out. The focus is on enrolment, on testing the characterization of the issue and the relevance and role of the actors identified. The execution of a complicated research plan that was described in detail in the application often is, as we all know, much messier and unexpected than planned. Things happen (or not) all the time, leading to rearticulations of problems and hypotheses, failing commitments, data that is not useful anymore, drafts of deliverables that are abandoned. Regional RRI needs a lot of work to come into being.

As we described above, engagement of stakeholders is both the central strategy of RRI and its biggest concern at the same time, which needs a lot of attention and time. Selection of stakeholders is often still ongoing and communicating project expectations and RRI benefits to them is not straightforward. Their participation, commitment, use, and time investments become, therefore, unsteady, requiring continuous (re-)negotiation. As we saw earlier, projects reported stories about stakeholders' distrust of project administration, difficulties of being able to relate to the jargon of RRI, resistance to participating in regular assessments, and, lastly, stories about the effects of COVID19 on establishing committed relationships with stakeholders. The systematic involvement of stakeholders continues to be crucial for co-developing the process and taking ownership of the work packages is an important step in this executive stage.

FINISH

The last phase is the representation phase, i.e. the moment where the project is narrativized on behalf of all partners and stakeholders included. Putting together the joint narrative and using suitable indicators is the goal. What this narrative should look like, and which indicators will be used, has often already been promised early on. Moreover, many projects organize indicator development or other evaluative activities throughout the project. It is in the co-implementation phase that these need to be conclusively presented.

What is, however, the 'right' story or indicator? How to account well for the difference between regional innovations? How to account for changes that are more institutional and systemic and take more time than the running time of the projects themselves? Who is the audience? Should narratives and/or indicators represent the collective, the decisions of the project and enable learning, or should they be accountable and convince funding partners or the RRI community of experts? These difficult issues must have been resolved in this last phase, even if thinking about and working towards them has already started in the co-defining phase.

Regional RRI projects are clearly complex endeavors. Callon states that translations are processes of displacements of goals, interests, devices, human-beings, non-human beings, and inscriptions. RRI projects, indeed, aim to displace their allies and make their contexts, framings, strategies and pathways fit within a hypothesis-turned-reality of responsible, regional innovation. The actors don't always behave according to plan of problematization, involvement, enrollment, and representation, however. Research strategies become unsteady, (European) policies and concepts change or disappear, and the funders may raise a brow.

At the end of this process, the project represents the diversity of actors in unison. This process in which actors are defined, associated, and simultaneously obliged to remain faithful to their alliances can be understood as developments in a relationship of power. This development happens in an unsteady way, with many confusions, miscommunications, and misaligned expectations. The resulting translation is therefore not achieved in the most "democratic" way. It is in here that we want to contribute to the quintessentially democratic RRI method of cocreation. While the level of democracy of the process of translation is not Callon's concern, we do think that extra attention to Callon's stage of involvement may offer a way to deal with issues around stakeholder commitment and engagement that regional RRI projects reported.

EVALUATIVE CONVERSATIONS

RRI has been presented in this article as a process in which diverse stakeholders become engaged in a process of regional innovation. This process knows several stages of translation, of becoming engaged together. Maintaining the commitment of these stakeholders is difficult, and this is a crucial condition for the confusions around the different informal and formal uses and needs of assessments and indicators.

There is no general monitoring and evaluation plan to fit all regional RRI purposes as experiences in our regional RRI meetings and the work on multistabilities have shown. The conclusion, therefore, might reach as far as that the "credible contextualization" (one of SUPER-MoRRI's guiding principles) of data and information becomes redundant as each RRI project must have its own, singular M&E framework, and, consequently, project-specific data and indicators. The remaining issue is, then, for each project to establish their own framework for operationalizing RRI and engaging in responsibility and to do this within a collective of very diverse actors.

