

# CHALLENGES FOR CO-GENERATION IN THE SEARCH FOR THE SOCIAL IMPACT OF THE UNIVERSITY: A CASE OF THE CONSTRUCTION OF A DIALOGIC SPACE THROUGH ACTION RESEARCH

LOS RETOS DE LA CO-GENERACIÓN EN LA BÚSQUEDA DEL IMPACTO SOCIAL DE LA UNIVERSIDAD: UN CASO DE CONSTRUCCIÓN DE UN ESPACIO DIALÓGICO A TRAVÉS DE LA INVESTIGACIÓN ACCIÓN

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**Abstract:** At the center of the debate about the social impact of the university we find a new division of work in the production of knowledge that can respond to the challenges of society. This new division of work is more complex and signals an epistemological turn in the form of organizing interaction between academic knowledge and society. This article poses four challenges that were identified based on a case of the construction of a dialogic space for the co-generation of knowledge. The case, which was developed through action research, questions the scheme in which knowledge generated in a university is packaged in the form of articles, books, reports, or conferences and communicated linearly, and suggests another that is based on dialogue and that allows other actors to contribute their knowledge as well.

**Key words:** university, social impact, action research, communication.

## Introduction

The debate about the social impact of the university has been gaining strength in recent years. At the center of this debate lies the ability of the university to interact with other actors in society to co-generate knowledge that contributes to dealing with challenges faced by territories. Public administration policies also foster this debate with a clear commitment to transdisciplinary research aimed at the solution of great social challenges.

Nevertheless, in order for the university to be able to co-generate knowledge with other actors in society, it needs to reformulate its mission of transference as a mission of service to society (Tandon et al., 2017). It should also cast a critical eye on the monopoly it has maintained in the production of knowledge and on its structure in disciplinary silos. Likewise, its researchers need to

develop specific abilities, such as active listening and communication in multidirectional dialogues in real time (Oswald et al., 2017), conflict management, power relationships, and knowing how to generate social capital (Karlsen & Larrea, 2015). Communication, language, and mediation also stand out as necessary abilities in order for the university to play the role of agent of change in the territory (Aranguren et al., 2016; Trencher et al., 2014).

The present article takes a close look at this discussion and aims at responding to the question of what challenges the university faces to co-generate knowledge with other actors in society. Specifically, it questions the scheme in which knowledge generated in the university is packaged in the form of articles, books, reports, or conferences and communicated linearly to other actors in the territory, without any dialogue that

would permit those actors to contribute their own knowledge.

This article is divided into three sections. The first section examines the relationship between the university and society, and brings to light the need to explore a new division of work in the production of knowledge that would be able to respond to the challenges of society. The second section presents the case under consideration: first, the context in which the case develops is established; next, the point of departure is explained – the draft of a book that was initially going to be communicated under the linear scheme described above; and finally, the section concludes with a description of the process of construction of a dialogic space in which to communicate that knowledge through action research. The last section of the article discusses the case by way of conclusion.

## **1. The university and its relationship with society**

The idea of research in the university has traditionally been supported by a demarcationist and linear approach to the scientific and social aspects of the research, maintained in the name of objectivity when facing problems. That tradition linked academic research to the search for true, productive, and coherent knowledge, a search governed exclusively by cognitive values and a set of methods through which genuine knowledge is certified. To this characteristic another normative one was added, according to which the guarantee of good science, or of responsible research, is the action of the researcher him- or herself, based on respect for scientific norms (Douglas, 2009). Thus, led by curiosity and his or her desire to discover and interpret the internal evidence of the real, physical, and social world, the researcher would isolate from its rules and norms the consequences of the use of generated knowledge, the satisfaction of human needs, and knowledge that is beneficial for society (Brown & Guston, 2009).

In this sense, the university and its relationship with society have been governed by a clear functional and moral division of work (Van den Daele, 1978). More specifically, epistemic authority and the organization of research have been subjected to a set of assumptions that guide and make sense of the production of knowledge.

The classical sociological perspective holds that “the institutional goal of science is the extension of certified knowledge” (Merton, 1942: 270). This characteristic of science is observed in a principle that recognizes and encourages the task of the researcher, that is, the freedom and independence of academic research with the goal of generating knowledge for its own sake. Together with this, standardized and professional recognition is established according to the degree of authenticity, scientific value, originality, and the publicizing of knowledge (Polanyi, 1961). All of this is preceded by a linear and positivist view of research that has been of benefit to a model of conduct and evaluation characterized by a quantitative methodology, a cumulative model of scientific knowledge, and a logic with universal pretensions.

