Peer Review in the Social Sciences and Humanities at the European Level: The Experiences of the European Research Council

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Abstract In this article, I outline the evaluation process established by the European Research Council (ERC) and present results of the ERC's funding calls between 2007 and 2012. Because of its European added value, the ERC is a unique funding organization in the European research landscape. Based on a rigorous evaluation process, the ERC dedicates a considerable share of its budget to the social sciences and humanities.

1 The European Research Council's Mission

The European Research Council (ERC) was established in 2007 as part of the European Commission's 7th Framework Programme (namely, the 'Ideas' Specific Programme); under the new framework program, Horizon 2020, it has been extended until 2020. Since inception, the ERC has filled a gap in the European funding landscape. The council's principle is to make decisions on the criterion of 'excellence only'. Although RD&I funding has become a major policy issue of European integration during the last 20 years, cutting-edge basic research remained largely underdeveloped at the European level (Dosi et al. 2009, pp. 233, 234). There are several reasons for this delay. One is the initial mandate to the European Commission to fund research under framework programs to the extent it supports the competitiveness of European industry. Consensus on the need to fund frontier research at the European level was not reached until the negotiations for FP7.

In the initial reasoning for setting up the ERC, frontier research was perceived as the (necessary) counterpart to a top-down approach in research funding, because frontier research is an investment in the European knowledge base and the innovation cycle (Schibany and Gassler 2010). Equally important, however, the ERC makes genuine competition among research institutions and researchers at the European level possible for the first time. The previous framework programs (FPs) lacked a specific

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drive to integration (Banchoff 2002). It turns out that, with the bottom-up approach and simple funding instruments, the ERC contributes significantly to a 'European added value' (Andrèe 2009; Stampfer 2008). Under the FP7 framework, the ERC received 15 % of the entire budget dedicated to research funding, totaling EUR 7.5 billion over 7 years, which makes the ERC a powerful instrument for funding research at the frontier of knowledge. Together with well-established national research funding organizations in European countries (although endowed with unequal budgets), the ERC now contributes decisively to fostering the European Research Area, the backbone of the European knowledge society. Under Horizon 2020, the ERC's budget will increase considerably, to approximately EUR 13.1 billion.

1.1 How Does the ERC Work?

The governing body of the ERC is the Scientific Council, which is responsible for developing the ERC's strategy. The Scientific Council represents the ERC to the scientific community, establishes the annual Work Program and in general ensures the ERC's high profile. The Scientific Council is composed of 22 highly distinguished members of the European scientific community, acting in a personal capacity. The governing structure of the ERC will change under the new legislation of Horizon 2020 (Nowotny 2013); however, the main principle will remain the same: Committed only to the principle of scientific excellence, the Scientific Council members are independent from political, economic, or other interests. To administratively support the Scientific Council, the Executive Agency (ERCEA) was created in 2009. Located in Brussels, the ERCEA currently has a staff of approximately 380, and the number is rising.

Exclusively committed to funding curiosity-driven, bottom-up frontier research by individual principal investigators (PIs) in EU member states or associated countries host institutions, the ERC is open to applications from all fields and to researchers from all over the world. At the moment, three funding mechanisms have been established. For talented post-docs and early-stage researchers (between 2 and 7 years after PhD), the Starting Grant scheme offers funding for 5 years and a project budget of up to EUR 1.5 million. The Consolidator Grant scheme, implemented since 2013, is a breakout from the Starting Grant call; this scheme covers the subsequent scientific career steps for more advanced scientists (seven to 12 years past PhD). Finally, well-established, senior researchers can apply under the Advanced Grant scheme, which offers funding for 5 years and a project budget of up to EUR 2.5 million. Advanced Grant applicants must have a distinguished track record over the past 10 years and present an innovative, ambitious research project. In 2012, the Scientific Council implemented a fourth grant programme for research groups, called the Synergy Grant. In addition, the Proof of Concept Scheme provides an opportunity for current ERC grantees to receive top-up funding for commercializing their research results. Each grant call is usually published annually.

