

swissuniversities



The programme  
Research

# performances

in the humanities  
and social sciences



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## Preface

*The issue of appropriate research evaluation remains an important challenge facing universities in Switzerland and indeed around the globe. Evaluations are never an end in themselves but fuel the development of individual higher education institutions on the basis of scientific freedom and institutional autonomy. Appropriate evaluations follow a bottom-up approach: evaluations can only generate suitable outcomes if they are recognised by higher education stakeholders as meaningful and expedient.*

*Both qualitative (peer review) and quantitative instruments are used in evaluations. Quantitative instruments in particular, such as the Journal Impact Factor, have increasingly met with criticism within the scientific community. This statement applies across the various disciplines, not only in humanities and social sciences. However, these disciplines are characterised, not least because of their variety of languages, methodological approaches and forms of publication, by features that also make it difficult to assess the quality of research using a few numbers. The former Rectors' Conference of Swiss Universities (CRUS) recognised this at an early stage and promoted the development of alternatives addressing humanities and social sciences in particular. This publication presents the results of this long-term analysis of research evaluation by Swiss Higher Education Institutions. It combines the results of two programmes during which Swiss Universities jointly developed innovative methods in a total of ten initiatives and eight implementation projects between 2007 and 2016 in order to make the quality and impact of research in the humanities and social sciences more visible and to develop new and innovative evaluation tools. At the same time, the report highlights the results in a national and international context, pointing out current developments within the humanities and social sciences' evaluation sector. The publication concludes with ten topics for effective research evaluation, developed within the programme framework and currently discussed by swissuniversities bodies.*

*This publication also contributes to further examination of the subject of evaluation in Swiss Higher Education Institutions and at international level. At the same time, it forges links with current challenges such as Open Access/Open Science, which go hand in hand with the scrutiny of conventional scientific evaluation systems. The purpose of this document is therefore to make a relevant and long-term contribution to the present-day structure of the Higher Education Institutions.*

*A number of individuals have contributed to the success of the programmes and ultimately to this publication. Firstly, we wish to extend our grateful thanks to the Programme Scientific coordinator, Alexander Hasgall, and those members of the swissuniversities' General Secretariat responsible for co-ordinating these programmes: Axel Marion, Raymond Werlen, Jaromir Bregy, Caroline Fischer and Aude Pacton.*

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## 1 Introduction

In recent years, systematic evaluations of institutions have been introduced in the university landscape. Although the introduction of large-scale evaluations has become commonplace, thwarting the emotional intensity of debates on the subject of their positive and negative effects, viewpoints remain sharply contrasted vis-à-vis such evaluations. Some view this process as a means of transforming universities into stakeholders enshrined in a neoliberal logic whilst others adopt a contrasting view, emphasising the obligation to account for and use limited resources in a reasonable manner, as far as possible.

University administrations, in turn, depend on certain data for strategic decision-making. Data collection should take into account all of the research in a particular institution, rather than reduce it to individual indicators. It is therefore necessary to have tools that are adapted not only in line with the complexity of a higher education institutions and the questions it raises, but also with research per se. In recent years, all Swiss universities have developed evaluation procedures and implemented appropriate administrative structures. At the same time, highlighting the quality and efficacy of the research remains a challenge in itself.

In terms of these questions, it is very important to have a better understanding of what scientific quality actually means, especially for researchers who will be the next generation of scientists. They are confronted by the fact that partly contradictory criteria are used to make decisions having a lasting impact on future scientific careers. The scientists of tomorrow must make informed decisions that require knowledge of specific quality criteria in the disciplinary field as well as knowledge of institutional procedures.

For stakeholders outside the university context, a better understanding of evaluation processes and an assessment of scientific quality are also extremely useful. In general, universities are largely financed by public funds. The willingness to provide such finance depends essentially on highlighting the quality and "impact" of research.<sup>1</sup> Political and social stakeholders should be able to understand why quality assurance procedures that are adapted in line with various research disciplines and cultures are possibly more sophisticated but, at the same time, are more sustainable and more promising.

The humanities and social sciences present a specific challenge in this context of multiple requirements in terms of enhancing research. As outlined in this document, established (albeit highly controversial) practices in other areas of research such as the natural and life sciences can only be applied to a limited extent to these scientific domains. This is because of the significant differences in research and publication practices.

Alternative forms of evaluation research are also an important alternative to questionable university classifications as the so called "Shanghai ranking".

<sup>1</sup> The concept of "impact" dominates many debates on the evaluation and value of research. However, there is no generally recognised definition as to what impact should be. The UK Research Council defines impact as "the demonstrable contribution that excellent research makes to society and the economy". Here, the UK Research Council distinguishes between academic and economic/societal. Most of the time, however, the impact of research describes the efficacy of research which extends beyond the scientific community. <http://www.rcuk.ac.uk/innovation/impact/>

The growing importance of alternative methods of promoting research led the Conférence des recteurs des universités suisses [Conference of Rectors of Swiss Universities] (CRUS)<sup>2</sup> to initiate a collaborative programme in 2007 aimed at developing alternatives to traditional evaluation practices for humanities and social sciences. The projects carried out in Swiss universities must produce instruments able to facilitate appropriate evaluations in the humanities and social science sector, whilst meeting the strategic requirements of the various institutions.

A number of programme options were put forward in 2008 in the CRUS guidance document entitled "The Swiss Way to Quality in Swiss Universities", which also provides the basis for the programme "Research performances in the humanities and social sciences".

1. "The CRUS recognises that member universities are bound by different missions as established by their respective responsible bodies. The CRUS is therefore convinced that each university is responsible for setting its own strategy according to its mission, thereby autonomously determining its role in the Swiss and international university landscape.

2. The CRUS is further convinced that it is best that its member universities themselves determine the body of objective quality criteria that most appropriately fit the deliverables emanating from these strategies. However, no university shall abstain from committing itself to a body of objective quality criteria for its self-chosen deliverables or from communicating them broadly"<sup>3</sup>.

CRUS did not intrinsically rule out the development of objective indicators for evaluation and, where intended and feasible, analysis of the outcome of research, even in the humanities and social sciences. On the other hand, it stated an expectation that they should be confined to cases where useful assessments could be made regarding the quality and impact of research. The focal point however is the institution's and researchers' point of view, where independence should be guaranteed in setting quality assurance-related targets. This point of view therefore corresponds to a "bottom-up" approach.

*"The growing importance of alternative methods of promoting research led the Swiss University Conference of Rectors to initiate a collaborative programme."*

This document presents the results of two programmes, and comprises three parts. The first introduces the topic of evaluation or research into evaluation. The second is devoted to the higher education landscape in Switzerland and how it has changed in recent years. The third part focuses on the programmes "Measuring research performances" and "Research performances in humanities and social sciences", summarising the key results. In the last chapter, ten theses toward an effective evaluation of research are presented. These are a concrete result of the programme.

2 The project was subsequently taken up by swissuniversities which succeeded CRUS.

3 CRUS. (2008). The Swiss way to quality in the university system. Bern: CRUS.

## 2 What is evaluation?

### 2.1 The basis of evaluation

The history of the modern evaluation of science and scientific practice is also linked to the development of evaluation and quality assurance procedures performed by the research community per se. For instance, in 1752, the "Philosophical Transactions" of the British Royal Society published an initial peer review system (i.e. an evaluation of a scientific text by specialist colleagues) where texts were circulated within a group of editors prior to publication. A decision was then taken as to whether the text should be sent to a journal for publication. It was not only a question of text quality but also a decision-making exercise with respect to censorship issues that could arise. Since only one copy of the scientific work in question was generally available, this procedure was usually limited to society members themselves. Therefore, the process was relatively long and geographically limited. It was only with the advent of the typewriter and the related technique of photocopying that it was possible to obtain several copies of a text that could be circulated at the same time. This initial form of quality assurance addressed scientific texts.

The history of evaluating educational establishments and research is relatively recent. In the XIXth century, under the increasing influence of public authorities on the educational system, which up to this point had been ecclesiastical, initial attempts were made to evaluate the quality of education by professional inspectors in accordance with public standards. This was primarily in order to check whether the funding had been invested wisely and if the various schools complied with pre-defined standards.

The evaluation of research increased its relevance in the XXth century with the emergence of major projects in the field of technology and social policy. Franklin Roosevelt's "New Deal" and the development of the American atom bomb as part of the Manhattan Project had generated enormous financial resources to meet certain technological and political objectives – hence the need for scientific monitoring and evaluation of these major undertakings. This has resulted in the field of evaluation, which has become increasingly professionalised and since then forms (in the words of evaluation researcher, Peter Dahler-Larsen) a "ritual" through which certain social norms are applied.<sup>4</sup> Since the 1980s, the topic of evaluation has gained enormous relevance with the introduction of private sector audit methods in public services, as part of the new public management regime and the growing autonomy of universities. The new public management regime advocates, amongst other things, the separation of control and operation with the result that indicators are becoming increasingly important. Conversely, autonomy has triggered greater responsibility on the part of public institutions with demands for transparency and accountability encompassing not only evidence of research performance but also the implementation and operation of a quality assurance system. Evaluations are now integrated into state-funded scientific institutions and are part and parcel of scientific projects and careers.

<sup>4</sup> Dahler-Larsen, Peter (2011).  
The Evaluation Society. Stanford  
University Press: Stanford.



## 2.2 A growing criticism of conventional measuring systems

In addition to the peer review process introduced in the early stages of evaluation, metric measures were developed and have gained significance. They essentially measure the impact of scientific texts calculated according to the number of citations of a publication. Such indicators are popular because they tend to express success not only in figures but also compare research output. The Journal Impact Factor (JIF) is the most widely known of these. It was developed in the 1950s by American sociologist, Eugene Garfield, in an attempt to give librarians an opportunity to assess the relevance of a given publication more efficiently. This factor indicates the average frequency with which a given journal article has been cited in the last two years. As Eugene Garfield himself points out on many occasions, the JIF is not used to assess the quality of a given publication.<sup>5</sup>

However, this factor has increasingly emerged in terms of scientific productivity combined with other quantitative indicators, which appeared later, such as the H index (after its inventor, Jorge E. Hirsch), which measures the ratio between productivity and scientific reception.<sup>6</sup> Furthermore, researchers have been encouraged to publish in journals that are the most prestigious for their respective disciplines, regardless of the relevance of this choice in terms of content.

Indicator-based evaluation systems have been increasingly criticised in recent years. Reference should be made in this respect to the "DORA" declaration (The San Francisco Declaration On Research Assessment) by the American Society of Cell Biology. It was adopted by the society at its annual meeting in San Francisco in December 2012.<sup>7</sup> In the manifesto, the inflationary use of the Journal Impact Factor and others was criticised and a more differentiated evaluation system was proposed. In Switzerland, DORA was signed, amongst others, by the Fonds National Suisse de la Recherche Scientifique (Swiss National Foundation for Scientific Research), swissuniversities and several Swiss universities. Various rectors personally signed this declaration.

In 2015, various respected evaluation researchers published an additional declaration in the Nature journal, namely the "Leiden Manifesto".<sup>8</sup> In this manifesto, the authors note the growing misuse of indicators to measure scientific productivity and the quality of research:

*"As scientometricians, social scientists and research administrators, we have watched with increasing alarm the pervasive misapplication of indicators to the evaluation of scientific performance."*<sup>9</sup>

The authors responded by listing ten principles that should be followed when using indicators. These include the fact that quantitative measures should not replace but rather complement expert evaluation, that specific local (including languages) and disciplinary features should be considered, and that the entire research process should be transparent and easy to understand.

Whereas the DORA declaration still depends heavily on the natural sciences, the Leiden Manifesto covers all scientific areas. A dedicated COST action on research evaluation in the social sciences and humanities has also led to an important declaration of principles specifically addressing humanities and social sciences. In May 2017, COST ENRESSH (European Network for Research Evaluation in Social Sciences and Humanities) published a document titled "Challenges of the evaluation of social sciences and humanities research (SSH)"<sup>10</sup> calling, amongst other things, for recognition of the diversity of research in humanities and social sciences as part of the evaluation process, both in terms of social impact

5 Garfield E.(2006). The history and meaning of the journal impact factor. The Journal of the American Medical Association, 295: 90–93.