Figure 3 The SeeRRI model. Created by Nhien Nguyen with graphic design by Marion Magaña
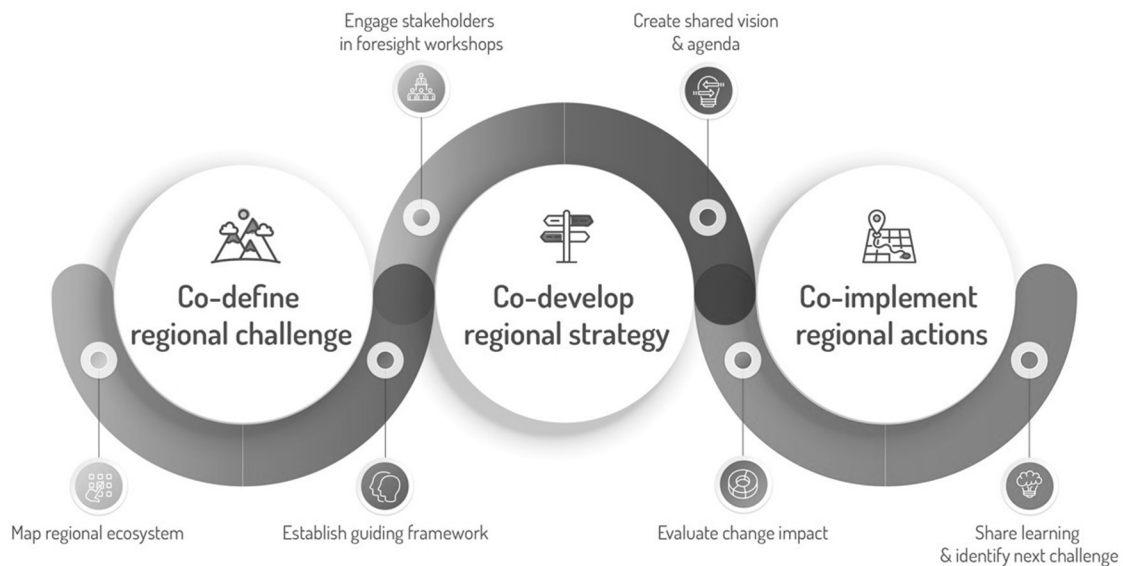
The SeeRRI model. Figure created by Nhien Nguyen with graphic design by Mario Magaña.

We suggest that this requires continuous conversations between all stakeholders. One of our ecosystem partners, the SeeRRI project, designed three stages (SEERRI, 2021) that offer good moments and orientations for th ese conversations. Conversations start in the co-defining phase. This can be followed by negotiations in the co-develop phase, followed by evaluative conversations in later stages. Taking note of RRIs projects struggles with engaging stakeholders and seeing these projects through the lens of Callons translational phases we argue that it is crucial to involve all stakeholders in the conversations and each time again address basic evaluative questions of "where do we come from?", "where do we want to go?", and "what needs to happen?".

Asking these questions allows projects to deal with the mess and uncertainties of research and innovation, thereby overcome the separation between evaluation and RRI. Integrating these evaluative conversations into the project's execution allows formative, real-time evaluation to happen building on co-creation. We are looking forward to experimenting with these evaluative conversations in the future.

REFERENCES

Callon, M. (1984). Some elements of a sociology of translation: domestication of the scallops and the fishermen of St Brieuc Bay. The Sociological Review. 32(1): 196-233.

European Commission. Horizon 2020 Program. Available: https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation

RIPEET (2021). RRI constellation based on RRI dimensions, MoRRI keys and quintuple helix stakeholders. Available: http://ripeet.eu

Schwandt, T. (2015). Evaluation Foundations Revisited. Cultivating a life of the mind for practice. Stanford University Press

SEERRI (2021). The SeeRRI booklet: Bringing responsibility and RRI into regional planning - from theory to practice https://zenodo.org/record/5567217#.YYQ_8S_MzOQ

Sipos, R., Akerman, M. & Wenzelmann, V. (2021). Critical Making Baseline: Towards a Critical Making Responsibility Framework. A report published by the Critical Making Consortium.

Stilgoe, J, Owen, R. & Macnaghten, P. (2013). Developing a framework for responsible innovation, Research Policy, Volume 42, Issue 9, 2013, Pages 1568-1580

SUPER MoRRI (2021). Policy report on the state of SwafS RRI projects. Available: https://super-morri.eu/download/153/findings-and-deliverables/5363/d7-3-policy-report-on-the-state-of-swafs-rri-projects.pdf

Technopolis. (2020). The evolution of Responsible Research and Innovation in Europe. The MoRRI indicators report. Available: https://www.technopolis-group.com/wp-content/uploads/2020/02/The-evolution-of-Responsible-Research-and-Innovation-in-Europe-The-MoRRI-indicators-report-D4.3.pdf

CONTRIBUTORS

SUPER-MoRRI

ANESTIS AMANATIDIS
CWTS Leiden University
Kolffpad 1, 2333 BN Leiden, The Netherlands
E: a.amanatidis@cwts.leidenuniv.nl
ORCID: 0000-0002-8037-7558