Projects are funded based on proposals presented by individual researchers on subjects of their choice, with a clear emphasis on interdisciplinary and high-risk projects. Proposals are evaluated on the sole criterion of scientific excellence. Since there are no thematic or other priorities preselecting among the ideas and projects that applicants wish to pursue, evaluation of the project proposals relies heavily on the expertise of the reviewers. The ERC evaluation process is carried out by 25 panels for each funding mechanism with alternate panels put in place every other year—adding up to 75 panels annually (not including the extra panels in the Synergy Grant, which follows a different evaluation procedure). Each panel consists of approximately 12 to 16 panel members, all international experts in their field. They are supported by approximately 1,600 external (remote) reviewers per call.

1.2 European Added Value

Within a very short period, the ERC has become an undisputed success story. With its simple funding instruments, the ERC responds to the expectations of the younger generation of researchers who seek to break out of academic hierarchies and their national systems to obtain early scientific independence. And the ERC encourages advanced researchers to pursue riskier ideas that might lead to new breakthroughs and discoveries. However, beyond providing trustworthy and fair funding opportunities for the European scientific community exclusively based on scientific merit, the ERC carries European 'added value' (Nedeva and Stampfer 2012).

This 'added value' can be demonstrated on two levels. The first is related to the evaluation process. The ERC's evaluation process has won such high acclaim and reputation that high-level experts are willing to participate in the lengthy evaluation process, knowing that the ERC upholds its promise of the highest professionalism and, at the same time, allows them to witness the newest developments in their field. One of the most significant results of the ERC is the completely international set-up of its evaluation panels. On average, no more than two experts from the same country are represented on one panel, and on average, seven to ten countries are represented on one panel. Thus, the ERC has the most international evaluation procedure in place. At the same time, the panels are an excellent breeding ground for establishing a truly European academic culture that profits from the diverse cultural background of members, but is nevertheless focused on intrinsically scientific values.

The second level is related to the stimulation ERC grants provide to research institutions in Europe. It is based on a quite simple but nevertheless very effective equation: Countries and host institutions (universities and other research centres) can compare how many ERC grants they have won. With ERC grants distributed all over Europe, we start to see certain patterns. In terms of absolute numbers, related to the size of the population, the biggest winners of ERC grants thus far have been the United Kingdom, Switzerland and Israel. Comparisons like this that make policy makers and scientists demand more efficient infrastructure and support, in order to

achieve better results in the ERC grant competition. By and large, the ERC has become a quality threshold for the European research community.

The success story of the ERC has been critically acclaimed in evaluations (Vike-Freiberga et al. 2009; Annerberg et al. 2010, pp. 34–37) and public statements. As a role model for institution building, the ERC has already raised the interest of independent researchers (Gross et al. 2010; Hummer 2007; Nedeva 2009) and students (Haller 2010; Tan 2010). Members of the Scientific Council, when presenting the ERC to the academic community, continuously stress that the ERC is a learning institution and that improvements, particularly regarding the governance structure and the long-term funding of the ERC, are still needed (Antonoyiannakis and Kafatos 2009; Fricker 2009; Gilbert 2010; Nowotny 2010, 2013; Winnacker 2008).

2 Why Social Sciences and Humanities?

It goes without saying that the panels and reviewers follow the highest standards of peer review, as established and monitored by the ERC. The 25 panels are divided into three domains: physics and engineering (PE), life sciences (LS) and social sciences and humanities (SH). According to an interview with Helga Nowotny, ERC president from 2010 to 2013, the ERC was initially planned to cover only life sciences and physics, and it took some effort to convince politicians and representatives of the 'hard sciences' that social sciences and humanities must be included. Now the ERC's agenda is clear, as Nowotny, a sociologist by training, emphasizes: 'We fund research in the 19th century, German conception of *Wissenschaft*, which includes everything' (Enserink 2011, p. 1135).

