Seminar Title: Hopes and Fears of Open (Research) Data: Need to Reflect Before It Is Too Late

Place: INGENIO (CSIC-UPV). Date: 8 May 2025, 12-13h

Speaker: Dr. Inma Aleixos-Borrás, Visiting Researcher at the University of Stuttgart

Bio: I am an information scientist by training with a specialization in data, information, records and archives, and in the way that people manage and interact with them. This training and personal interest in the relationship between people and (analogical and digital) "knowledge objects" drive and define my interest in the current Open (research) Data movement. My previous research on the reuse of (research) data has led me to propose the concept of "bounded individual horizon", —a model of researchers' working behavior, and theorize a "datareuse (social) mechanism" to explain why some researchers reuse data and others abandon the process when facing challenges. I am also conducting research on the topics of impactful research, academic engagement, and academic entrepreneurship.

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Abstract:

Open research data are a taken-for-granted responsible and fair ideal or philosophy that no scientist dares or would dare to question or oppose. Doing so would imply that they are against the advancement of knowledge and innovation in science, the appropriate expenditure of public money, and the exemplary sharing act from which potential data reusers could benefit. However, Open Data are more preached than practiced in most scientific disciplines, while in others, e.g., molecular biology, there is the widespread belief that Open Data is the norm and not the exception. To incentivize researchers to share data openly, some scholars and policy makers suggest that rewards should be put in place (European Commission. Directorate General for Research and Innovation, 2017; Mabile et al., 2024; Morris & Saenen, 2024; National Academies of Sciences, 2020). The underlying assumption is that, by recognizing open science practices, these will be adopted widely.

Others argue that rewards might not work (Fecher et al., 2017), as data sharing practices work against scientists' 'competitive edge' (Hilgartner & Brandt-Rauf, 1994). Mabile et al. (2024) suggest that researchers might 'engage in strategic sharing to accumulate rewards, effectively 'gaming' the system rather than focusing on the production of new, high-quality knowledge' (p. 34). Furthermore, data sharing requirements may lead to unintended effects. Researchers may adopt restrictive practices, delaying journal submissions to fully exploit the underlying data before sharing it openly (Mueller-Langer & Andreoli-Versbach, 2018). Hilgartner (2017) refers to these practices as 'knowledge control regimes'. Furthermore, in cases in which data sharing is common, researchers may adopt more 'obscure' practices to impede colleagues from reusing their data due to a lack of documentation or by withholding key variables from the shared datasets (Thelwall et al., 2020).

Additionally, the availability of open data can reduce research efforts on collecting primary data in some fields as observed in the case of Hydrology (Allen & Berghuijs, 2018; Blume et al., 2018) as scientists see greater benefits in making use of secondary data rather than generating

new ones. This can be problematic if the reasons for reusing data are related to career priorities and rationalizing efforts rather than research priorities and societal challenges.

These contradictory issues present a difficult scenario in which hopes and fears of open (research) data clash. In her presentation, Dr. Inma Aleixos Borrás calls for (critical) reflection of these hopes and fears by questioning both policy and scholarly advocating discourses of data as first-tier objects or outputs of research to promote data sharing, warning how a controversial path-dependency on publications and the (current) reward system of science might lead to another controversial path-dependency on data sharing, arguing that open (research) data may not be equally necessary or convenient in all disciplines, and challenging the individual researcher as the only decision maker of sharing data in disciplines in the long tail of science.

As a closing remark, Dr. Aleixos Borrás will introduce her concept of "junk data" as an envisioned future as the result of the current (scientific) data hoarding by drawing on Hartmut Rosa's concepts of acceleration and uncontrollability (original: *Unverfügbarkeit*; Spanish translation: *lo indisponible*).