This image of research and its relationship with society, never exempt from debate, is subject to continual revision (Rip, 2012). In that regard, there are very diverse beliefs: some insist on the complex nature of the challenges that must be addressed as a society, others note the economic and social contribution of the university, and still others focus on the increase in cognitive capital with respect to organizations outside the academic and university network, or emphasize a different image of the expected results. In any case, these changes, although of different forms and degrees, alert us to the need to encourage collaborative programs and strategies in order to boost the intensity, quality, and density of research. In other words, these beliefs make it possible to catch a glimpse of an epistemological and social turn in the form of understanding and organizing interactions between academic knowledge and the institutional, community, and corporate life (Bonaccorsi & Daraio, 2007). All of this leads to a demand for more socially robust linking policies at the same time that the demarcationist approaches mentioned above being revealed as highly ineffective (Felt & Wynne, 2007). As a result, research policies are gradually placing more emphasis on problems and challenges to resolve, instead of on disciplines and areas of knowledge, while a greater contextual sensibility emphasizes the widespread and collective nature of knowledge (Kuhlmann & Rip, 2018). In this way, the traditional assumption about expert discovery as a revelation of objective truths is being replaced by a perspective according to which different values, knowledge, and expectations are integrated into research and innovation processes and the results

align better with different social visions, needs, and preferences (Eizagirre, 2017).

This to some extent calls into question the idea that a special characteristic of research in the university is the belief that knowledge itself is the primary product and purpose of research. Nevertheless, the emergence of a new modality of organizing, producing, and validating knowledge in application contexts, a modality that transcends pre-established roles, is not at odds with scientific quality and excellence (Ziman, 1998). Likewise, a growing interest in the resolution of problems and research oriented toward challenges does not necessarily entail the rejection of the idea that science is an epistemic strategy of considerable value, nor the rejection of its social characteristics.

On the contrary, the gradual recognition of the dispersed nature of expertise and of the collaboration of different organizations, all bearers of knowledge, values, and interests, favors adaptation to distinct contexts, environments, and users, as it shows greater variety, robustness, and contextual sensibility (Callon et al., 2009). These changes indicate a new division of work, one that is more complex and interactive, and that indicates a system of dispersed research in which different professionals and communities of civil society interact and collaborate in response to social needs and aspirations.

This, however, requires a unique perspective about the nature, meaning, and purposes of the university. On the one hand, it subjects epistemic authority and the organization of research to cooperation with other extra-academic actors and proposals. On the other hand, it advocates for understanding the university in more relational terms and defends the open nature of research and innovation processes (Eizagirre et al., 2017).

## **2. Etorikizuna Eraikiz as an experimentation space of the co-generative role of the university: a meeting place for facilitators**

### ***2.1. Introduction to the case***

The preceding section suggests the need to explore a new division of work, one that is more complex and interactive when it comes time to generate knowledge that responds to the problems of society. For this purpose, it was said that it is necessary to have interaction and collaboration

among university researchers from different disciplines, and among those researchers and different professionals and groups of civil society.

The case addressed below is a project developed for the purpose of constructing a meeting place for facilitators of territorial development in the context of Etorikizuna Eraikiz (Building the Future), a program led by the Provincial Government of Gipuzkoa (PGG). This project can be interpreted as an experimental process of the construction of a place for collaboration, not only among researchers, but also among researchers and different professionals, in this case associated with the facilitation of territorial development. It is thus an experiment about the interactive role of the university with other actors in the territory. Following the language used in action research, which inspired the methodology of the present process, it is an experiment about the co-generative role of the university in its goal of generating knowledge that is useful in resolving the problems of society.

The co-generative role of the university is presented in the project from the perspective of the communication of academic knowledge, a field that one of the authors of the present article addresses in her doctoral dissertation. The initial proposal was that a university that wishes to co-generate knowledge to respond more directly to the needs of society cannot continue to support a scheme of linear communication with society. In such a scheme, knowledge is generated in the university and is then communicated to actors in formats such as reports, articles, books, and seminars without the actors of the territory having the option to dialogue with the researchers or contribute to the construction of the knowledge in question. Two of the authors of the present article were then challenged to experience a different way of communicating a draft of a book that they were working on. The contents had been constructed for book format, and had therefore followed the regular process of academic production. Nevertheless, the work done on the draft makes it possible to speak about a new way of communicating academic knowledge that moves forward in the direction suggested in the theoretical framework by breaking with the traditional division of work.