Under FP7, the share of social sciences and humanities in the ERC's overall budget of EUR 7.51 billion was approximately 17 %. This was a much higher share than any other programme dedicated to social sciences and humanities. For example, in the 'capacities' special program, the socio-economic sciences and the humanities accounted for only 2 %. What is interesting, however, is that the social sciences and humanities were slower in recognizing the ERC as a source of funding. After a weak start in the first calls in 2007 and 2008, the number of applications rose more sharply in the SH domain than in the other domains. And, as we shall see, in the SH domain the popularity of the ERC still differs remarkably between disciplines and fields.

2.1 An Inclusive Approach

We live in a time when 'innovation' has almost gained the status of a buzzword in the European political discourse. Public spending for research is often evaluated along the (promised) impact on economic development. However, there is more to innovation. Whether it is a result of the financial crisis that asks for a critical validation of our understanding of capitalism, or the general question how to support societies

abroad, struggling to find a just and democratic society: Every time questions on societal and cultural foundations arise, in-depth analysis and expertise are required from the social sciences and humanities.

Unfortunately, the very disciplines and fields usually subsumed under the label of social sciences and humanities, thus far, cannot take advantage of this. An analysis of previous efforts by the European Commission showed that, although these programs were received very well by the community, the influence on 'the strategies and practices [...] has been limited' (Watson et al. 2010, p. 17). Whether the ERC's inclusive approach will have a more stimulating effect on elevating social sciences and humanities on the European level in the future remains to be seen. But it deserves our close attention here to clarify what lies behind the inclusive meaning of *Wissenschaft*. Clearly, in the sense of spanning all scientific fields, it avoids the danger of limiting the success of new approaches and the possibility of projects not being fundable because of a lack of expertise. Since the ERC actively encourages scientists to reach beyond disciplinary borders and to implement interdisciplinarity as a fundamental principle in European research, the number of cross-panel and cross-domain projects is increasing.

The ERC funds not merely basic research but also *frontier research*. This distinction is crucial for the role of the social sciences and humanities in the ERC, and therefore needs more explanation. According to a now famous classification, research can be divided along two different motivating factors: the role of applications and the use and the depth of understanding of causes, phenomena and behaviour. From the four possible combinations, frontier research can be understood as that 'of applications-oriented research with the pursuit of fundamental understanding' (Whitley 2000, p. xxi). This kind of research is often also represented by the reference to Louis Pasteur (Stokes 1997), but it drives not only parts of the 'hard sciences' as genetics, for example. Indeed, as has been noted, this motivating combination can be 'found in most of the human sciences' (Whitley 2000, p. xxi), because these fields of knowledge are concerned with societal and human affairs. Thus, the social sciences and humanities are particularly well suited for the type of research that the ERC aims to fund.

Social sciences and humanities have always played a distinctive role in the European Commission's research programs (Kastrinos 2010, pp. 300–304). Nevertheless, due to the austerity principles established in the aftermath of the financial crisis, concerns have been growing over the past few years that the social sciences and humanities programs will be severely cut in the European Commission's next multi-annual funding program, Horizon 2020. On December 8, 2010, social scientists published a memorandum warning of 'alarming developments' (Risse et al. 2010). Since then, the debate on the role of social sciences and humanities in Horizon 2020 has taken many turns, and dominated the EU Presidency Conference in Vilnius in September 2013 (Mayer et al. 2014).

That there is a widespread feeling of threats to funding for social sciences and humanities within the communities is not so much because politicians disregard these fields, as the common belief goes. Instead, it is a consequence of the fact that the social sciences and humanities have only weak institutional forms of advocating on

the European level. For example, there is no equivalent to the well-organized and powerful European Molecular Biology Organization (EMBO) that participates in many important events and represents the interests of its field in many respects.