6 The H index was developed in 2005 by physician Jorge E. Hirsch and purports to measure the success of a scientist according to his/her publications. An index value of 5 means, for example, that at least five of his/her publications have been cited five times. See: Hirsch, J.E. "An Index to Quantify an Individual's Scientific Research Output". Proceedings of the National Academy of Sciences of the United States of America 102.46 (2005): 16569-16572.

7 [www.ascb.org/dora/](http://www.ascb.org/dora/)

8 [www.leidenmanifesto.org/](http://www.leidenmanifesto.org/)

9 [www.nature.com/news/bibliometrics-the-leiden-manifesto-for-research-metrics-1.17351](http://www.nature.com/news/bibliometrics-the-leiden-manifesto-for-research-metrics-1.17351)

10 <http://enressh.eu/challenges-of-the-evaluation-of-social-sciences-and-humanities-research-ssh/>

and the different forms of research outcome. The aim of the COST action is to promote scientific networking at European level. Several participants in the "Research performances in humanities and social sciences" programme are actively involved in this COST action.

Basic considerations regarding the issue of relevant research evaluation have also been developed in Switzerland. In 2013, the Swiss Science Council published ten theses<sup>11</sup> under the heading, "Measuring the quality assurance yield in science. The targeted and directed use of measuring yield and evaluation in science".

This included among other things the fact that evaluations were aimed primarily at a learning effect and, therefore, had no automatic influence on the distribution of resources; that the intrinsic motivation of the researchers should be protected against such auditing procedures; and that evaluations form part of an empowering culture. The Scientific Council refers to a "methodological, determined and rational use of yield measurement and evaluation in science".<sup>12</sup>

For the Swiss Academy of Humanities and Social Sciences (ASSH), which represents sixty societies in the field of humanities and social sciences, performance and quality evaluation is also a key area in which the Academy has played an active role in recent years. To this end, it interviewed member societies about quality-related debates and criteria within their disciplines. In 2016, the ASSH published a report in which it conveyed the various positions adopted by societies in the discipline, adding a reference to the programme "Research performances in the humanities and social sciences", with which it closely collaborates. Under the heading "Qualitäts- und Leistungsbeurteilung in den Geistes- und Sozialwissenschaften: Prinzipien, Ansätze und Verfahren: Ein Synthesebericht und Stellungnahmen aus den Fachgesellschaften der SAGW. Schweizerische Akademie der Geistes- und Sozialwissenschaften. Bern"<sup>13</sup> (Quality and Performance Assessment in the Humanities and Social Sciences: Principles, Approaches and Procedures: A Summary Report and Statements from SAGW Experts. Swiss Academy of Humanities and Social Sciences. Bern), the ASSH proposed a diversified view of approaches to quality in the various disciplines. Smaller disciplines with a transdisciplinary spectrum appeared to be particularly interested in presenting quality criteria specific to their discipline. This shows that quality discussions can serve to reinforce the identity and profile of a discipline.

### 2.3 The specific features of humanities and social sciences

The relationship between humanities and social sciences on the one hand, and natural sciences on the other, has been constantly discussed and redefined since the outset. We are particularly familiar with the distinction made by philosopher Wilhelm Dilthey, who understands humanities as the science of understanding and interpretation, and the natural sciences as explanatory sciences.<sup>14</sup> However the boundary between scientific cultures remains permeable. Even so-called exact sciences are still open to linguistic interpretation. At the same time, humanities and social sciences are confronted with empirical realities. Considerable differences exist even within certain disciplines. For instance, in many cases, neuropsychology does not differ from neurobiology in terms of the subject for investigation, methodology and presentation of research results in scientific journals. Yet psychology, with which it is also connected, is considered part of humanities and social sciences. In contrast, mathematics, as an "exact" science, ranks on the side of the natural sciences, from a structural point of view, whilst having close connections with philosophy. Cultural differences often play a role. Whereas, in German-speaking areas, geography is taught in natural science faculties, it is considered a social science in French-speaking culture. Subjects

11 [www.swir.ch/images/stories/pdf/de/SWTR\\_Schrift\\_3\\_2013\\_D\\_2\\_Auflage\\_Qualitaetsicherung\\_web.pdf](http://www.swir.ch/images/stories/pdf/de/SWTR_Schrift_3_2013_D_2_Auflage_Qualitaetsicherung_web.pdf)

12 Ibid. p. 7.

13 [www.sagw.ch/quali](http://www.sagw.ch/quali)

14 Dilthey, W. (1910). *Der Aufbau der geschichtlichen Welt in den Geisteswissenschaften*. Berlin: Kgl. Akad. d. Wiss.

such as computer science and engineering more obviously belong to the natural sciences but do not share their preference for articles, opting to publish conference proceedings, patents or codes. In addition to these, in the so-called "digital humanities", the technical issues of which are increasingly coming to the fore, even in humanity disciplines. In this case, evaluation standards for "conventional" humanities go hand in hand with those of technological sciences.

However, delimitations are not always easy to apply. In the research field, common denominators relevant in the context of evaluation procedures and promoting a common logical approach can be identified in humanities and social sciences. The following common denominators can be highlighted:<sup>15</sup>

*a) Forms of publication:* in addition to articles published in journals, many disciplines make monographs the focal point of scientific interest. Regardless of the questionable relevance of evaluation methods geared towards quantitative production, it is impossible in humanities and social sciences to refer to indicators based on citation databases since conventional databases such as Thomson Reuters' Web of Science or Elsevier's Scopus only present individual citations in English journals, with therefore minimal scientific coverage in humanities and social sciences. In most humanities' subjects and, to a certain extent in social sciences, monographs are the method of publication with the greatest potential gain in terms of reputation, disseminating the most significant research results.

*b) Language:* many contributions are not published in English, but in other languages. In the natural sciences, English has become a vehicular language in most disciplines. This is not the case for social sciences and even less so for humanities. This is evident not only in philological sciences such as romance studies or German philology where communities essentially communicate in the language that characterises the discipline. Wherever specific language usage is required, researchers will inevitably communicate in the languages they know best. Moreover, there is no point in conveying research results to the general public unless the findings can be understood.

*c) Time:* given the size of a book project, it generally takes longer to write and publish monographs than to publish articles. Moreover, they may be submitted over a longer period and not always in a linear fashion. It is quite possible for a text to go unnoticed for a long period of time before it eventually becomes noticed. Humanities and social science publications not only convey new knowledge (which is soon duplicated by subsequent publications), but also disseminate know-how, thoughts and knowledge used in discussions and which can always be introduced into a current debate.

*d) Citation practices:* there is less of a tendency to cite in humanities and social sciences than in the natural sciences. This does not mean that the texts in question are not read, but that this reading is not necessarily part of a direct citation. Furthermore, humanities and social science publications are, in turn, published in books as opposed to journals listed in citation databases, which makes it impossible to measure citations at all.

All of these specific features call for methods adapted to this specific research culture, addressing the overall quality of research, not focusing solely on isolated research results. The programme "Research performances in the humanities and social sciences" can therefore be viewed as an international and interdisciplinary research evaluation study, which recognises the specific features of SSH and obtains results, thereby fuelling debates of potential interest to other scientific areas.

<sup>15</sup> In terms of the specific features of humanities and social sciences, see: Hellqvist, B. (2010). "Referencing in the humanities and its implications for citation analysis". *Journal of the American Society for Information Science and Technology*, 61 (2), 310-318; Huang, M.H., & Chang, Y.W. (2008). "Characteristics of research output in social sciences and humanities: From a research evaluation perspective", *Journal of the Association for Information Science and Technology*, 59(11), 1819-1828.

### 3 The Swiss University System

The system of higher education differs significantly between the various higher education institutions.<sup>16</sup> At university level, there are ten cantonal universities and two Federal Institutes of Technology. Most of these cantonal universities are general universities, whilst the universities of St. Gallen, Lucerne and Neuchâtel mainly focus on humanities and social sciences. At the same time, humanities and social sciences are less evident in the Federal Institutes of Technology. In addition to university institutions, there are seven Universities of applied sciences and fourteen Universities of teacher education<sup>17</sup>. The last two types focus primarily on education and applied research. This higher education system therefore reflects the country's federal structure, with universities firmly consolidated in cantons based on different political, social, cultural and financial interests. At the same time, the Confederation is having an increasingly perceptible influence on financing. Unlike other countries, most research is university-based with independent research institutions playing only a secondary role.

The new Federal Act on Funding and Coordination of the Swiss Higher Education Sector, which came into force in 2015, has reshaped the Swiss higher education landscape, placing all types of institution under the same roof. Apart from the effects of financing arrangements, this law introduced mandatory accreditation for all higher education institutions, leading to new evaluation requirements. Switzerland was also the first country in the world to include mandatory evaluation in its Constitution.

Evaluations at different levels are therefore common practice in Swiss Higher Education Institutions. However, given the complexity of the funding and governance system and the significant differentiation between the various types of higher education, it is still difficult to implement a common research evaluation procedure as in other countries with greater centralisation. On the other hand, it promotes the development of different methods and the pooling of experience. Developing new approaches and sharing experiences are at the heart of the programmes presented in this publication.

#### Evaluation and quality

Evaluation questions are inextricably linked with those of quality, which has taken on an increasingly important role in the European higher education landscape. Both inter-linking concepts have to be discussed without overlapping each other.

The introduction of the notion of quality as an institutional approach in European higher education occurred following the introduction of evaluations and dates back to the 1990s, notably with the creation of the QAA (Quality Assurance Agency) in Great Britain which played a pioneering role.

The increasing relevance of quality requirements can be attributed to numerous influences. One of the main elements is undoubtedly the process of university autonomy, which is now evident in most European countries, albeit to varying degree. This empowerment goes hand in hand with greater responsibility on the part of institutions and an increasing demand for transparency and accountability. In many cases, the supervisory authorities provide equivalent funding for the various establishments but have less impact on governance and operations. They therefore need reassurance that funding, generally public funds, are being put to good use. The development of New Public Management and the desire for efficiency reinforce this need. Another key influential factor is the construction of the European Higher Education Area (EHEA), one of the driving forces of which is the implementation of the Bologna process which essentially aims to harmonise admission

<sup>16</sup> For an overall view see, [https://www.sbf.admin.ch/dam/sbf/de/dokumente/2017/01/hs-f-ch.pdf.download.pdf/HE\\_dt.pdf](https://www.sbf.admin.ch/dam/sbf/de/dokumente/2017/01/hs-f-ch.pdf.download.pdf/HE_dt.pdf)

<sup>17</sup> These include the Universities of teacher education belonging to swissuniversities. Similarly, teacher training institutes incorporated within a university or university of applied sciences, and related institutions are not included. The latter nevertheless fulfil similar roles and are involved in meetings of the Chamber of the universities of teacher education of swissuniversities.

conditions and credits and qualifications awarded in order to promote academic and professional mobility. As far back as 1999, the Bologna Declaration included quality as a central element in the construction of the EHEA ("A European dimension in Quality Assurance, with comparable criteria and methods"). The globalisation of higher education and growing competition has also exerted quality-related pressures.

Therefore, quality concepts and practices have gradually been integrated into higher education institutions, in line with the legislative changes introduced by the various countries and the creation of quality agencies to carry out evaluations.

At the outset, quality procedures were essentially conducted externally and controlled to some extent the activities of the institution which had to provide the wherewithal needed to carry out this control procedure. A movement was subsequently launched to give greater responsibility to institutions in the drafting and implementing of quality strategies. This was consistent with the previously mentioned logic of autonomy and met governments' expectations. In fact, on several occasions, from 2003 onwards (meeting in Berlin), the communications of education ministers in the Bologna Declaration signatory states strongly and clearly emphasised the primary responsibility of the institutions regarding quality assurance.

The concerted implementation of European standards (ESG) by the various stakeholders (quality agencies, higher education institutions, students and, secondly, companies and unions) has consolidated this swing from an external to an internal approach.

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This swing is accompanied by the development of the Quality Culture concept in order to promote real ownership of these approaches by the community. Indeed, initial attempts at quality assurance were naturally inspired by many approaches used in industry and services, but these approaches were far from conclusive in the academic world. On the one hand, they applied mainly to processes in which it is relatively easy to establish causal relationships – which is not easy to do in teaching and research. On the other hand, concepts such as "zero defect" or client satisfaction made little sense in the higher education context and encouraged rejection by the academic community. Furthermore, the mediocre efficacy of the procedures used imposed an additional constraint along the lines that quality was limited to the implementation of procedures essentially guaranteeing consistency. This definition did not reflect the complexity of the mechanisms involved or the ambitions of the institutions.