### ***2.2. Point of departure: a book draft***

As stated, the point of departure of the process was a draft written by two of the authors of the present

article that had been planned to be communicated in the form of a book. The content of the book could, a priori, seem insignificant in terms of reflection about how it was communicated. Nevertheless, in order to understand more clearly who the actors were with whom knowledge was later co-generated, the content of the draft should be understood. Thus, let us now introduce the draft that was later converted into a book in Deusto's Territorial Development Series under the title *Actores Facilitadores del Desarrollo Territorial. Una Aproximación desde la Construcción Social (Facilitative Actors of Territorial Development. A Social Construction Approach)* (Costamagna & Larrea, 2017).

The book presents the initial argument that facilitative people are a relevant element for processes of territorial development to work, but that their role has nevertheless been conceptualized very little and when it has been done, a neutral role has been attributed to them that does not correspond to the authors' interpretation of their nature in practice. Thus, the book suggests steps to take in order to reinterpret the figure of the facilitator and to help the reader to become a facilitative person of processes of territorial development.

The first step is to understand the origin of this interpretation of facilitation, which is double: the pedagogical focus (developed in Latin America) and action research for territorial development (which has its roots in the collaboration between research environments in the Basque Country and Norway). These approaches make it possible to argue that territorial development is a complex process, and complex processes cannot be developed in terms of order and authority, nor do they allow "finding" solutions through analysis. Rather, solutions must be "constructed" and that requires developing processes of social construction. The book maintains that often in territorial development, complicated problems (for which there exists a solution that can be discovered through expert knowledge) are not distinguished from complex ones (problems for which no solution that can be discovered exists, but rather for which a solution must be constructed in a contextual way). Because of this, people have tried to solve complex problems as if they were complicated ones, through linear logic and hierarchical decisions. However, the figure of the facilitative person has been proposed as someone who can generate the appropriate conditions for

other actors to reflect, make decisions, and act to *construct* solutions in a collaborative way.

After outlining this framework, the authors of the book propose the figure of the facilitative actor, which breaks away from the image of the neutral professional facilitator and suggests that the different actors in the territory, whether from a political, business, or university background, can have their own interests and still be legitimized by other actors to facilitate a process. Once this figure has been defined, the book addresses the leadership of the facilitative actor, which is defined as a relational leadership. The book also poses the question of whether facilitators are born or made and, therefore, whether it is possible to train facilitators. Beginning from the hypothesis that it is, a set of roles of facilitative people are suggested, as are the individual and group abilities needed for those roles to be addressed.

The authors' goal is to invite the reader to reflect about his or her own role in territorial development by seeing whether the conceptual framework of facilitation and its characteristics are helpful to understand some of his or her experiences.

This content was appropriate for participants to experience a new way of communicating academic knowledge, not only because the authors of the book were willing to participate in the process, but also because the content itself is oriented toward generating facilitative abilities in a context of multidisciplinary and co-generation. Thus, it was foreseeable that the potential readers of the book would be people with an attitude that was a priori favorable toward participating in a co-generative process.

Considering the direct participation of all the authors of the present article in the action research process that constructed the dialogic space, we have chosen to use the third person plural in the following sections.

### ***2.3. The construction, through action research, of a dialogic space in which to communicate the book about facilitators***

In order to answer the question of "how" to communicate the book about facilitative actors, we developed an action research process based on the co-generative model of Greenwood and Levin (2007). Action research is proposed as a strategy for change that, through cycles of reflection-action-reflection, generates lessons that solve a

problem in practice and generate new knowledge that is relevant in the academic environment.

As mentioned above, all four authors of the present article participated in the action research process. We began with our goal, which was defined in terms of “communicating the book in a co-generative way,” but we played different roles. The authors of the book played the role of owners of the problem, while the author who was writing her doctoral dissertation at the time designed the process based on an analytical framework constructed on the basis of a review of the literature on Responsible Research and Innovation (RRI) and Communication for Development and Social Change (CDSC). For his part, the fourth author, who played the role of critical friend, maintained constant dialogue with the doctoral student, helping her to reflect on the development of the process and suggesting new lines of

discussion. At different times, professionals with knowledge about information technologies, audiovisual communication and design, and project management were integrated. In the final stage a pilot group formed primarily by doctoral students and researchers also participated.