For the social sciences and humanities, this lack of representation has its reasons. Most research funding in these fields still comes from national sources, and it is on this level for which knowledge is produced and on which representation is focused. In an integrated Europe with new funding opportunities, however, orientation along national aspects becomes detrimental. To compensate the lack of institutional representation, members of disciplines and fields in the social sciences and humanities therefore often resort to an alarmist rhetoric. Since the ERC will continue to follow its inclusive approach, the council is becoming an important point of reference for the social sciences and humanities.

2.2 ERC Evaluation in the Social Sciences and Humanities

Based on an excellence-only approach, the ERC evaluation follows a well-established, rigid process. Two aspects are particularly important:

(A) The process is the same over all three domains. There is no special treatment for any discipline or research field regarding the evaluation process, simply because of two reasons. Cross-panel proposals are distributed to members of other panels; in order to incorporate these evaluations, the procedure must be consistent. Additionally, the Scientific Council believes that proposals from all fields can be assessed under the same premise, namely, excellence. Of course, there are huge differences in what excellence means in different disciplines, fields and paradigms. However, there can be no doubt that excellence exists in each case, and that the focus on excellence as the only criterion for selection helps to foster the intrinsic values of *Wissenschaft* across all domains.

(B) The ERC focuses on individual, bottom-up research projects with one PI. Since the proposal and the PI's track record are crucial for the success of the funded project, they are thoroughly assessed by multidisciplinary panels. This approach distinguishes between the originality of the proposal and the PI's capability to actually carry out the proposal.

What makes the ERC so special in Europe is not that the council funds research based on this notion of excellence, nor that the ERC relies on a rigid peer review system. This is nothing new, since the most prominent funding organization, the U.S. National Science Foundation, was founded in 1950. Other organizations in industrialized countries either followed this model or set up variants. All over Europe, funding organizations rely on decision-making procedures similar to those described by the European Science Foundation (2011). In many respects, therefore, the ERC is simply absorbing well-established procedures and patterns, particularly in the evaluation process. Nevertheless, within this reliable structure, the ERC has also developed remarkable new features. The most important aspect is the fruitful combination of

the internationality of the ERC peer review process with the rigid process put in place. This combination creates a diversified approach to excellence.

The proposal evaluation follows a two-step procedure. In the first step, after proposals have been submitted and eligibility has been checked, panel members evaluate the proposals and the track record of the grant applicants. These are the only two criteria for the evaluation process. An original project proposal and an excellent career path are required to reach the second step of the evaluation. In preparation for the second step, the applicant's proposal and CV are again evaluated, this time not only by at least three panel members assigned to the proposal but also by remote (external) reviewers, specifically from the research field of the proposal. This is also a very important undertaking with cross-panel and cross-domain proposals. In the case of such proposals, a streaming takes place, using appropriate experts from other panels. Thus, the ideal mix of expertise can be achieved, also with an interdisciplinary proposal.

The second step of the evaluation process is different in the Starting and Consolidator Grant schemes and the Advanced Grant scheme. In the latter, where it is assumed that the PI has already gained a recognizable position in his/her field, the final funding decision is based on a second, thorough assessment of the proposals that made it into step two. In the Starting and Consolidator Grant schemes, where young researchers competing for large sums, the panels are required to get a better impression of the PI. Thus, every Starting and Consolidator Grant applicant who made it to step two is invited to an interview with the panel. The interview serves two purposes: It shows whether the PI is really committed to his/her research proposal and if he/she is really capable of doing it. At the same time, the interview gives the PI the opportunity to engage in a discussion with the panel in order to convince its members of the PI's intellectual strength and his/her commitment to the proposed research.

Peer review is a well-established procedure. When assessing the intrinsic scientific value of a research project proposal, peer reviewing is the only valid selection procedure. Nevertheless, peer review has its flaws, particularly in terms of the novelty of approaches, concepts and methodologies. If panels decide according to conventional wisdom and are not prepared to choose risky but promising research projects, the panels fail to achieve the ERC's main target. In the case of social sciences and humanities, a particularly broad range of different conceptual approaches exists. Lamont (2009, p. 57) distinguishes different types of epistemological styles (constructivist, comprehensive, positivist, utilitarian), and all panels must respect each style as scholarly valuable.