The question of the definition of quality was debated long and hard until the following conclusion was reached. It is impossible to agree on a single, universally accepted definition of quality. It is now widely accepted that several, albeit non-exclusive definitions exist side by side. It seems that the definition of Quality as "Fitness for Purpose" is accepted by at least 80% of higher education establishments. Thus quality is not defined by external standards but refers to the mission and objectives of the institution per se. Quality thus corresponds to attainment of the objectives set. This notion is entirely consistent with the approach of swissuniversities and its Swiss way to quality, which emphasises the weight of the strategy and institutional objectives.

The difficulty in applying industrial models and the need to assume ownership of quality approaches have led to the development of the Quality Culture concept. Although this expression is not without ambiguity, it highlights the integration of quality in institu-

18 EUA. (2006). *Quality Culture in European Universities: A Bottom-up Approach*. EUA, p. 6.

19 [www.admin.ch/opc/fr/classified-compilation/20070429/index.html](http://www.admin.ch/opc/fr/classified-compilation/20070429/index.html)

20 See Directives Art. 9 al 1.

21 [www.admin.ch/opc/fr/classified-compilation/20151363/index.html](http://www.admin.ch/opc/fr/classified-compilation/20151363/index.html)

tional culture and promotes collective responsibility. As outlined by the European University Association (EUA) in 2006, "Quality must be perceived as a shared value and collective responsibility for the entire community including students and administrative staff".<sup>18</sup> The challenge is therefore to make the community adhere to this desire to collectively seek improvements (definition of quality as an institutional value). In fact, any culture is based on values and assumes minimum compliance with these values by institutional stakeholders. Quality must therefore take into account the expectations and representations of those stakeholders and especially academics, to ensure the implementation of quality approaches. It is therefore relevant to allow institutions room to manoeuvre. This is also provided for in new legislation governing higher education in Switzerland.<sup>19</sup> Indeed, although this law requires accreditation by the institutions, it is important to emphasise that, on the one hand, this accreditation is based to a large extent on the quality assurance mechanisms of the higher education institution.<sup>20</sup> On the other hand, if each higher education institution is required to implement an internal quality assurance system, it can define and implement this according to its context and values, provided that this system encompasses the various areas specified in the legislation and presented as standards. The methods defined at European level focus on education with research mostly being evaluated through external funding and "peer reviews" of publications. Switzerland distinguishes itself in this area since it encompasses research and the third mission of the higher education institution in areas to be included in the quality system. It is important to note that, although the institution must include research evaluation in its quality system, it has the opportunity to define how it wants to do this so that it is relevant in terms of context and acceptable to the community. The reflections presented in this publication on alternatives to research evaluations therefore all have a role to play in this new Swiss higher education landscape. This is especially true since the system implemented at least aims to improve rather than control (see quality standards in the Accreditation Directive).<sup>21</sup>

### One culture, quality cultures

Initially, the concept of Quality Culture emerged in response to overly bureaucratic approaches and was based on the idea that quality, implying a collective search for improvement, should be part of institutional values in the same way as respect, academic integrity or any other underlying value of the institution. However, it is useful to note that all of the processes linked to the quality concept (planning, evaluations, improvements, etc.) are themselves part and parcel of an organisational culture defined by the priority values on which they are based such as the ability to reflect, communicate or participate. These different values make up the quality culture conceived as a sub-culture of the organisational culture.

A different culture will correspond to each set of values. They will be differentiated according to what is being valued – control or development? Specialisation by certain individuals involved in quality or ownership by the majority? Conformity or adaptation, etc.? For instance, in one university, the quality processes may be carried out by specialists who try to control process conformity whereas another university will opt for ownership by the vast majority and creative processes. Both institutions certainly have a quality culture but this is not the same culture.

In other words, there is always a quality culture but the question is, what are the values that actually characterises it? Are they explicit? Are they consistent with the institution's priorities? At this stage it seems relevant and useful to mention the principles arising from the programme "Research performances in the humanities and social sciences" because they are priorities likely to contribute to the quality culture of the institution and create conditions for the constructive evaluation of research.



In order to integrate the evaluation processes in the institution's Quality Culture, the evaluation policies and practices should ideally be incorporated within the institution's quality concept. This would allow evaluation and quality to be managed consistently.

## 4 The programme "Research performances in the humanities and social sciences"

### 4.1 History of the programme "Research performances in the humanities and social sciences"

As mentioned at the outset, in 2005, the Conference of Rectors of Swiss Universities decided to launch a programme encouraging appropriate strategies for promoting research in humanities and social sciences. The aim was to develop new perspectives in terms of quality assessment and research diversity, to be used constructively for evaluation procedures and strategic decision-making processes. At the same time, they should strengthen competence within the institutions per se, such that they can be adapted and applied to each institution. Following a selection process, three projects were chosen and financed over a four-year period (see table).

### Projects in the programmes "Measuring research performances" and "Research performances in the humanities and social sciences"

<b>Projects 2007-2011</b> (The title of projects and initiatives are in the original language)	<b>Leading institution</b>	<b>Partner institutions</b>	<b>Persons involved</b>
Entwicklung und Erprobung von Qualitätskriterien für die Forschung in den Geisteswissenschaften am Beispiel der Literaturwissenschaften und der Kunstgeschichte	University of Zurich	University of Basel	Prof. Dr Hans-Dieter Daniel Sven Hug Prof. Dr Martin Lengwiler Dr Michael Ochsner Dr John Bendix
Décrire et mesurer la fécondité de la recherche en sciences humaines et sociales	University of Neuchâtel	University of Lausanne, University della Svizzera Italiana	Prof. Dr Jean-François Perret Prof. Dr Edo Poglia Philippe Sormani Alain Bovet Alaric Kohler
Measuring Research Output in Communication Sciences and Educational Sciences between international benchmarks, cultural differences and social relevance	University of Fribourg University della Svizzera italiana	University of Bern, University of Zurich	Prof. Dr Diana Ingenhoff Prof. Dr Benedetto Lepori Dr Daniela de Filippo Dr Désirée Donzallaz Dr Ingrid Hove Dr Carole Probst

Based on the experience of these three projects, another programme was launched in 2013, entitled "Research performances in the humanities and social sciences", which alongside more increasingly restricted projects, extended the previous projects by generalising questions (especially the question of the impact of research) and by including additional disciplines. The aim of the programme was to further direct the results developed in the previous programme towards different disciplines and to find ways of making the increasingly relevant subject of the social impact of research, actually beneficial for evaluation purposes. In addition, two projects within the programme "Research performances in the



humanities and social sciences" addressed the question of the options available to collect research data in humanities and social sciences, and attempted to establish to what extent the indicators, which target the impact of research on social media, yield useful results. Since measures in the strictest sense were no longer a key focus, the term "measure" was abandoned for this second programme. In addition, the projects were officially designated as "initiatives" in order to distinguish them from conventional research projects and to show that the various projects represent initiatives derived from the previous programme.

<b>Initiatives 2013-2016</b> (The title of projects and initiatives are in the original language)	<b>Leading institution</b>	<b>Persons involved</b>
Developing indicators for the usage of research in Communication Sciences. Testing the productive interactions approach	University of Fribourg/ University della Svizzera italiana	Prof. Dr Diana Ingenhoff Dr Alexander Buhmann Prof. Dr Benedetto Lepori Dr Michael Wise
Der Wertbeitrag betriebswirtschaftlicher Forschung in Praxis und Gesellschaft	University of St. Gallen	Prof. Dr Miriam Meckel Prof. Dr Christian Pieter Hoffmann
Scientometrics 2.0: Wissenschaftliche Reputation und Vernetzung	University of St. Gallen	Prof. Dr Miriam Meckel Prof. Dr Christian Pieter Hoffmann
Forschungsevaluation in der Rechtswissenschaft in der Schweiz und in Europa	University of Bern/ University of Geneva	<b>First phase of the project Switzerland (Universities of Bern and Geneva):</b> Dr Fabian Amschwand Karin Byland Prof. Dr Alexandre Flückiger Eva Herrmann Prof. Dr Andreas Lienhard Martin Schmied Prof. Dr Thierry Tanquerel <b>Second phase of the project Europe (Universities of Bern and Tilburg [Netherlands]):</b> Prof. Dr Andreas Lienhard Prof. Dr Rob van Gestel Karin Byland Martin Schmied Sabine Senn
Ressourcen-basiertes Instrument zur Abbildung geisteswissenschaftlicher Forschung am Beispiel der Theologie	University of Lucerne/ University of Bern/ University of Fribourg	Dr Désirée Donzallaz Dr Silvia Martens Dr Wolfgang Schatz
Cartographier les réseaux de recherche. Interactions et partenariats en sciences humaines et sociales	University of Neuchâtel	Dr Thomas Kadelbach Prof. Dr Jean-François Perret Joanna Domingos Dilek Harmanci
Standardisierung von Forschungsinformationen an Schweizer universitären Hochschulen	University of Basel	Dr Sonia Ackermann Krzemnicki Jürg Friedli Dr Bernd Hägele Prof. Dr Benedetto Lepori Dr Martin Meier

### **Implementation projects**

The programmes are not meant to compel the various institutions to implement their results but to offer a range of good practices. Not only is the legal basis lacking for such an obligation, but it would also be contrary to the stated objective of the two CRUS programmes, to support universities in developing procedures adapted to the needs of their institutions. Therefore, it is up to the different universities as to whether or not they implement the results within their institutions. In order to encourage the implementation of projects, the programme has supported the initiation of implementation projects over a one-year period. Eight Swiss universities have grasped this opportunity and implemented programme results within their institution. The financing of various implementation projects has been limited to 100,000 Francs. Therefore, it was not a question of developing new systems but rather of thoroughly examining ways of incorporating programme results in university practices.

<b>Implementation project</b> (The title of projects and initiatives are in the original language)	<b>Leading institution</b>	<b>Persons involved</b>
Workshop for emerging researchers from universities in Switzerland and members of LERU universities in Europe	University of Geneva	Dillini Silvie Jeanneret Dr Laure Ogniois
Theologische Forschung im Kontext der Geistes- und Sozialwissenschaften. Instrumente zur Dynamisierung der Forschungserträge ad intra und ad extra im Horizont der Nachwuchsförderung	University of Fribourg	Prof. Dr Barbara Hallensleben Sabina Ingold Stefan Constantinescu
Analyse détaillée des réseaux de collaboration et de partenariat de la recherche en SHS	University of Lausanne	Dr Claire Arnold Alexandra Bumbaru
Implementation of a system of indicators and of performance measurement for the Università della Svizzera italiana	Università della Svizzera italiana	Dr Barbara Antonioli-Mantegazzini Prof. Dr Benedetto Lepori
Implementation Project "Scientometrics 2.0"	University of St. Gallen	Prof. Dr Christian Hoffmann
Évaluation descriptive des activités de recherche en SHS. Expériences pilotes d'implémentation	University of Neuchâtel	Dr Thomas Kadelbach Joanna Domingos Dilek Harmanci
Application of Bottom-up Criteria in the Assessment of Grant Proposals of Junior Researchers	University of Zurich	Prof. Dr Hans-Dieter Daniel Sven Hug Dr Michael Ochsner
Software application to analyse and visualise research output in the humanities and social sciences	University of Lucerne	Dr Silvia Martens Dr Wolfgang Schatz

## 4.2 Accompanying the programmes

In addition to developing methods to improve the visibility of research in humanities and social sciences, the programme also seeks to strengthen bibliometric competence in Swiss universities. To this end, positions for bibliometric and research evaluation specialists have been financed jointly by the programmes and the universities with the goal of making them permanent once programme funding is exhausted.

These specialists met with various project managers as part of a network. This network met on a quarterly basis and was responsible for providing collegial advice for the various projects but, in principle, also for evaluating research in universities. External speakers were also invited to these meetings in an attempt to disseminate programme results more widely. The demanding field of research evaluation in terms of both qualitative and quantitative methods requires a great deal of expertise in evaluation as well as an understanding of the challenges faced by researchers. One of the objectives of the programme "Research performances in the humanities and social sciences" was to strengthen this expertise. Furthermore, as part of the programme, experts were funded in all Swiss universities in order to secure these posts on completion of the programme.