In each of the workshops, the conceptual frameworks presented by the doctoral student shed light on the book authors’ reflections on the challenge expressed as “how” to communicate knowledge about the figure of the facilitative actor. Based on those reflections, the authors made decisions that were put into action. By the time the process was finalized, those actions had materialized in a digital dialogic space in order to communicate knowledge about the figure of the facilitative actor. Table 1 shows a summary of the process.

**Table 1.** The action research process: concepts and decisions.

<b>Concept/ Date of workshop</b>	<b>Decisions</b>
Communication as a process. (March 7, 2017)	Design a <i>journey</i> with two stages: - An interactive journey on which travelers internalize the contributions of the authors and of travelers who have already visited the different stops. - A meeting place at the end of the trail in which the book will continue being written.
The interaction of different knowledge sets. (April 12, 2017)	- Design the interactive journey with spaces that make it possible to visualize the idea that at each stop on the journey a deferred dialogue takes place between the authors and the travelers about the different chapters of the book.
The inclusion of perspectives, experiences, and expectations. (May 9, 2017)	- Formulate questions at each stop that invite the travelers to reflect about the chapters of the book by connecting with their own theoretical and practical knowledge.
Learning communities. (June 13, 2017)	- That the meeting place at the end of the trail should be constructed based on an emerging dialogue among the travelers who have completed the journey. - That the responsibility for keeping the dialogue alive should be shared.

Source: present study.

**2.4. Result: a meeting place for facilitative actors**

The tangible result of the process described in the previous section is an open space online

(<https://dgroups.org/groups/perfadt>) in which participants are invited to carry out a journey that ends in an agora or plaza where they can meet with

other travelers interested in the facilitation of territorial development.

The need to design a realistic and sustainable dialogic process was a matter of constant concern throughout the workshops. This reflection was key in the design of the space as a process divided into the two stages mentioned above: the journey and the plaza.