There are several ways on which the ERC relies in order to achieve a fair evaluation procedure focused on excellence, and all are centered on the evaluation panels. To begin, the ERC Scientific Council sets up the panels in a broad, interdisciplinary way. Only 25 panels cover all fields of science, scholarship and engineering. Let's take a closer look at the six panels that are assembled under the two letters SH. Fields and disciplines range from economics and management (SH1), sociology, anthropology, political science, law (SH2), geography, demography, migration, environmental and

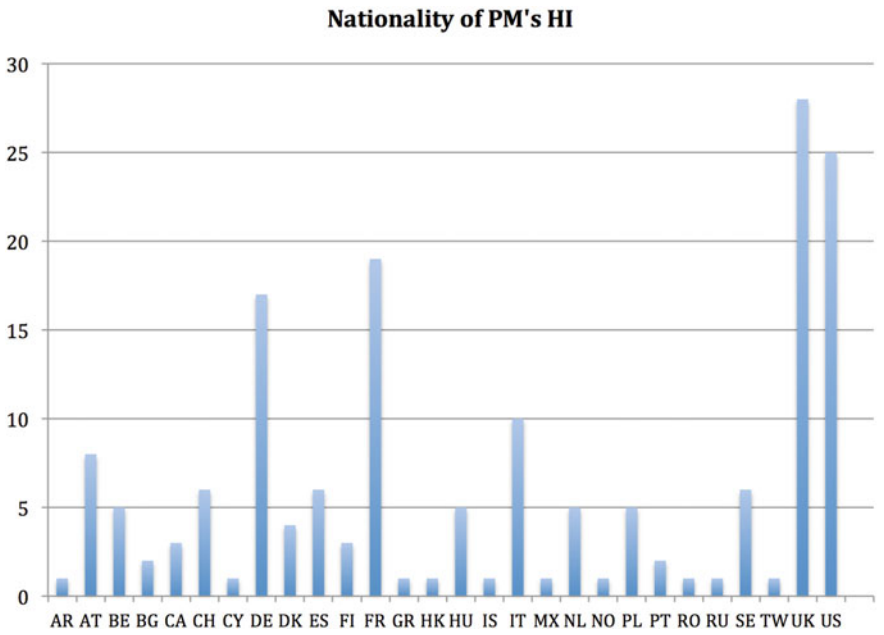

Fig. 1 Nationality of panel members' host institution

urban studies (SH3), linguistics, philosophy, education, psychology (SH4), literature and philology, art history, musicology (SH5) to history and archaeology (SH6).

Panel members are selected based on their scientific reputation; usually they have specialist as well as generalist competence, since they have to be open to multidisciplinary research perspectives. Diversity is not, as some may expect, a contradiction to excellence. In the case of the ERC, a diversified panel is considered a strength in the evaluation process. To take but one example, the approximately 170 panel members for the 12 SH evaluation panels in 2011 were situated at host institutions in 28 different countries worldwide (see Fig. 1). Experts from Anglo-American countries (the United Kingdom and the US) made up about 30 % of the total, thus presenting the largest group. Other large academic communities, such as the Germanic and the Francophone, constituted about 15 % and 11 %, respectively, of the total.[1]

The ERC Scientific Council, responsible for selecting and nominating panel members, has committed to a gender equality plan (ERC 2011), aiming at representation of female panelists of about 40 %. In the 2011 SH panels, this target was almost met; approximately 37 % of the experts on the six panels were female. Finally, panel members are advised to look for unconventional career paths and take them into consideration during decision-making. If we take the rising reputation of ERC grants and the huge acceptance that the ERC receives from the European academic community, this mix of strategies seems to be successful.

[1]The panel composition may change slightly during the course of an evaluation circle.