### Network of experts of the programme

University	Person in charge
University of Basel	Prof. Dr Edwin Constable, Dr Bernd Hägele, Dr Katharina von Bülow
University of Bern	Jürg Friedli, Dr Martin Meier
University of Fribourg	Dr Désirée Donzallaz Schnyder, Dr Ingrid Hove, Dr Sabine Morand, Prof. Barbara Hallensleben
University of Geneva	Dr Laure Ognois
University of Lausanne	Dr Claire Arnold, Dr Judith Czellar, Prof. Dr Jacques Lanarès
University of Lucerne	Dr Silvia Martens
University of Neuchâtel	Dr Thomas Kadelbach., Prof. Dr Jean-François Perret
University of St. Gallen	Ruedi Lindegger
Università della Svizzera italiana	Prof. Dr Benedetto Lepori
University of Zurich	Anita Klöti, Dr Rita Stöckli
EPF Lausanne	Prof. Benoît Deveaud-Plédran
ETH Zurich	Dr Urs Hugentobler
SERI	Isabelle Maye

### **4.3 Communication of results**

The project results were made public, during two conferences held in the autumn of 2014 and autumn of 2016 amongst others. These conferences provided the intermediate results of various projects and served to identify new challenges whilst making this topic the focus of debate between the various stakeholders.

During the second international conference on 3 and 4 of November 2016 at Bern University, ten principles were debated under the provisional title "The Swiss way to research Quality", and reflect the programme philosophy. They present the basis for an approach to evaluating research in universities that is commensurate with the Swiss higher education system. These theses are inspired by evaluations in humanities and social sciences but also address other disciplines. These principles continue to be debated within the framework of the Conferences of Rectors of Swiss Universities in an attempt to provide bases for assessing research within the relevant institutions.

A three-language Internet site was created (German, French and English) to promote external communication and safeguard project results ([www.performances-recherche.ch](http://www.performances-recherche.ch)). The different initiatives are listed here together with the implementation projects and the contact data of the project managers. A detailed bibliography of publications drafted under the various initiatives is also available and includes over 60 titles.

Led by the "Quality" delegation of the CRUS, under the supervision of the Rector of University of Neuchâtel, Professor Dr Martine Rahier, the programme was conducted until 31 December 2014. The project was managed by the CRUS General Secretariat under the supervision of Dr Raymond Werlen. The programme was co-ordinated scientifically from May 2014 by Dr Alexander Hasgall who was responsible for, amongst other things, the strategic development and external representation of the programme. Since 1 January 2015 a steering committee within the quality and accreditation delegation of swissuniversities has assumed responsibility for the programme, under the supervision of deputy rector of University of Lausanne, Professor Dr Jacques Lanarès. The programme was connected to the higher education policy division of swissuniversities under the leadership of Dr Axel Marion in conjunction with Mr. Jaromir Bregy.

### **4.4 Results of the programme "Research performances in the humanities and social sciences"**

#### **4.4.1 Foreword**

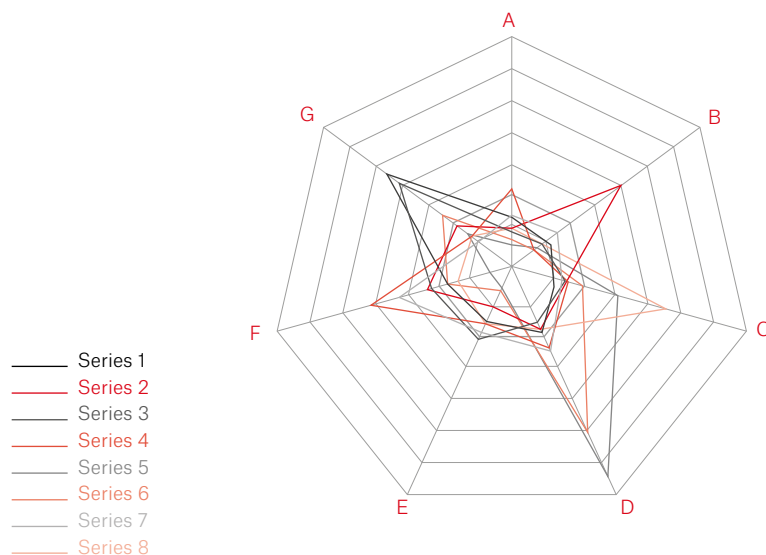
The main results of the programme "Research performances in the humanities and social sciences" are presented below. The description does not claim to be exhaustive. This would be impossible given the extent and diversity of the subjects covered in the programme. It serves however to show potential approaches to revealing the quality and impact of research, in order to obtain useful results within the framework of the evaluation procedures whilst meeting the strategic objectives of the higher education institutions. Communication and dissemination of the full scope of the results falls to the initiative managers and those responsible for implementation projects. They can provide the complete results of the different projects.

#### 4.4.2 Creation of institutional profiles

The project entitled "Developing indicators for the usage of research in Communication Sciences", which focuses on highlighting various university profiles, has been devised in conjunction with the University of Fribourg and Università della Svizzera italiana. It is based on an earlier project, "Measuring Research Output in Communication Sciences and Educational Sciences between international benchmarks, cultural differences and social relevance". Different profiles are presented because the universities focus on a variety of missions. An evaluation of the various activities undertaken by these universities is feasible only in relation to these missions. There is no point comparing the research activities of an institution primarily responsible for teaching students with those of a research institute that deals with very few students.

In order to adequately convey the scientific profiles of communication within the scope of this project, the assistance of the scientific community has been enlisted to collect data from a large number of universities actively involved in this domain. Anonymous profiles of individual universities are drafted and presented in the form of diagrams (see below).

- A Average Science
- B Average Teaching BA
- C Average Teaching MA
- D Average Further Education
- E Average Research Teaching
- F Average Transfer Public
- G Average Transfer Private



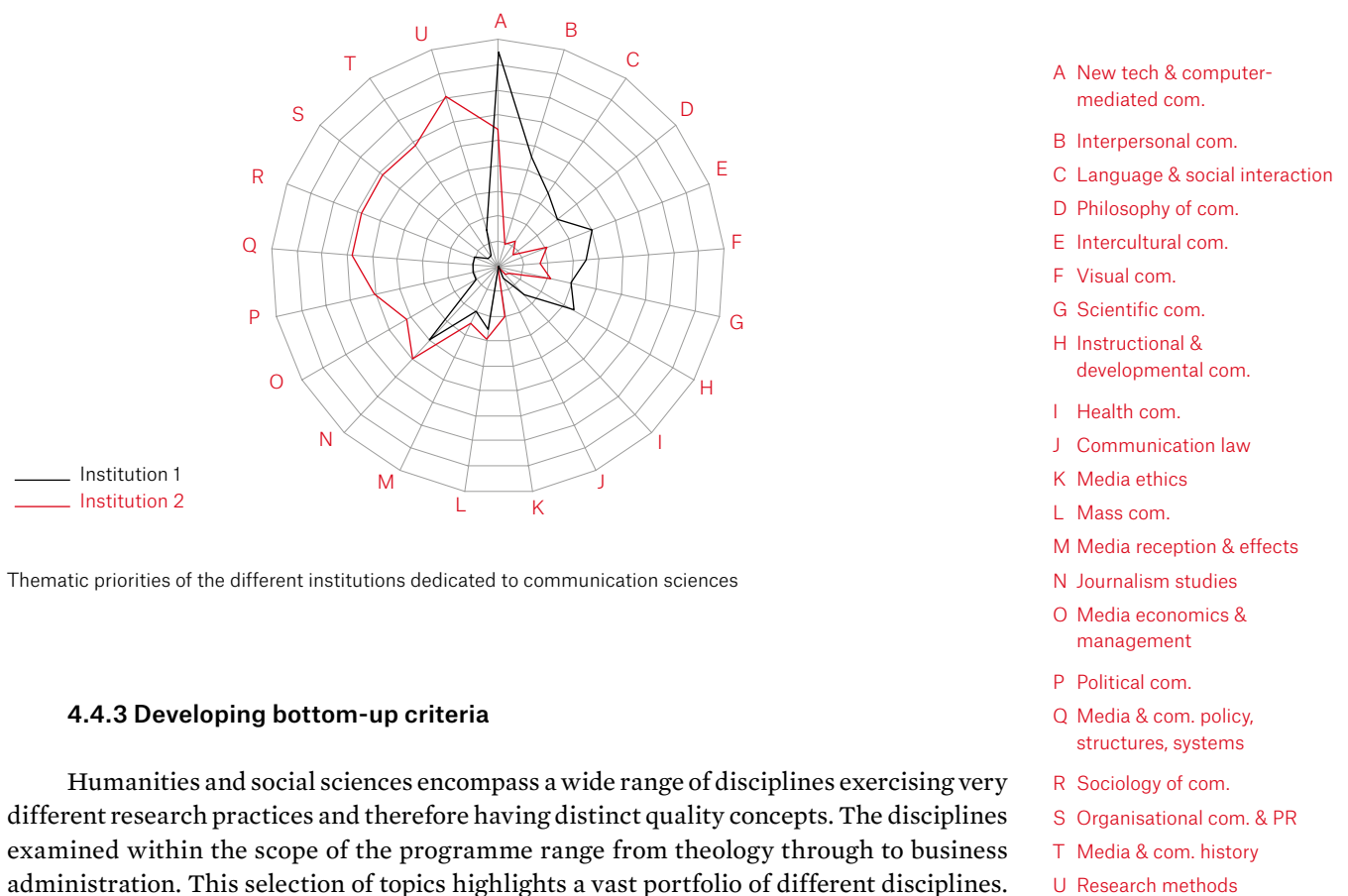
Profiles of the Higher Education Institutions in reference with the interactions with different actors

The result shows clear-cut differences in the way in which Swiss institutions actively involved in communication sciences establish their priorities. Whilst some institutions focus primarily on teaching and promoting the scientists of tomorrow, others concentrate on posts financed by external funding. This creates an inventory for the communication sciences discipline within Swiss universities, enabling university leadership not only to allow their institution to liaise with others, but also to compare the institutional reality to the previously defined profile.

In addition to outlining structural differences, the project has also identified the subject priorities of the various institutions devoted to communication sciences (see diagram). This has led to the emergence of two priority approaches, namely institutions which focus on the conventional themes of communication sciences such as journalism or political communication on the one hand, and those concentrating on subjects that have recently come to the fore such as health communication or visual communication, and which examine these subjects in a more interdisciplinary manner, on the other hand.

These different profiles also influence careers in science. Whereas career progression in the "traditional" areas tends to be conventional and future scientists are recruited locally in Switzerland, careers in the new domains have more of an international focus and are therefore more complex in nature.

We have seen a considerable change in the way in which academic staff are recruited. International competitive examinations are increasingly taken into account when awarding professorships whilst doctorate and post-doctorate posts tend to be filled internally in departments specialising in the required field. Some paths for more relevant career development, i.e. focusing on teaching and transfer, are created ad hoc for local people.



#### 4.4.3 Developing bottom-up criteria

Humanities and social sciences encompass a wide range of disciplines exercising very different research practices and therefore having distinct quality concepts. The disciplines examined within the scope of the programme range from theology through to business administration. This selection of topics highlights a vast portfolio of different disciplines. Other subjects have been taken into account, such as German and French literature, the history of art, communication and law. The aim of the programmes was to highlight discipline-specific quality criteria used by scientists in daily practice and to demonstrate common, interdisciplinary elements.

The development of bottom-up criteria ideally leads to a series of procedures which, beyond individual positions, express common viewpoints. This is the only way to provide a truly representative insight and gain appropriate acceptance in the scientific community. Conversely, consensus must not be achieved by ignoring different perspectives within individual disciplines.