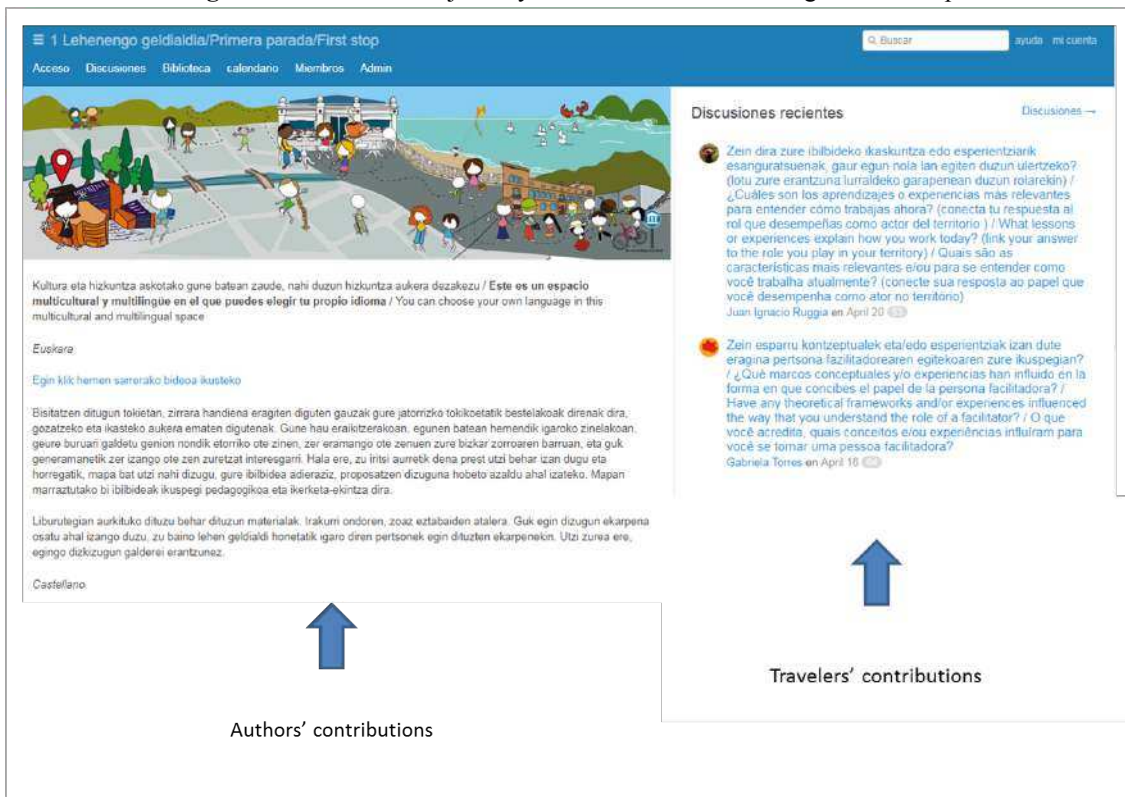
a. The interactive journey

The *interactive journey* is set up as a deferred dialogue that is developed throughout a tour with different stops, at each of which the travelers have the possibility of accessing both the original chapters written by the authors and audiovisual materials prepared by the authors in order to make those chapters more accessible to the travelers. But above all, the travelers have the possibility of sharing their reflections about the contents of the book and reading the contributions of travelers who reached the stops earlier. Following the

criteria of realism and sustainability, this deferred dialogue is an intermediate method between the total absence of dialogue and dialogue in real time among the authors and readers of the book. This intermediate method was considered necessary because the traditional format of communication of knowledge through a book would not have allowed for the development of any type of dialogue, while the need to maintain a continual dialogue would have been unsustainable for the researchers. The concept of deferred dialogue made it possible to find an intermediate point between the two extremes.

Figure 1 shows one of the stops on the journey. The space on the left consists of the contributions of the authors of the book expressed through texts and audiovisual materials; videos in which the authors directly address the travelers complement the chapters. The space on the right consists of the travelers' contributions.

Figure 1. An interactive journey in which a deferred dialogue is developed.



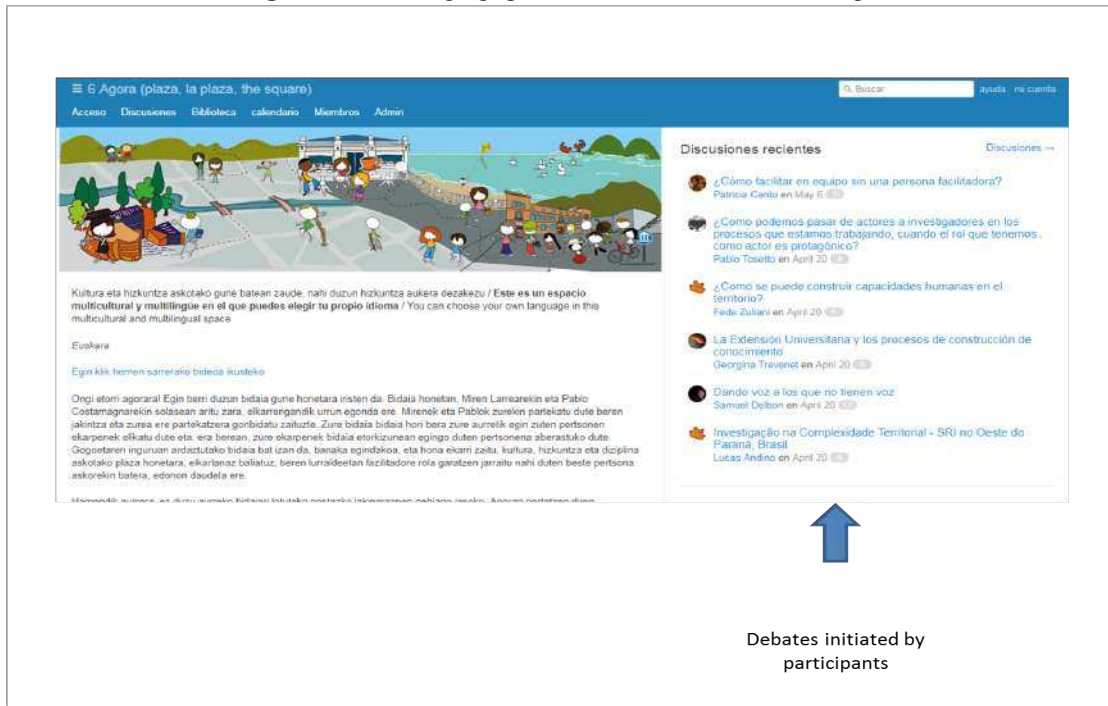
Source: <https://dgroups.org/groups/perfad>

At the time of writing, a total of 183 people from different parts of the world have begun the journey: Argentina, 73; Basque Country, 51; Uruguay, 22; Brazil, 9; Mexico, 6; Finland, 5; Colombia, 3; Peru, 3; and 1 person each from Germany, Chile, Cuba, Ecuador, Italy, Kenya, Nigeria, Norway, United Kingdom, the Dominican Republic and Vietnam. Among them are lecturers, researchers, and makers of public and private policy.