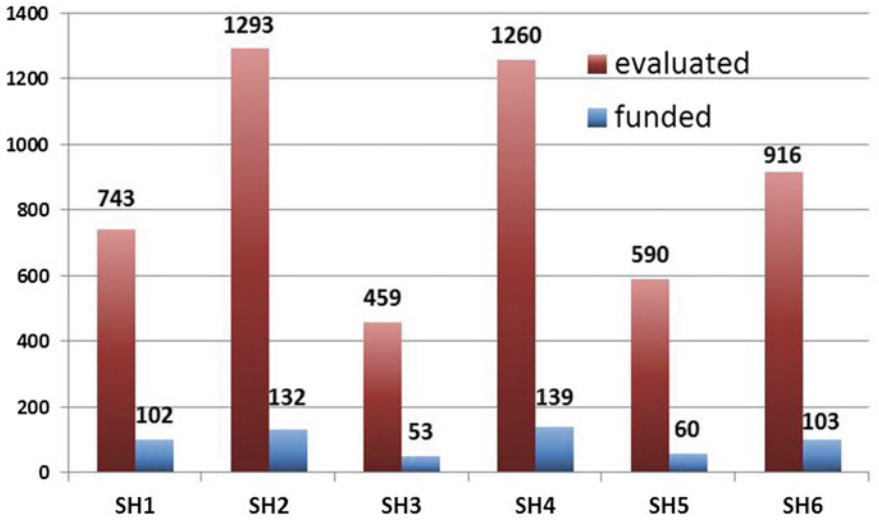

Fig. 2 Applications and granted projects submitted per panel, 2008–2012

3 What Are the Results?

Although the goal of this volume is the humanities (*Geisteswissenschaften*), distinguishing between social sciences and humanities does not make sense in the case of the ERC. Actually, there is only one domain (SH) in which the approaches are combined and intertwined.

If we look at the accumulated results from all 10 ERC calls for individual PIs from 2007 to 2012, there are interesting patterns in the SH-related project proposals.[2]

The success rate of the proposals submitted to the SH panels in the ERC is on average the same as in the two other domains. SH-related project proposals constitute about 17 % of the ERC budget spent on proposals submitted in these calls—or 600 projects in total.[3] The number of applications is rising more sharply in the SH domain.[4] Maybe even more significant, the number of applications to the panels is quite uneven. Thus, we can assume that certain fields (such as the social sciences in SH2 and the cognitive sciences in SH4) are more responsive to the ERC than others (such as the core humanities panel, SH5) (see Fig. 2, also the next paragraph).

[2]Data from the ERC Executive Agency website, http://erc.europa.eu. In 2007, only the Starting Grant call was announced; in 2008, only the Advanced Grant call. From 2009 onwards, both funding streams were carried out annually. When this contribution was being completed, data on these calls carried the most accurate information. The overall trend described in the following paragraphs did not change with the results of the three calls in 2013.

[3]This does not necessarily include so-called cross-disciplinary proposals, which were regarded as a separate 'fourth domain' in the earliest ERC calls.

[4]The initial ERC funding call, the Starting Grant Call of 2007, is not included here for two reasons: With a success rate of only 2 %, it was heavily over-subscribed, and the panel structure was different.

Since the budget of one call for each domain is distributed to the panels along the number of applications that each panel initially received, this difference also determines the number of fundable projects per panel. Thus, this results in a striking variation in how many projects are funded by each panel. Since the panels SH3 and SH5 receive few submissions, only 53 and 60 projects, respectively, were funded during the nine calls. On the other side, SH2 and SH4 are large panels in terms of submissions, and funded 132 and 139 projects, respectively. The SH1 and SH6 panels received fewer applications, but since the project budgets for these panels were on average smaller, approximately the same number of projects was funded as in the largest panels.