Furthermore, it is equally important to motivate scientists themselves to participate in such investigations. This is not straightforward, given the usual university workload. Willingness to participate in such initiatives can also be limited by the fear that the results

will be used against the interests of the scientists. Processes are therefore required to ensure a workload that is realistically proportional to the outcome. In addition, it is important to allow enough time for scientists to gain confidence. The "Qualitätskriterien in den Geisteswissenschaften" project, which provided the methodological basis for subsequent programme initiatives, developed a specific technique based on the "Delphi method" derived from sociology sciences. Using interviews known as "Repertory Grid Interviews", a method has been implemented that specifically highlights the similarities and differences between the various disciplines. The outcome has led to a series of discipline criteria. These were tested to see if a consensus could be reached within the scientific community (see table).

### Quality criteria for humanities research: Consensuality in the three disciplines

	<b>GLS</b> Criterion reached consensus in German literature studies	<b>ELS</b> Criterion reached consensus in English literature studies	<b>AH</b> Criterion reached consensus in art history
Scholarly exchange	X	X	X
Innovation, originality	X	X	X
Productivity			
Rigour	X	X	X
Fostering cultural memory	X	X	X
Recognition		X	
Reflection, criticism	X		X
Continuity, continuation	X		
Impact on research community	X	X	X
Relation to and impact on society			
Variety of research	X		X
Connection to other research	X	X	X
Openness ideas and persons	X	X	X
Self-management, independence	X	X	
Scholarship, erudition	X	X	X
Passion, enthusiasm	X	X	X
Vision of future research	X	X	X
Connection between research and teaching, scholarship of teaching	X	X	X
Relevance	X		



Consensus has been reached for some criteria in all subjects. But this consensus is not always expressed with the same force. While some criteria were understood to guarantee quality in the three disciplines, others did so in only one or two discipline(s). Thus the consistency (rigour) or openness to new ideas is an important sign of quality in the three disciplinary fields whereas, for instance, self management, independence of the scientist as a quality criterion was the subject of consensus in two literature studies but not in history of art. It is interesting to note that criteria such as productivity and relation to and impact on society, which are the focal point of the evaluation procedures, hardly met with any consensus among scientists.

Furthermore, scientists were asked which accepted criteria could be often measured by indicators. This has turned out to be a grey area in terms of indicator-based evaluation processes. Initially, quantitative indicators could only be identified for half of the accepted criteria. The other 50% were open solely to peer assessment. Therefore, quantitative indicators are not deemed by the scientific community to be of any major significance. Indicators which, according to researchers, measure the criterion significantly, were identified for only 4 out of 19 criteria.

This can be summarised as follows: there are research quality criteria which are referred to in an interdisciplinary manner. However, these criteria are perceived to be relevant in different ways. Not all criteria are measurable and an evaluation procedure must consider measurable and non-measurable criteria in the same way.

Whereas the project devised by University of Zurich in collaboration with University of Basel has developed basic methods by comparing different disciplines, two other initiatives have focused on one discipline by developing quality criteria specific to this discipline during intense dialogue with the scientific community. The "Ressourcen-basiertes Instrument zur Abbildung geisteswissenschaftlicher Forschung am Beispiel der Theologie" initiative was developed in theology and managed jointly by the Universities of Fribourg and Lucerne. Case law/jurisprudence ("Forschungsevaluation in den Rechtswissenschaften") was managed by the University of Bern (in conjunction with the University of Geneva).

The two initiatives and some of their key results are presented below.

### Law

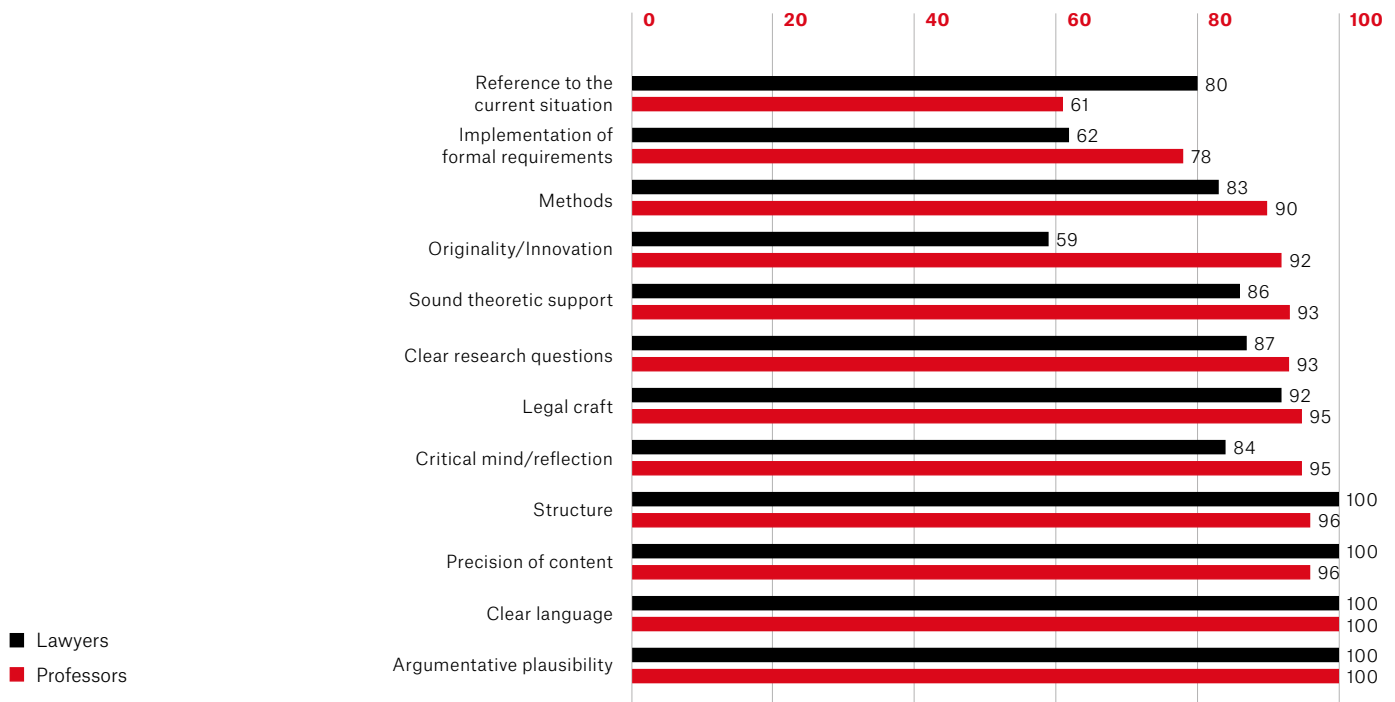
Considering research evaluation in its context, there are many formal or informal, individual or institutional evaluation situations focusing on research products or scientists. The following situations have been highlighted and studied:

1. Evaluation of doctoral theses or qualifications
2. Evaluation of a research article for publication
3. Ex ante evaluation of research projects (e.g. for funding)
4. Ex post evaluation of research projects
5. Evaluation of the research carried out by candidates in an appointment procedure;
6. Evaluation of research products in order to award a prize
7. Evaluation of research produced by an academic entity (e.g. a faculty)

Different evaluation practices exist in all these situations but qualitative methods are the most widely used. It should be noted that the double-blind peer review procedure, which is the standard for assessing the scientific quality of a text or another research product in many other disciplines, is seldom applied in Switzerland. Instead, publishers of legal journals are faced with the task of determining whether or not a particular contribution will be published in a journal. At the same time, the system of legal reputation differs from other disciplines.

Some particular features of legal research have been highlighted, linked to segmentation of the law, publication practices, legal methodology, the absence of any clear boundary between scientific research and legal practice, the fundamental issue of language, the comparatively low cost of research in this field and limited databases with the ensuing restrictions on options for using bibliometrics.

### Criteria for the evaluation of publications in the legal sciences



In addition, there are different requirements in terms of scientific text between the two groups (see diagram). It is relatively difficult to define the boundary between legal research and legal practice. It is not at all unusual for law professors to accept mandates as lawyers. And practitioners (mainly judges or lawyers) continually carry out "legal research" without belonging to the university community. Moreover, practising lawyers can also influence scientific debate within their discipline through publication. To this end, as far as legal practitioners are concerned, it is important for a publication to deal with the key issues of the day. Whether or not this activity is distinguished by a specific original feature is much less important here. Contrastingly, methodological questions are more important for professors. At the same time, some criteria appear to be universally valid. Apart from substantive accuracy, this also concerns clarity of language and the structure and quality of the argument. The scientific community must, however, be included in the debate and in developing evaluation criteria.

### Theology

Similarly, the project carried out in collaboration with the universities of Lucerne and Fribourg, namely, "Ressourcen-basiertes Instrument zur Abbildung geisteswissenschaftlicher Forschung am Beispiel Theologie" comprises different disciplines. As with the law project, the scientific community was largely involved. Theology is also interesting because of the very different approaches that coexist in the field of theology (different approaches such as biblical hermeneutics and the sociology of religion are part of theology), as well as (Christian) theology with the church – a very powerful partner – that can directly influence research in this discipline.

The results show that, when evaluating theological research, theologians use quality criteria which are also permitted in other humanity disciplines. However, the same result is obtained as in other subjects, namely that the criteria used in evaluation procedures such as interdisciplinarity, networking or the transfer of science into society are not understood as quality criteria per se. For this purpose, project managers suggest that a distinction be made between actual quality criteria and research profiles. This is akin to the communication sciences project. The quality and impact of research can be understood from a more global perspective by describing institutional profiles combined with quality criteria inherent in the discipline.

#### 4.4.4 Representing stakeholder interactions

Research does not develop in a vacuum. It stimulates collaboration between scientists and various occasional or regular partners. This collaboration develops within university institutions as well as with external partners in the region or from other countries or continents. The collective dimension of research takes on very different forms depending on the research groups, disciplines and fields of study. It is nevertheless omnipresent but often unfamiliar.

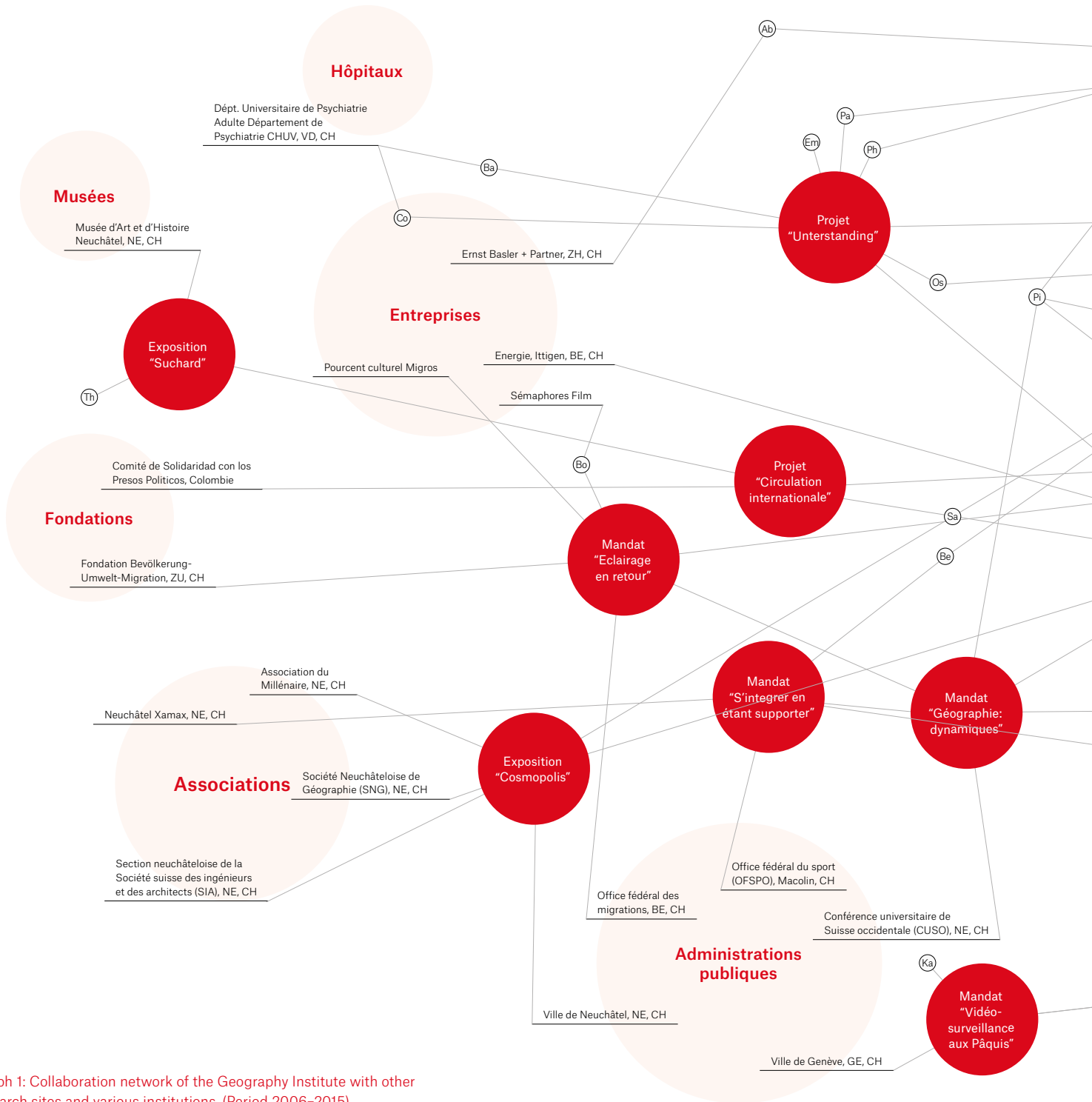
Unlike natural sciences and medicine where group research is widespread and often reflected in long lists of co-authors, publications in SSH are more often individual. Consequently, the various co-operations established are only partly manifested in joint signatories. This is why, in SSH, analysis of co-signatories does not give a true reflection of the regional or international collaborative networks involved. Collaboration and partnership networks must be highlighted in another way.

