### **Events**

# Information and Training Seminar on Evaluation

## Graziano Mario Valenti

Within the rich and heterogeneous panorama of activities that the Unione Italiana per il Disegno, in line with the principles of its statute, organizes in favour of its members and more generally for the scientific drawing community, the Training [1] and Scientific Production and Evaluation [2] commissions worked together to plan and implement a seminar dedicated to the topic of scientific evaluation. The event held in Rome on 14 March 2024 with the title Seminario informativo, formativo, sulla valutazione continues a tradition –previously established in the years 2019, 2020 and 2022 [3]— of inviting the scientific community of the area of Drawing to a critical reflection on the best practices of evaluation and self-evaluation of research and the consequent implications in the training field, considering them within current and future scenarios.

The seminar was structured into two parts over the course of a day. The first part, 'informative', dealt with the topic of evaluation from a general and transdisciplinary point of view. The second part, 'training/formative', dedicated attention to specific aspects of the evaluation in reference to the scientific disciplinary sector ICAR17 (now CEAR-10A).

For each part of the seminar, four main topics were identified, presented, and discussed by a guest, two moderators and, in several cases, by participants from the public present. The seminar was introduced by the president of the UID Francesca Fatta and by the presidents of the Training and Scientific Production and Evaluation commissions, Maria Linda Falcidieno and Rossella Salerno.

The 'informative' part of the seminar began with a presentation by Matteo Bigongiari [4], who discussed key points of the innovation process of the National Scientific Qualification that are of particular interest in the works of the CUN.

The seminar then continued with presentations by the first four guests. Marco Margarini [5], introduced by Sandro Parrinello and Roberta Spallone, illustrated data and provided considerations on the articulation of scientific production, the objectives and principles of Research Quality Assessment (VQR), the evolutionary perspectives of VQR and the methodology and critical issues in evaluation of scientific iournals. Data showed that most of the evaluated scientific production consists of conference proceedings, journal articles, and monographs. In

the previous VQR, journal articles were numerically predominant, while monographs received better evaluations in non-bibliometric areas. The innovations of the 2020-2024 VQR include a broader definition of scientific products and a promotion of scientific transparency and reproducibility linked to Open Access and Open Science. Margarini also emphasized the importance of training evaluators to ensure a fair evaluation based on the quality of the scientific product regardless of the type of publication. Fabrizio Cobis [6], introduced by Carlo Bianchini and Marcello Balzani. discussed the use of resources from the National Recovery and Resilience Plan (PNRR) in the university and research sector, particularly focusing on the commitment deadlines set for December 2025. His contribution highlighted the importance of using resources efficiently and swiftly, a challenge for Italian institutions whose main critical factors are the implementation and concrete management of resources, as well as their planning. In this scenario, it is essential that administrative staff can promptly respond to researchers' needs to avoid delays that could jeopardize projects. Cobis emphasized that the real success of the PNRR will be



measured by the ability to create a new sustainable research management model even after the program ends in 2025.

Francesca Bottaro [7], introduced by Lia Maria Papa and Graziano Mario Valenti, illustrated the activities of the CoARA coalition aimed at reforming research evaluation, a necessity arising as a response to radical changes in research methods due to digitalization and increasing international collaboration. Research evaluation today is primarily focused on the number of publications and the prestige of the journals where they are published, measured by the Journal Impact Factor. This approach has led to negative consequences on the quality and integrity of research, prompting the academic community to consider the need for reform. Previous initiatives such as the San Francisco Declaration on Research Assessment (DORA) have already suggested abandoning the exclusive use of metrics based on scientific journals. The proposed reform aims to create a broader and more coherent movement at the European level, involving key factors such as universities, research centers, funding agencies, and academies. The reform agreement, published in July 2022, is the result of a co-creation process facilitated by the European Commission and signed by over 700 organizations. The reform aims to improve the effectiveness and efficiency of scientific research by promoting open science practices and recognizing a broader range of contributions to scientific knowledge.

Donato Malerba [8], introduced by Laura Farroni and Michele Russo, discussed potential scenarios for artificial intelligence (AI), highlighting how AI is becoming a transformative force in various sectors, including scientific discovery and evaluation. His contribution focused on the use of Al to improve the efficiency of the peer review process, noting some operational tools useful for statistical control and compliance. Malerba also pointed out that AI is a valuable aid for reducing evaluative biases and improving the quality of review decisions. However, there are ethical concerns related on the opacity of algorithms and the potential for existing biases to be replicated. There is thus a need to balance accuracy with transparency and fairness in evaluation to prevent AI systems from negatively influencing decision-making and reducing author trust.

Donato Malerba's intervention concluded the 'informative' section of the seminar, which resumed in the early afternoon with the 'formative' part introduced by Alberto Sdegno, representing the UID's doctoral working group.

Sdegno's contribution highlighted the importance of the doctorate as a first step for young researchers, supporting the need to balance quantity and quality of publications, since it seems clear that today there is a greater production of articles by doctoral students, but these risks being at the expense of quality. Methodological rigor and the impact of research are considered fundamental for the training of the PhD, equally important is the inclusion of new technologies such as artificial intelligence. Finally, Sdegno recalled the need for a transdisciplinary approach, to integrate knowledge and skills in a broader way, promoting a holistic vision of reality and research. This approach is seen to improve understanding and collaboration between various fields of knowledge, enriching the overall scientific and cultural landscape.