If we examine the country distribution of the submitted and granted SH proposals in all 10 calls, we see that the submitted proposals and granted projects are evenly distributed throughout Europe. The largest number of applications came from the UK (1,343), followed by Italy (878), Netherlands (590), Germany (577), Spain (474) and France (422). If we look at the grants funded, British host institutions lead the field with 208, followed by Dutch (79) and French institutions (68), German (57), Italian (52) and Spanish (37).[5]

4 Outlook

We know that the way research funding is set up affects the way research is carried out in the social sciences and humanities (Marton 2005, p. 184). Not even 10 years after the ERC's inception, the question if the ERC has already shaped the way research in the social sciences and humanities is carried out remains unanswered. We can assume, however, that the ERC has had an impact on two levels (Nowotny 2009, p. 3). First, particularly young grantees achieve early independence that, thus far, is widely unknown in the European university and research systems. Since the dependency of young researchers always had a particularly crippling impact on the social sciences and humanities, we may expect new, unconventional and highly innovative knowledge from Starting and Consolidator Grantees within the next few years.

Second, these young researchers may develop a new form of non-hierarchical collaboration from which the entire range of disciplines may profit. As a result, we can assume that there is a new visibility on social sciences and humanities, since more than ever they are working on transnational, comparative topics.

Given the ERC's budget in relation to the sums spent in other programs, the ERC is still a small player. Its reputation stems from its rigid evaluation process, its strict focus on excellence and its broad, pan-European approach. For the social sciences and humanities, the ERC offers a great opportunity to strengthen frontier research in an almost unprecedented manner. Nevertheless, some issues remain critical. One

[5]Because an ERC-funded project is portable and can be shifted to a host institution in another country, we cannot calculate a success rate per country of host institutions with the data available.

of the general problems the ERC has to deal with is the gender quota, particularly in the Advanced Grant scheme. The ERC Scientific Council therefore adopted the Gender Equality Plan (ERC 2011), and commissioned a study dedicated to gender and excellence in relation to ERC-funded projects.

Even more troubling to some is the participation of certain countries, and the looming fear that these countries may not be integrated in the emerging European Research Area. Certainly, there is a need to foster independent research in these countries. The ERC cannot deviate from its core mission, namely, focus on excellence; the ERC must support research facilities and infrastructure in these countries to create an environment such that researchers at these sites become competitive.

In SH in particular, another concern is the balance of panel member composition. In some respect, the SH panels represent the strong. There are more experts from different countries, but the difficulty here is the language. In the humanities, excellent researchers sometimes do not publish in English, and therefore remain 'invisible' as potential reviewers. Although the diversity of experts regarding country distribution is actually quite good, more experts should be invited from countries with such well-established traditions in the humanities.

In some fields, the ERC has witnessed a steady growth of applications, while in others, the number of applications is stagnant. This often goes hand in hand with the misunderstanding that projects primarily concerned with classificatory research are submitted. Undoubtedly, this is an important field of research; however, it is not within the ERC's funding policy, and therefore, projects with this background will be turned down. It seems that, particularly in the humanities (*Geisteswissenschaften*), communication of what the ERC can do for these disciplines and fields must be strengthened.

To a large extent, the ERC's high reputation among scholars and scientists comes from the fact that the evaluation process is admired and trusted by the research community. In this regard, again, diversity is crucial, because understanding excellence in a multi-dimensional way is a necessary prerequisite for research proposals from different fields and academic cultures. This understanding is already growing among the evaluation panels; one of the most fascinating aspects of the ERC is that it has created, perhaps for the first time in history, a truly transnational, that is, European, evaluation culture. In this setting, 'excellence' is understood not as exclusive but open to the unexpected.

The ERC involves reviewers from the entire world. Between 2007 and 2013, more than 4,000 distinguished scientists have reviewed more than 40,000 ERC applications. The panels and remote reviewers constitute the most precious asset of the ERC. The ERC has also contributed to raising the evaluation standards among national funding organizations throughout Europe and facilitates best practice by demonstrating a model of an exclusively merit-based evaluation culture, in particular for countries that, for historical reasons, lack such a culture.

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