It is precisely in this perspective that pilot projects<sup>22</sup> at the University of Neuchâtel were carried out in succession, with three key objectives: to promote a descriptive evaluation of research activities and the fruits of research; to draw attention to the diversity of the objectives and practices of SSH research; to design a mapping instrument to highlight the use and scope of the scientific contributions of a research unit.

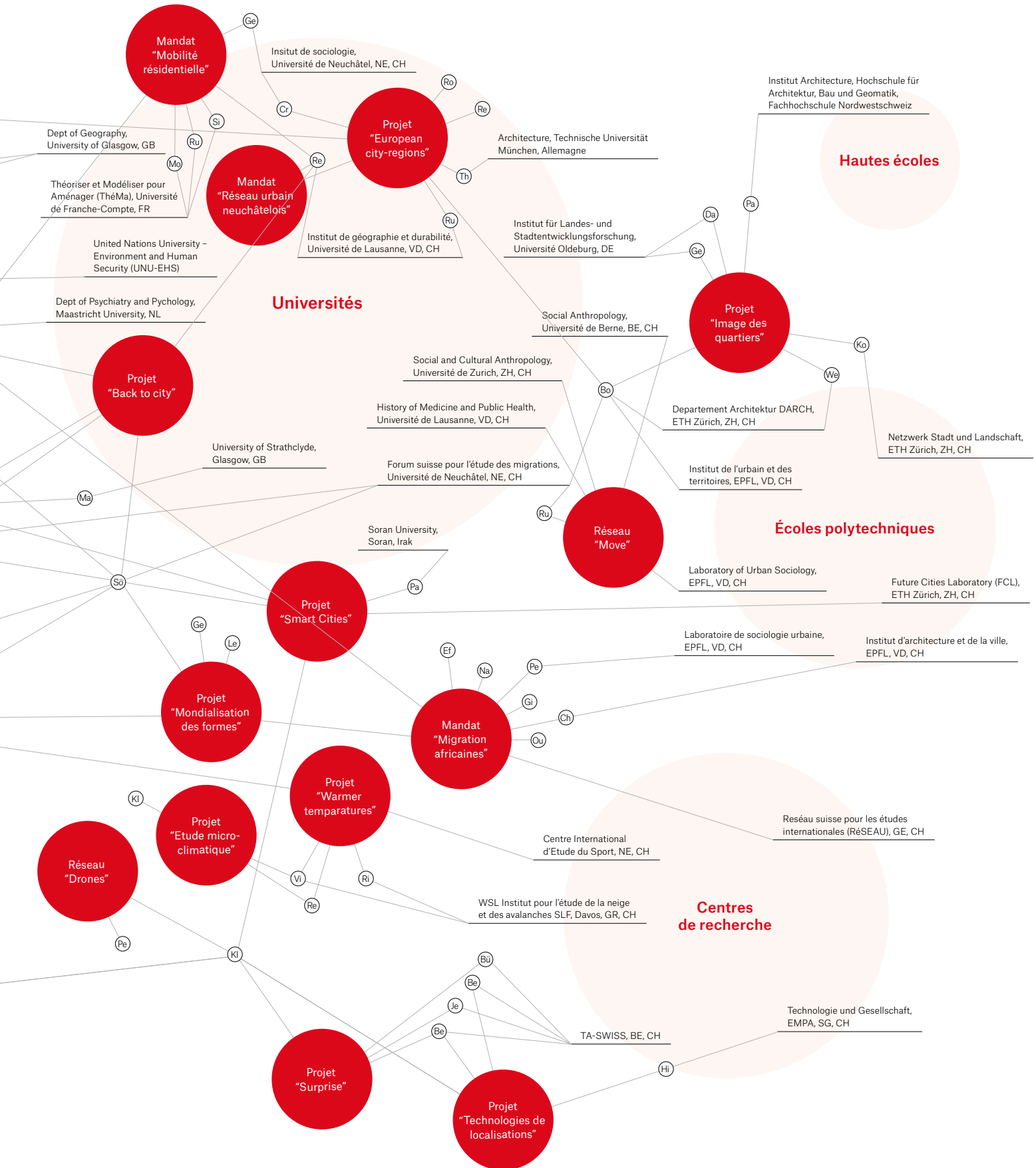
<sup>22</sup> The titles of the three projects are as follows:

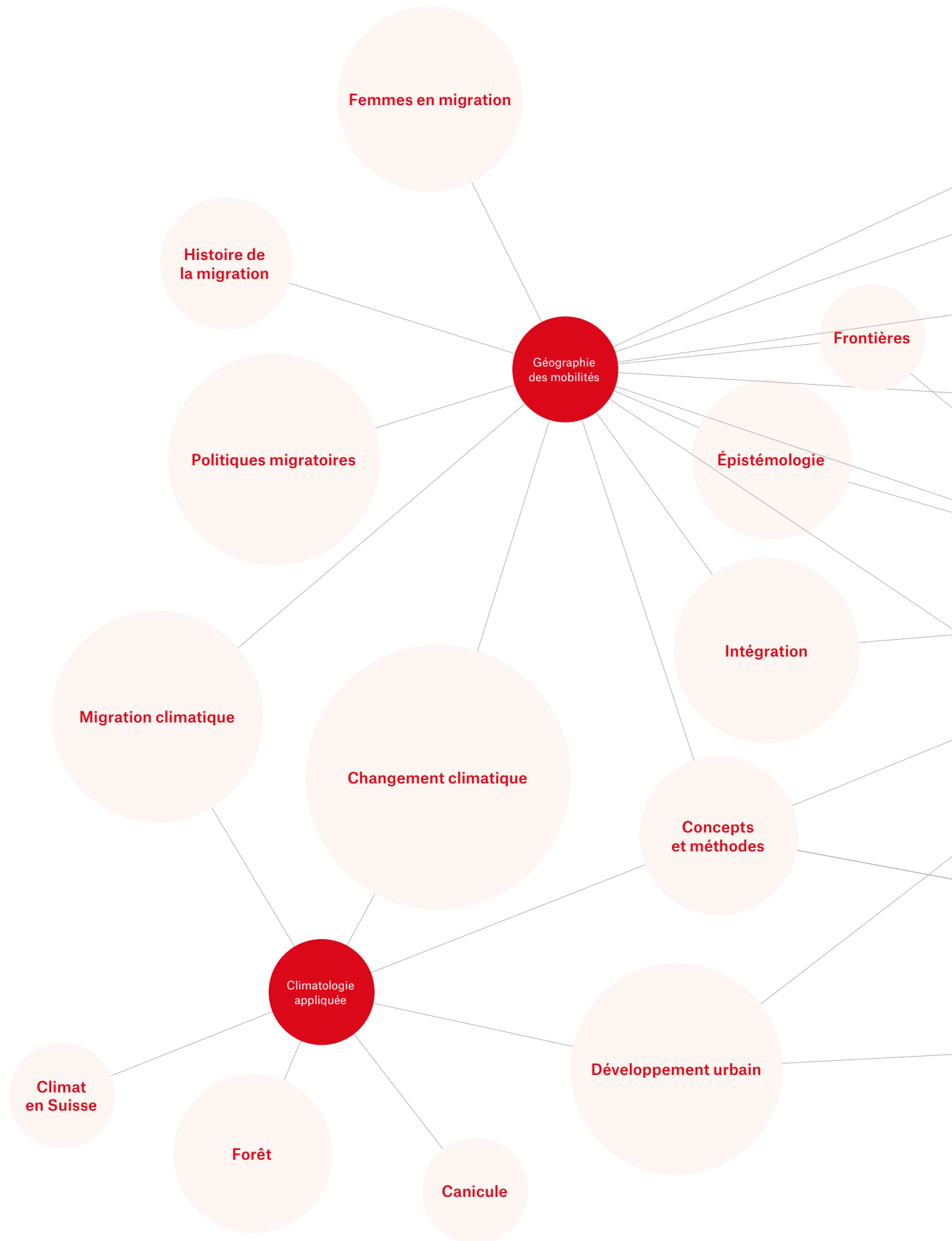
- 1) Décrire et mesurer la fécondité de la recherche en SHS à partir d'études de cas
- 2) Cartographier les réseaux de recherche. Interactions et partenariats en SHS
- 3) Pour une évaluation descriptive des activités de recherche en SHS (projet d'implémentation)

Two typical visual displays:

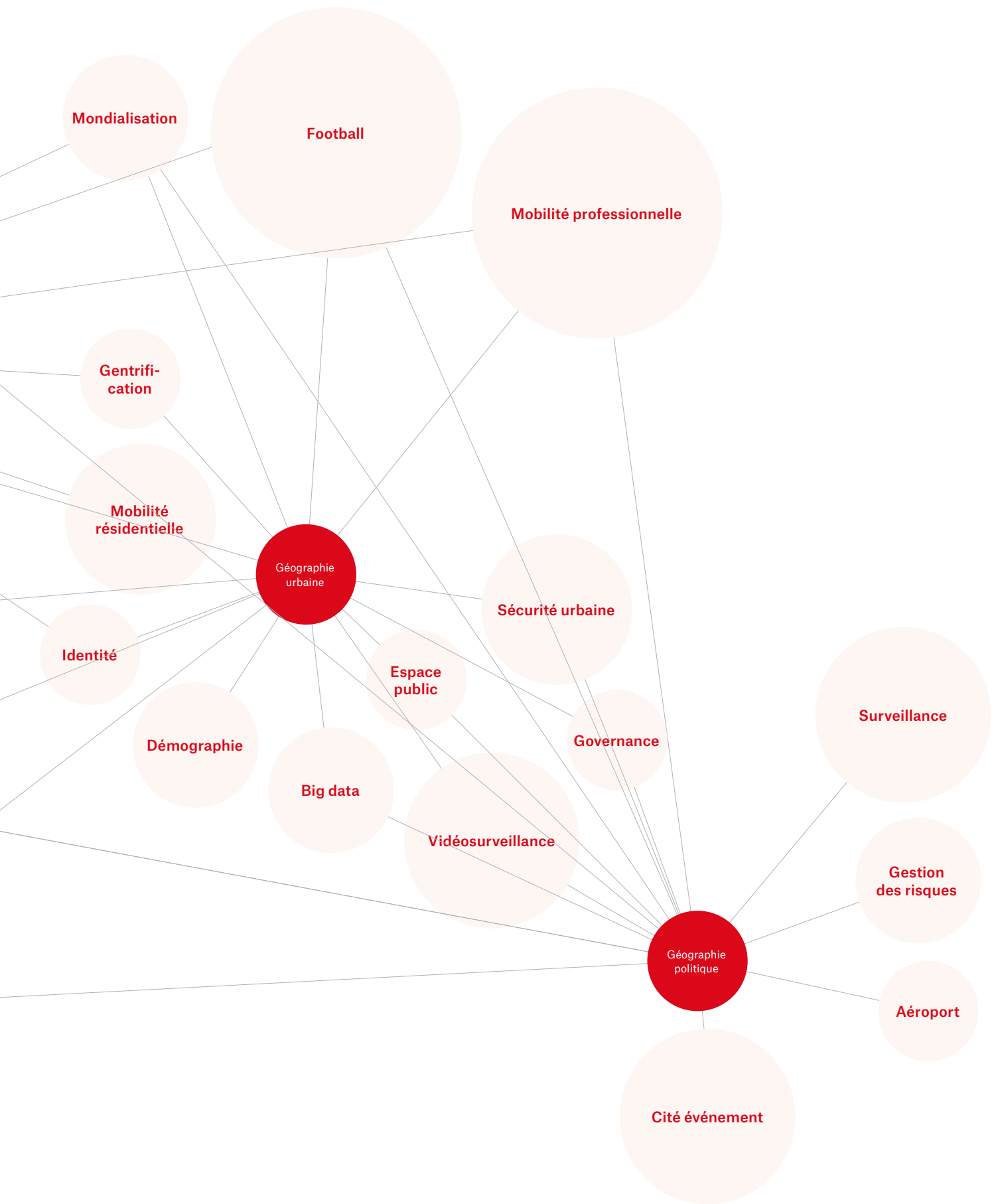


Graph 1: Collaboration network of the Geography Institute with other research sites and various institutions. (Period 2006-2015)