The seminar then continued with presentations by four more guests. Fabrizio Apollonio [9], presented by Antonella Di Luggo and Alessandro Luigini, first addressed the complexity of the topics under discussion, recalling that the nature of scientific research has been debated among epistemologists and scientists such as Karl Popper and Thomas Kuhn. He focused on the difference between the 'scientific fact' and the scientific article, then delving into the challenges of identifying the product of scientific research. Apollonio's contribution also touched on the distinction between research evaluation and review. Evaluation aims to monitor and verify the impact of research in terms of costs and results, while review focuses on validating the scientific product. Criteria such as transparency, reproducibility, and the need for appropriate evaluation tools to ensure scientific quality were discussed. Finally, Apollonio addressed the demarcation issue between scientific products like articles, monographs, and 3D models, highlighting the specific challenges for interdisciplinary scientific areas. Research product evaluation must consider the peculiarities of each discipline and adopt appropriate evaluation criteria to recognize the scientific value of contributions.

Roberto Delle Donne [10] and Itala Del Noce [11], introduced by Elena Ippoliti and Ornella Zerlenga, illustrated the value and potential of Open Science, considered a fundamental practice to make accessible not only the final products of

research such as articles and books but the entire research cycle, including data and methodologies. The free dissemination of research output online can produce significant scientific synergies and social impacts. The availability of open access publishing platforms is crucial to support these principles. The Department of Architecture and Industrial DRAWING at the Università della Campania 'Luigi Vanvitelli', through its publishing brand DADI Press, is committed to promoting open access.

Alessandro Barbano [12], introduced by Maria Grazia Cianci, explored the role of ethics in our society, particularly in journalism. He underlined the close link between ethics and democracy, pointing out recent issues in social media communication and the public sphere that raise ethical concerns. Barbano emphasized the complexity of balancing freedom of

expression with the need for ethical behavior. He discussed the legal responsibilities of newspaper editors, who are criminally liable for everything published in their newspapers, and the criteria for publishing defamatory news: truth, social utility, restraint, and respect for privacy. Barbano concluded by reflecting on the importance of maintaining a balance between investigative journalism and protecting individual rights, warning that excessively limiting press freedom could harm democracy itself. Riccardo Larini [13], presented by Fabrizio Gay and Edoardo Dotto, highlighted the challenge of evaluating scientific work, emphasizing how interdisciplinarity and collaboration between humans and technologies can improve this process. Larini, with a background in teaching and creating digital courses, highlights that assessment serves not only to measure

learning but also to certify skills, improve metacognition and ensure the quality of scientific research. He illustrated the distinction between different types of evaluation, such as diagnostic, formative, and summative, and described the use of technologies in evaluation, emphasizing that these should enhance rather than replace human evaluation. Larini stressed the importance of asking the right questions in the context of evaluation and using scientific criteria to reduce subjective biases.

At the end of the seminar, there was a lively debate with interesting insights. The UID president Francesca Fatta, the presidents of the 'Training' and 'Scientific Production and Evaluation' Commissions Maria Linda Falcidieno and Rossella Salerno, and the seminar coordinator Graziano Mario Valenti briefly commented and concluded the event.

#### Notes

- [1] CTS members: Maria Linda Falcidieno (president), Elena Ippoliti, Alessandro Luigini, Alberto Sdegno, Graziano Mario Valenti. External members of the CTS: Maria Grazia Cianci Lia Maria Papa.
- [2] CTS members: Carlo Bianchini, Edoardo Dotto, Alessandro Luigini, Roberta Spallone, Rossella Salerno (president), Graziano Mario Valenti, Ornella Zerlenga. Members external to the CTS: Fabrizio Gay, Antonella Di Luggo, Laura Farroni. The following ordinary members also participated in the organization of the seminar: Sandro Parrinello, Matteo Bigongiari, Michele Russo.
- [3] I Seminar evaluation of research in the SSD ICAR/17 DRAWING, Rome, 9 May 2019; II Seminar evaluation of research in the SSD ICAR/17 DRAWING VQR 2015-2019, Rome, 4 March 2020; III Research evaluation seminar Disciplinary strategies and policies of the SSD ICAR/17 DRAWING, Rome, 12 May 2022; IV Research evaluation seminar in the SSD ICAR/17 DRAWING Outcomes and implications of the VQR 2015-2019, I I November 2022.
- [4] Councilor representing Area 08 Engineering and Architecture, at the National University Council.
- [5] Director of ANVUR Research Evaluation Area.
- [6] Director of the MUR Office Incentives and support for the competitiveness of the private production system and public/private cooperation at a national level of the General Directorate of Research of the Ministry of University and Research.
- [7] Legal and Policy Officer at the Directorate General for Research and Innovation of the European Commission. He works in the Open Science and Research Infrastructures unit, where he contributes to the development and implementation of the European Open Science Agenda. In particular, he is part of the team dealing with the initiative for the reform of research evaluation.
- [8] Full Professor of Computer Science, University of Bari.

- [9] Full Professor of Drawing, 'Alma Mater Studiorum' University of Bologna.
- [10] Full Professor of Humanistic Studies, President of the University Center for Libraries 'Roberto Pettorino' of the Università degli Studi di Napoli 'Federico II' SHARE Group Coordinator (Scholarly Heritage and Access to Research).
- [11] DADI\_PRESS editorial committee SHARE Book, Università degli Studi della Campania 'Luigi Vanvitelli'.
- [12] Italian journalist and essayist.
- [13] Solution Architect and Learning Engineer at Area9 Lyceum.

### Author

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