TJITSKE HOLTROP
CWTS Leiden University
Kolffpad 1, 2333 BN Leiden, The Netherlands
E: t.j.holtrop@cwts.leidenuniv.nl
ORCID: 0000-0002-1413-8591

INGEBORG MEIJER
CWTS Leiden University
Kolffpad 1, 2333 BN Leiden, The Netherlands
E: i.meijer@cwts.leidenuniv.nl
ORCID: 0000-0003-1481-1739

PAULA OTERO-HERMIDA
INGENIO CSIC-UPV
Camino de Vera, 46022 Valencia, Spain
E: pauother@upvnet.upv.es
ORCID: 0000-0001-6817-3504

SeeRRI

DONATELLA CASALE
University of Haifa
Abba Khoushy Ave 199, Haifa 3498838, Israel
E: dcasale@poli.haifa.ac.il
ORCID: 0000-0001-8758-8588

ALAN HARTMAN
University of Haifa
Abba Khoushy Ave 199, Haifa 3498838, Israel
E: ahartman@is.haifa.ac.il
ORCID: 0000-0002-1275-3902

NHIEN NGUYEN
Nordland Research Institute
Universitetsalleen 11, 8049 Bodø, Norway
E: nng@nforsk.no
ORCID: 0000-0002-6415-467X

TeRRItoria

FABIO FEUDO
K&I
Via Guido Reni, 56 – 00196 Roma, Italy
E: feudo@knowledge-innovation.org

ILDIKO M. IPOLYI
ESF
1, quai Lezay-Marnésia – BP 90015. 67080 Strasbourg Cedex, France,
E: iipolyi@esf.org

TINE RAVN
AU
Bartholins Allé 7, 8000 Aarhus C, Denmark
E: tr@ps.au.dk
ORCID: 0000-0002-8462-5686

TeRRIfica

NORBERT STEINHAUS
Bonn Science Shop
Reuterstr 157, 53113 Bonn, Germany
E: norbert.steinhaus@wilabonn.de
ORCID 0000-0002-6688-0739

SISCODE

ALESSANDRO DESERTI
Politecnico di Milano
Piazza Leonardo da Vinci 32, 20133, Milano MI, Italy
E: alessandro.deserti@polimi.it
ORCID: 0000-0002-1049-7650

FRANCESCA RIZZO
Politecnico di Milano
Piazza Leonardo da Vinci 32, 20133, Milano MI, Italy
E: francesca.rizzo@polimi.it
ORCID: 0000-0001-5809-0684

FELICITAS SCHMITTINGER
Politecnico di Milano
Piazza Leonardo da Vinci 32, 20133, Milano MI, Italy
E: felicitas.schmittinger@polimi.it
ORCID: 0000-0002-8690-2640

CHERRIES

CLAUDIA COLONNELLO
Knowledge & Innovation (K&I)
Via Guido Reni, 56 – 00196 Roma, Italy
E: colonnello@knowledge-innovation.org
ORCID: 0000-0002-2630-2758

DigiTeRRI

MARIANNE HÖRLESBERGER
AIT Austrian Institute of Technology
Giefinggasse 4, 1210 Wien, Austria
E: Marianne.Hoerlesberger@ait.ac.at

RRI2SCALE

CHIARA BUONGIOVANNI
APRE - Agenzia per la Promozione della Ricerca Europea
via Cavour 71, 00184 Roma, Italy
E: buongiovanni@apre.it

RENE WINTJES
Maastricht University
Minderbroedersberg 6-6, 6211 LK Maastricht, Netherlands,
UNU-MERIT
E: r.wintjes@maastrichtuniversity.nl

TRANSFORM

ROGER STRAND
University of Bergen
5007 Bergen, Norway
E: roger.strand@uib.no
ORCID: 0000-0001-6159-1586

THOMAS VÖLKER
University of Bergen
5007 Bergen, Norway
E: thomas.volker@uib.no
ORCID: 0000-0002-2921-3996

TetRRIs

MIKA NIEMINEN
VTT, Technical Research Centre of Finland ltd.
Viikinkaari 1, 00710 Helsinki, Finland
E: mika.niemine@vtt.fi
ORCID: 0000-0001-8528-6869

EMAD YAGHMAEI
Delft University of Technology (TU Delft)
Mekelweg 5, 2628CD Delft, Netherlands
E: e.yaghmaei@tudelft.nl
ORCID: 0000-0003-4884-77801

RIPEET

GABRIELE QUINTI
Knowledge & Innovation (K&I)
Via Guido Reni, 56 – 00196 Roma, Italy
E: quinti@knowledge-innovation.org
ORCID: 0000-0002-8630-5686