Graph 2: Institutional collaborations developed by the Chair of Ancient Mediterranean Archeology – UniNE. (Period 2009–2014)



The methodological approach is based on routine indexing of scientific contributions recorded in the Neuchâtel University "Publications and Research" database – data which are supplemented on request by researchers in the relevant units. The "TouchGraph" visualisation tool was chosen to develop mapping capable of visualising all long-term research activities (5 to 10 years).

The analyses carried out have focused in particular on the various academic links forged within a research unit as well as at interfaculty, national or international level. The analysis has also focused on the type of partnerships established with economic, social and cultural stakeholders. The strategy allowed research activities to be integrated within the scientific community and the City.

These maps highlight the research and collaboration networks with external stakeholders over ten years or so. They show which stakeholders work together and the sector from which they originate. University institutions obviously play a key role in these networks. However, it is interesting to see the various forms of co-operation with both public institutions and the business community. The extensive scope and social and cultural consolidation of research unit activities are highlighted.

In addition to showing the collaboration networks, the mapping approach also highlights several characteristics of the scientific work and its dissemination. For instance, the language of scientific publications in relation to the type of publication and the media mainly targeted, show the specific function of French publications versus English publications intended more specifically for the relevant scientific communities.

This approach allows university and haute école scientists to highlight the activity of a research unit and to have a more specific vision of the collaborative dimension. This type of approach provides a useful basis for strategic decision-making within a university. At the same time, it contributes to scientific communication with a wider audience by providing an insight into the institutional fabric underpinning SSH research projects.<sup>23</sup>

<sup>23</sup> The overall approach is discussed on the following website: <https://evaluation-de-la-recherche.com>

#### 4.4.5 Presenting the impact

Humanities and social sciences are connected with external stakeholders in many ways. In this respect, the groups concerned can vary considerably, depending on the disciplines. In communication sciences, for instance, there is a special relationship with the media, management is linked to the private economy, and theology is linked to the Church. In law, there is a close dialogue between the courts and the bar. This close relationship can obviously affect how quality is perceived within a discipline, especially if a certain element of permeability exists between professional practice and university research. Thus, the citation of legal commentary in the context of a Federal Court order is deemed to prove the importance of this work. Religious communities, for their part, can affect the definition of quality theology research in universities.

At the same time, considerable scepticism exists in the research community, as evidenced by current analyses of the use of impact as the quality criterion. Again and again, fears come to the fore. Focusing on the impact and efficacy of research could push scientists towards utilitarian research.



Moreover, this topic is gaining ground at international level. The “Research Excellence Framework” (REF), which evaluates British universities and regulates the allocation of some public funding, requires universities to focus on the impact of their research.<sup>24</sup> In the next European FP9 framework programme, which will replace Horizon 2020, impact is one of the three lynchpins alongside Excellence and Openness.<sup>25</sup>

Highlighting impact in its entirety constitutes a major challenge. Impact is not expressed solely in end products, but affects the entire research process through the various relationships between scientists and stakeholders. As mentioned at the outset, impact is one of the main thrusts of the “Research performances in humanities and social sciences” programme. The “Mapping Research Networks, Interactions and Partnerships in Humanities and Social Sciences” project described above shows the relationships between universities and other stakeholders using projects and publications. In discipline-specific projects, the importance of impact on individual disciplines is examined and the “Developing indicators for the usage value of research in Communication Sciences” project examines the main groups involved in research and productive interaction between research units in communication sciences and the public sector, as well as the private economy, using both qualitative and quantitative methods.

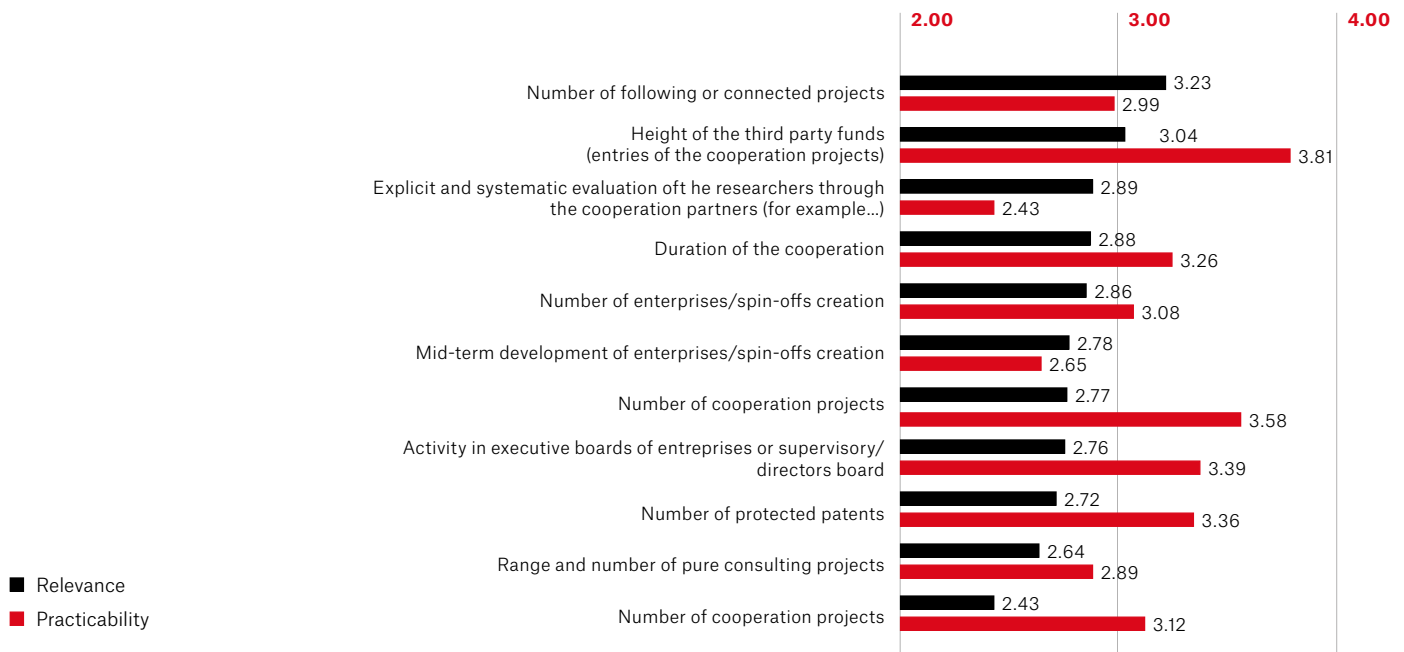
*“Again and again, fears come to the fore. Focusing on the impact and efficacy of research could push scientists towards utilitarian research.”*

Another project in the “Research performances in the humanities and social sciences” programme is the initiative entitled “Der Wertbeitrag betriebswirtschaftlicher Forschung” managed by the University of St. Gallen. The aim of the project is to identify ways of finding alternatives to the traditional reference in obtaining third-party funds. To this end, the Managerial Impacts’ model has been devised to examine the efficacy of business management research in the following three areas: project success, forging personal networks by scientists themselves and boosting the reputation of their research (by relationships in the media, for instance). Furthermore, a set of indicators has been defined for each of the three areas. These were discussed with scientists at the University of St. Gallen who assessed the relevance and practicality of all of these indicators.

This is a frequent problem. The indicators that are easiest to collect are not the most relevant, and the most relevant indicators are difficult to collect or are even untraceable. Thus, evaluation by co-operative partners is considered relevant for the efficacy evaluation but deemed to be hardly practicable, external university stakeholders having little reason to participate routinely in an evaluation procedure that does not concern them. Moreover, this could have a negative influence on relationships between scientists and their co-operation partners since scientists become dependent on external stakeholders although the opposite is not true in this context.

<sup>24</sup> [www.hefce.ac.uk/rsrch/refimpact/](http://www.hefce.ac.uk/rsrch/refimpact/)

<sup>25</sup> [https://ec.europa.eu/commission/commissioners/2014-2019/moedas/announcements/embracing-era-change\\_en](https://ec.europa.eu/commission/commissioners/2014-2019/moedas/announcements/embracing-era-change_en)



As already mentioned above, a bibliometric analysis of the publication data cannot therefore be used to provide useful statements about the impact of research. This is also relevant because, in humanities and social sciences, it is difficult to set the boundary between a scientific publication addressed to a scientific community, contributing to the development of the research, and a research that is targeted toward the general public. Thus, even a contribution to the history of literature in a daily newspaper can be quite interesting for scientists and will consequently advance the research. This represents a new challenge in collating research findings, especially if it is not simply a case of stocking conventional scientific publications (articles and monographs). The aim of the "National vergleichbare Daten für die Darstellung und Beurteilung von Forschungsleistungen" project carried out by the University of Basel is to establish research information that could be useful in the context of Swiss universities in order to draw comparisons between the various institutions. To this end, recommendations in terms of standardisation of information have been formulated into categories such as publications, individuals, projects, transfer services and finances. Essentially patents and licensing have been earmarked as potential data to demonstrate the impact of science. Data in the humanities and social sciences sector hardly play any role. According to the authors, other possible indicators are spin-offs, television and radio broadcasts or articles in published journals. As the authors point out in the concluding project article, knowing the extent to which meaningful statements can be derived or whether there is a distinct need to separate scientific and popular publications should be clarified at discipline level per se.<sup>26</sup>

<sup>26</sup> Ackermann, S., Haegel, B. 2016. Die Standardisierung von Forschungsinformationen an Schweizer universitären Hochschulen, available at the following website: [www.forschungskennzahlen.ch](http://www.forschungskennzahlen.ch)

#### 4.4.6 Promoting Open Science

Will the principle of "Openness" influence research in the years to come? This will create new challenges for the development of evaluation systems and practices. Hence the efficacy and success of Open Science strategies will have to be verified. This requires new indicators to reflect the transparency of the entire research system. At the same time, evaluation procedures based on the "Open Science" perspective must be devised in an open manner. Conventional systems measuring citations such as the Impact Factor rely on the results of proprietary databases such as the Web of Science and Scopus, which do not provide information free of charge. The data can be purchased. Free services such as Google Scholar work with non-accessible algorithms which, again, are not consistent with assumed transparency.