**b. The agora or plaza as a meeting point**

The second stage of the process, which is less closely linked to the direct contents of the book and is more directly interactive, was defined as a space in which to “continue writing the book.” It was configured as an agora, an emerging space that requires the more constant involvement of the authors but in which the responsibility for keeping the dialogue alive is shared. That is, the book continues to be written, but no longer by the authors alone but by all the people who make up the space and bring up debates and reflections about the facilitation of territorial development. Figure 2 shows this emerging space.

**Figure 2.** An emerging space in which to continue writing the book.



Source: <https://dgroups.org/groups/perfadt>

At the time of writing, of the 183 people who started the journey, 54 have integrated themselves into the agora and 15 have participated in the debates. The 54 people are distributed as follows: Argentina, 31; Basque Country, 10; Uruguay, 6; Finland, 3; and 1 person each from Brazil, Italy, Mexico, and Nigeria.

The following is an example of one of the discussions that evolved in the agora, which connects with the discussion about the invisibility of the facilitative person brought up in the book:<sup>1</sup>

<sup>1</sup> Permission for publication in the present article has been granted by the authors of these extracts.

“I would like to share a very recent experience I had in an action research project that I facilitate. At a certain point, I realized that I was becoming invisible as a facilitator. It happened when one of the policy-makers of the project, in a presentation to introduce her strategy to support local development, referred to the actions defined as a result of the action research process but did not mention the reflection-action space that she shares with us, the researchers [...]”

Facilitators’ Space, November 18, 2017

The discussion that followed that intervention included the following extract:

“I think that part of the reason why the role of facilitators in processes of territorial development is not valued is due to the fact that many of us who acted as facilitative people believed in the importance of the invisibility of that role. Now I believe the opposite.”

Facilitators’ Space, November 21, 2017

This debate generated a total of 24 interventions in which different actors in the territory (researchers and others) engaged in a dialogue about this issue that is addressed in the book but that in the dialogue is reformulated based on the experiences of the different actors.

We understand that with these processes, a process of co-generation comes into being, co-generation of knowledge that is associated with the book, but goes beyond the contents presented in the book. For this reason, our interpretation is that this means of communicating the book is a response to the new co-generative modes that are proposed as a challenge to the university and that can open pathways to processes of construction of knowledge that are co-generative and aimed at the resolution of specific problems. The division of work is modified, and there is a group perspective in which the knowledge of the actors is valued.

One of the characteristics of this process is that contents created by the researchers were present from the beginning. In this approach therefore, the researchers’ initial conceptualization and theorization efforts are not substituted by a space in which knowledge is constructed dialogically. What is proposed is the

complementarity of both approaches in a framework in which there are times when the researchers work on their own and times when they interact with their “readers” in new knowledge construction processes.

### 3. Discussion and conclusions

Having shared the theoretical framework and a practical case, let us now specify the connections between them in order to be able to construct the conclusions of the article. Considering that we stand before a debate that is gaining strength, but for which the university does not always have answers, we present the discussion not in terms of *recommendations*, but as centering around four *challenges*:

- a) To create socially relevant knowledge;
- b) To overcome the division of functions in the creation of knowledge: the university creates it and society assimilates it;
- c) The legitimization of co-generated knowledge; and
- d) A change of culture within the university in order to be able to co-generate.

The first challenge for the university that we identified in the first section is that of generating *socially relevant knowledge*. For this purpose it is necessary to go beyond epistemological, methodological, or theoretical approaches that organize the production of knowledge around disciplinary silos since the complexity of the challenges of society requires views shaped by interaction among different disciplines.

Multidisciplinarity has entered the project in two different ways. First, the design of the interactive communication space for the book about facilitative actors is the result of a multidisciplinary view (economy, communication, philosophy, information technologies, and audiovisual design) of a specific problem: the need for the university to contribute its knowledge in a way that contributes to change in the territory. On the other hand, the space is designed for experimentation with interaction among different disciplines and among different academic and extra-academic actors.

One of the people who completed the journey shared that what he liked best was the following:

“...being able to learn about the experiences and opinions of other actors. Above all, my own internal debate when I disagreed with what was being presented or understood it in a new way, and being able to work on it in order to construct a joint vision.”

Quote from the questionnaire filled out by travelers who completed their interactive journey (January 11, 2018).

The second challenge is that it is not enough to escape the logic of disciplinary silos, it is also necessary to *go beyond the division of functions*, for which reason it often goes without saying that the university produces knowledge and then society receives it and applies it. The interactive strategy for the communication of knowledge about facilitative actors attempts to overcome that division by creating a space in which “the book continues to be written” but in which the responsibility for writing it no longer belongs solely to the authors but to all who define that space. This transition to new forms of knowledge production includes the difficult task of combining the criteria of scientific quality with social relevance and contextual sensibility.

This requires a change in the university, given that areas endowed with knowledge are extended and decentralized, so that it should be able to deploy new abilities associated with mutual recognition, collaboration, and cooperative learning. But not only the university is faced with the need to change. This type of process also demands change in other areas of society in which the territorial actors must make the transition from passive receptors to co-generators of knowledge, with the attendant fears, lack of practice, and time devoted to reflection. One of the participants in the facilitators’ space expressed this idea as follows:

“The effort is in understanding that it is a space for group learning, where all opinions generate contributions... easy to say, but a bit more complicated to carry out...”

Facilitators’ Space, April 6, 2018

The above leads us to the third challenge, which was posed on the theoretical level in the first section: how to legitimize in academia the new knowledge co-generated between science and

society? The co-generative character improves the chances for the generated knowledge to help resolve problems when the knowledge of the actors who are most familiar with those problems is integrated in the process. But as it is not a knowledge produced under the supposed imperatives regarding scientific production, the co-generated knowledge poses difficulties when it comes time to integrate it again in the academic debate. It is for this reason that it is important to construct mechanisms of legitimization of this type of knowledge in academia, so that a collaborative and open type of generation of knowledge does not entail penalization in researchers’ careers.

As an example, research that incorporates different perspectives in its design, includes different actors, diversifies its sources of knowledge, reflects actively on ways to integrate socio-economic considerations, and is flexible enough to change direction and orientation in response to lessons, values and needs, such research appeals to a profound revision of the traditional epistemological and methodological suppositions about the nature and sense of research. To this are added other obstacles, such as those referring to the times and purposes of investigative activity, to the organizational and functional structure of universities, and to the models and criteria that regulate and incentivize the different programs for quality evaluation and accreditation. Regarding the latter, evaluative structures for national accreditation that regulate the system of professional promotion and its institutions and that control and incentivize research, publication, and academic careers in universities are clearly intended for a very singular model of university that creates difficulties in integrating proposals like that presented in this article. The question remains: How do we legitimize knowledge co-generated in the register proposed here?

The fourth and final challenge, which is related to the preceding three, is the change of culture required in the university in order to be able to naturally integrate co-generative models. How does the university today deal with the call for co-generation? How are individual researchers positioned with respect to the facilitation of processes of co-generation of knowledge among different actors? This requires a profound change in routines and behaviors that goes beyond any individual decision by the researcher. Ultimately, it is a matter of rethinking the aspects that affect the

process and purpose of the research. Some of the difficulties and resistances were mentioned above, many of them of an organizational or structural nature. In any case, we must also create the foundations for a cultural change within the university and in the short term, in the specific context analyzed in the present article. Such a change could come about thanks to doctoral courses and training for researchers in which these types of processes are presented. The constructed facilitators' meeting place could serve this purpose.

In this sense, we believe it necessary to highlight the importance of experimentation. Thanks to the Etorikizuna Eraikiz public administration program, the authors of the present article have had the opportunity to experiment with a space in which academic knowledge is shared dialogically. This opportunity has created the

conditions necessary to generate abilities in the university itself and in other actors in the territory within the framework of the unique governance possible on this journey, a governance in which the different actors, researchers, and non-researchers collaborate in the construction of knowledge that helps to overcome the challenges of the territory.

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