As part of the Open Science framework, Open Access, i.e. free access to scientific production, plays a leading role and characterises current political action. In the national Open Access strategy developed by swissuniversities and the FNS, and adopted in 2017, a 100% change to Open Access in Switzerland has been put forward as a vision between now and 2024.<sup>27</sup> This is feasible only if the evaluation systems function according to Open Science principles and encourage this approach. This is evidenced in the following strategy:

##### *Quality evaluation review system*

*Many current academic evaluation systems that rely heavily on a few journals are generally deemed inaccurate and limited (see DORA Declaration) and should be reconsidered. In fact, (...) the evaluation processes and reputation perspectives determine where scientists publish their work. They should also be based on fundamental criteria including Open Access and Open Science. However, a new evaluation system can only be effective if it is supported by the scientific community.*<sup>28</sup>

On the other hand, changes to the evaluation systems should be negotiated between the stakeholders. This would respect the freedom of research and the right of institutions to make their own decisions. Given the international profile of research, this type of career-linked evaluation system should not only be introduced in individual institutions. Tools offering alternatives to the quantitative analyses of citations should be developed at the same time. These approaches should also take into account ways of disseminating information through new media and social networks. Meanwhile, there is an entire market of service providers offering alternative measures that satisfy these requirements. Alternative measures include quantitative measures of the dissemination of individual research results, such as scientific articles as well as databases or other research products that provide information on the dissemination and perception of digital content on the Internet and especially in social networks. These networks can reach wide audiences such as Facebook and Twitter or scientific communities such as ResearchGate and Academia, or even bibliographic management programmes such as Mendeley. Different service providers are now commercially available (mostly profit-making), such as Altmetric.com, Plum or ImpactStory.

In the case of Altmetrics, it is a case of finding adequate evaluation procedures dealing with the specific features of digital content. Altmetrics play an important role in Open Access and Open Science. To this end, the development of new measures has been required, on the EU side.<sup>29</sup>

<sup>27</sup> [www.swissuniversities.ch/de/themen/hochschulpolitik/open-access/](http://www.swissuniversities.ch/de/themen/hochschulpolitik/open-access/)

<sup>28</sup> National Open-Access Strategy, swissuniversities/FNS, 2017, p. 3.

<sup>29</sup> Cf.: <https://ec.europa.eu/research/openscience/pdf/report.pdf>

The question of alternative measures and their relevance for highlighting the quality and impact of research in humanities and social sciences is examined by the "Scientometrics 2.0" project at the University of St. Gallen. The project focuses in particular on the ResearchGate platform by examining networking between business economists at the University of St. Gallen at different levels of seniority.

Here, reference can be made to two results emerging from the study carried out by individuals in charge of this initiative. Firstly, scientists tend to use these networks less as a research communication tool and more as a means of networking. Examination of networks on a platform such as ResearchGate shows how closely scientists in a given community are connected by this network rather than promoting understanding of how a given item of research is received. Secondly, there is a certain correlation between the intensity of networking on ResearchGate and the performance of scientists compared to conventional indicators. There is, however, one difference. Young scientists mainly use these networks whilst older, established scientists are less active in this respect. This is undoubtedly also related to the age of the scientists but social networking may also promote the personal reputation of individual scientists. It would be interesting to establish in a next step if this is specific to economic science or whether it reflects a generalised trend.

Thus, alternative measures cannot overcome the difficulties that already exist with conventional measuring procedures such as the Journal Impact Factor. However, they can be consulted in order to have a better understanding of how researchers connect in virtual spaces and how their research is received on social networks. Furthermore, added value can be created. For instance, as part of an implementation project at the University of St. Gallen, an analytical tool was added to the university's institutional software, the Alexandria Repository. Since 2017, a Plum-Analytics plug-in has shown how many times a given Repository document has been viewed on social networks. The purpose of this is to create added value for scientists and also to encourage them to be active.

#### 4.4.7 Implementing tools

As part of the "Research performances in the humanities and social sciences" programme, each university had an opportunity to apply for implementation project funding. It was thus possible to broach subjects which, up to this point, had not been adequately covered in the programme. This involved working with data and databases, training for the next generation of scientists and the communication aspect of evaluations.

Three implementation projects focus on data processing and the resulting indicators. The implementation of an Altmetric tool at the University of St. Gallen was already mentioned in the previous chapter. As part of its implementation initiative, the USI developed a system of indicators on the university's own database with the option to derive a vast amount of information. The database has been adapted accordingly. As part of its implementation project, the University of Lucerne has developed software that can graphically represent the quality criteria developed through the theology initiative.

The next generation of scientists was discussed in the two implementation projects.

At the University of Zurich, a "scoring sheet" has been developed for what is known as a "research credit", based on the results of the programme "Research performances in the humanities and social sciences". This research credit supports doctorate and post-doc projects. This sheet helps experts to evaluate the projects presented. There are nine criteria, for which a consensus has been reached in all disciplines. These criteria concern the quality of the research, specified through twenty-three aspects. Project proposals can thus

be assessed by correctly applying the knowledge gained from various projects within the programme. This form of evaluation is based on criteria developed by the scientific community and increases the legitimacy of the decision-making process. It also promotes common criteria.

The University of Geneva ran a four-day workshop for early-career researchers in which PhD candidates and post-docs joined forces with research evaluation experts to examine and discuss the impact of evaluation on research in humanities and social sciences, especially from the future academics' perspective. The challenges facing young scientists were also raised. These included subjects such as interdisciplinarity or evaluation criteria partly contradicting each other in terms of the quality of scientific work. The aim of the workshop was to encourage early-career researchers not to view themselves as an object in the evaluation process but as a subject, and to actively devise these processes. At the same time, with the participation of the various stakeholders of the programme "Research performances in the humanities and social sciences", the results have been passed on to the next generation of scientists.

The entire workshop was documented using a SPOC (Small Private Online Course) and made available to young scientists at the University of Geneva. A short informative video can be viewed at <https://mediaserver.unige.ch/collection/VN4-234a-2017-2018>.

*"Alternative measures can be consulted in order to have a better understanding of how researchers connect in virtual spaces and how their research is received on social networks."*

The implementation project at the University of Fribourg fosters links between the next generation of scientists and communication in research. This project is based on the outcome of the initiative to evaluate theological research and plans to integrate the results of the initiative into the scientific community over a one-year period, by organising workshops and a research project. This project also includes a conference for all PhD students at the Faculty of Theology, University of Fribourg, with the participation of professors. Here, scientists will also develop strategies on how to convey theology research to the outside world. Moreover, within the framework of this implementation project, a consultation process with theologians at Yale University has also been initiated in an attempt to develop common ground in theology.

## 5 Conclusion

The long-term relevance of humanities and social sciences for universities cannot be decided within the scope of evaluation procedures. Instead, this will depend on basic political, social and economic conditions which, in turn, are influenced by societal debates on these disciplines. Evaluation can, however, help to highlight the importance of these disciplines, both in terms of considering key issues currently on the agenda and the preservation of cultural heritage for society. The evaluations can have positive repercussions especially when they contribute to the development of science in all its diversity. Nevertheless, evaluations are a highly political issue which, depending on the standards and methodology used, will influence the form and content of research.

The aim of the "Research performances in the humanities and social sciences" programme was to equip universities with the necessary tools to broach humanities and social sciences in a beneficial way. The key results of this venture are presented and summarised in this brief overview. Finally, it is up to the individual institution to decide to what extent the information presented here can or cannot be applied in concrete terms. According to the institutions, this information can be used in different ways. In principle, visibility and the promotion of institutional and regional diversity remain one of the key principles that have characterised the "Research performances in the humanities and social sciences" programme.

Last but not least, the programme has shown that, with the participation of the scientific community and the willingness to conduct long-term research, legitimate, beneficial tools can be developed for use in an evaluation context. The scope of these programmes and their long-term impact on everyday university life remain to be seen. This will also depend on changes in basic conditions and progression at national and international level. However, changes in recent years show that a "Swiss way to research quality" has developed and will also determine long-term evaluation practices in Swiss universities.

## 6 Theses for an appropriate evaluation

### **1. Disparate scientific cultures between and also within disciplines, require different forms of evaluation**

Scientific cultures specific to each discipline affect not only the research work itself but also the publication behaviour of various researchers. In many disciplines, research results are mainly communicated through books, and publications in several languages are common and insightful. In some disciplines, publications are frequently the work of several authors, while in others, publications attributed to individual authors are the norm. The evaluation criteria and indicators for research work applied to one specialist field, cannot be readily transposed to another field.

### **2. Evaluation procedures reflect, and take into consideration, different strategic profiles between research entities and institutions**

Research entities, faculties and higher education institutions on the whole have different profiles and pursue different strategic goals, be it locally, nationally or internationally. Taking various university groups into account, institutions themselves decide the form an evaluation should take to meet the objectives defined at the outset. Due to the diversity of institutions and their profiles, direct comparisons that do not take account of the specific nature of a context, always pose a problem. It is important that external experts and peers are informed beforehand of the characteristics specific to an institution.

### **3. When designing and implementing evaluation procedures, a bottom-up approach ensures pertinent and adequate results**

In order to obtain pertinent quality results on evaluations, appropriate participation from researchers is required. Evaluation procedures that do not have the support of the scientific community do not achieve the desired outcome. The community of researchers must itself establish the principles by which the excellence of the research will be evaluated. It is important that scientists are not just involved at the moment of the evaluation, but from the outset when the procedures are designed. In this context, the scientists involved must be able to represent the diversity of approaches in their disciplines.

### **4. Making the reason and the underlying norms behind an evaluation is part of the evaluation process**

The elaboration of evaluation procedures is inevitably marked by the interests and priorities of the stakeholders. For it to be transparent, the reasons, goals and methodology of the evaluation and any resulting consequences must be clearly defined beforehand. This implies that any incentives resulting from the evaluations must be clearly defined and their reason debated. An evaluation conducted on the basis of specific indicators linked to a research activity, must avoid producing unintended effects that would go against the aim to support high quality-research.

### **5. Clearly defining the form and goals of evaluations**

The success of an evaluation, in many fields including that of research, depends on the motivation and participation of all stakeholders concerned. Open and clear communication is essential in promoting this participation. Prior communication of the methods and goals of an evaluation is one element of this approach. In terms of obtaining data, the nature of the information to be collected must first be determined. This means that, for research information systems, data must be collected in a targeted way, taking into account the needs of the stakeholders. As such, the resources invested to develop, implement and maintain such a system must be justified and in line with the expected advantages.

### **6. Quantitative measurements may be made in addition to qualitative evaluations, but cannot replace them**

The quality of research cannot always be measured using quantitative indicators. They are an important element in the evaluations of quality and should not be ignored. However, no criterion or indicator can entirely take into account the quality of a scientific study. The use of quantitative measurements is only justified if the qualitative information is available at the same time and if it can be used to prioritise and contextualise the results. Furthermore, different indicators are often needed too, to meet the questions of the evaluation. They should be chosen according to the goals of the evaluation and the complexity of the research work. It is not because something is measurable that it should absolutely be measured. The accent is placed on the quality of the process and of the research results, not on the highest possible quantitative efficiency.

### **7. Different dimensions in research impacts**

Research has widely different impacts on society and informs debates on social, cultural, political, economic and ecological issues, although this contribution is not always perceived as the direct and manifest expression of the research. In this instance, the relationships between researchers and various society stakeholders are numerous. Through such relationships, the social and human sciences have a strong impact on society. The nature of these relationships must be highlighted in procedures to evaluate research.

### **8. Adapting evaluations to differing contexts**

Evaluating research activities is not a process that is self-contained, but depends on the context. An instrument that is relevant to evaluate one institution cannot necessarily be used to assess a university career as part of a recruitment procedure for the next scientific generation. Before selecting an evaluation procedure and the instruments used, the context on which the choice will depend must first be defined.



### **9. Research impact lasts over time and are not limited to published works**

Research is a process that occurs over time. The human and social sciences are often an area for reflection about issues that cover long, overlapping periods of time, and this affects the length of the research process. Thus, overall evaluation of the quality and the activity is not only limited to considering the frequency of publications, but will envisage the research process as a whole and the multiple effects it may have at different levels. This includes in particular knowledge transfer, the fostering of networks and the promotion of young talent. Note also that the fruit of research is not always understood directly, but only becomes evident after years, or even decades in some cases. A mixed reaction to a text in the first years following its publication does not necessarily mean that it will not, later, have lasting repercussions, within and outside the scientific world.

### **10. Meeting scientific requirements**

Evaluation procedures that meet the requirements dictated by the diversity of research are highly complex. For this reason, it is essential that they appropriately reflect the current state of research into evaluations. The evaluations themselves must also meet scientific quality requirements. This implies that their methodology be made transparent and that they be understandable from the outside. In order to be able to develop evaluation procedures, it is also important that stakeholders network and exchange their experience and the instruments they used. Only viable knowledge transfer will ensure that evaluation procedures evolve.

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