## Ana Gallego Cuiñas & Daniel Torres Salinas

## Introduction. Towards Expanded Humanities: Review and Agenda

The expanded humanities, 1 making use of Rosalind Krauss's celebrated concept, allude not only to other forms of humanist knowledge, marked by the combined use of sociological and technological methods and tools, but also to beyond the human into the digital space. In the third decade of the twenty-first century, this category, along with those of "Digital Humanities", "Big Humanities" (Lane 2016), and "Augmented Humanities" (Mendoza 2016), is beginning to shake off suspicion<sup>3</sup> and is becoming the object of growing interest in the academic world. On the one hand, within the humanist and cultural field, the development of new research techniques has been strengthened in areas such as literary studies, linguistics, philosophy, criticism, history, and the cultural industry over the last decade, through the use of large databases, text corpora and algorithms that open up renewed pathways to knowledge of our past, present and future. On the other hand, in the social, political and economic sphere, the humanist and ethical tradition is called upon to tackle the datafication of the world and the problems brought about by: the growing lack of privacy (Véliz 2021);4 the new dialectical relationship between the virtual and the real (Fisher 2016); the control and commercialization of the data we generate by companies and platforms (Srnicek 2018); the internet of things<sup>5</sup> (Han 2021); the over-representation of the world and its

<sup>1</sup> The notion of 'expanded humanities' is a theoretical proposal by Ana Gallego Cuiñas.

<sup>2</sup> There are multiple definitions of the Digital Humanities, although the large majority refer to digital collections and archives, databases, online biographies, et cetera.

**<sup>3</sup>** We cannot deny that until relatively recently, the relationship between the Humanities and Big Data seemed almost oxymoronic.

<sup>4</sup> Rivers of ink have flowed in the last decade over the issue of privacy and the (bad) use of our data: from the consideration that the subject who uses the internet is the product, to think about new forms of social control. Extremely interesting exhibitions have also been held, such as *Big Bang Data* at the Centro de Cultura Contemporánea de Barcelona in 2014, whose catalogue *Anonimízate*. *Manual de Autodefensa Electrónica* was a huge success. See: https://www.cccb.org/rcs\_gene/Anonimitza\_t\_def\_CAT\_ENG.pdf. Here there is an overview of the main electronic self-defence resources that have been created: Surveillance Camera Players; iSee from Institute of Applied Autonomy, iSee; Life: A User's Manual (2003–2006) by Michelle Teran; CV Dazzle and Off Pocket, by Adam Harvey; Invisible by Biogenfutur, or Blackphone by Silent Circle, among others. 5 Our "intelligent" devices (in the domestic and labour spheres, in the street, etc.) are hyperconnected and extract our personal data (habits of consumption, sociability, movement, fiscal or banking data, medical files, etc.) that can be sold for financial and political gain.

excessive abstraction (Berardi 2019); information overload (Tello 2018):<sup>6</sup> and Data Mining, Machine Learning and the use of intelligent tools such as ChatGPT and algorithmic governmentality (Sadin 2017).

With this starting point, the members of the Excellence Cluster "Iber-Lab. Crítica, Lenguas y Culturas en Iberoamérica" ("Iber-Lab: Criticism, Languages and Cultures in Ibero-America") of the University of Granada, bring together in this book papers from specialists in Literature, Spanish Language, Linguistics, Philosophy, Theory, Cultural Studies, Economics, and Data Science, in order to discuss the epistemic nature of Big Data, its theoretical, diachronic and synchronic problems, as well as the variety of its methods and applications in the Humanities. Generally speaking, there are three objectives – and sections – that make up the backbone of this volume:

- Theoretical, in which we explore, debate and outline a critical framework of humanist thought for computational techniques and big data.
- Methodological, which shows different computational methodologies and tools for analysing big data in the Humanities.
- *Practical*, which presents some practical applications and their field of validity in various humanist disciplines.

The pairing of art and technology has helped assemble our societies since prehistory, and crystallizes the symbolic and material root that constitutes our culture. Plato was the first to think about a humanist criticism of technology, in *Phaedrus*, thus initiating the opposition between culture and technology. Marx also highlighted the threat to culture that came from the relation of capital with machines, but today the interaction between humans and machines is already a fact, and such are the advances in Artificial Intelligence (AI) that they are now directly talking about technological genesis (Hayles 2012). In reality, algorithms have not only learned and do learn from the past of humans, but they also have autonomy and interact with us and between each other, capable even of arousing affection. Indeed, in 2014, MIT created Story Telling Robot, which told stories to children, who ended up developing an emotional relationship with the machine. Furthermore, the last decade has witnessed a surge in post- and trans-humanist positions.

We have therefore passed from the Anthropocene to the Capitalocene, and as a consequence of this system, the Technocene is emerging, or more accurately, the Technocapitalocene, based on the capitalism of things and data. Big Data have

<sup>6 &</sup>quot;From 2014 down to today, 2017, we have created as much information as the period from prehistory to 2014. And the most impressive, for me, is that digital information is going to surpass in quantity all the biological information that exists on the planet." (in Costa 2022: 10).

opened the door to the digitalization of (almost all) our world, which means operating with the processes of fragmentation, multiplication, abstraction and globalization of information, which give rise to infinite possibilities of economic, political, social, cultural, artistic and also academic use. This new paradigm, which is not necessarily either good or bad, is an "experimental laboratory", as Flavia Costa (2021: 10) calls it, to trial the new epistemologies and methodologies that the humanities of the future will have to define, and these cannot be less than a kind of "expanded humanities". We must therefore confront the challenge of "stopping to think" (Ibáñez 2014: 131) about the design of the agenda that defines the Humanities' relationship with technology, particularly with big data and AI. Moreover, we cannot evade the fact that certain themes and problems, such as abstraction, materiality, reproducibility, and the dangers of the introduction and perpetuation of gender and colonial biases in theory and technological praxis, make the intervention of a humanist, inclusive and decolonial gaze absolutely vital in academic and cultural studies that use computational tools.

We advocate, therefore, for the trans-epistemic coming-together of the humanities, culture and technology, to transcend the methodological emphasis of the digital humanities, which is fundamental but not sufficient, to promote theoretical, philosophical and "situated" (Haraway 1995) research areas in "los Sures" (literally, "the Souths", meaning the Global South) (Boaventura & Meneses 2012), and specifically, in the Ibero-American world. In other words, we argue for a humanities that, as well as dataistic techniques due to their useful or critical expansion, include a reflection on the place of enunciation of big data, which includes the mandatory incorporation of gender and decolonial studies. The way in which we use – and search for – data is conditioned by our ideology and its biases. 8 The reading of the past, like the reading of the future, depends on the (situated) gaze of the present, because the data do not speak for themselves, but need a watchful and humanist interpretation.

Nevertheless, we cannot not lose sight of the difficulty that this line of research entails in our field, because all the humanistic disciplines self-legitimize (cf. Gallego Cuiñas 2022) in their fight for:

<sup>7</sup> For example, on the platform https://www.internetlivestats.com/, you can see the information that is uploaded daily to the internet, since its creation, throughout the world. The growth is truly dizzying and hair-raising.

<sup>8</sup> The datacritical platform serves as an example, "an organization that strengthens critical narratives through the use of data", which works on issues of "gender, climate crisis and structural inequalities in Latin America". See: https://datacritica.org/.

- the objects of study, given that either they study texts or the authors, spaces, times, societies, theories, ideologies, practices, et cetera. Different variables do not tend to be combined, nor do they tend to do criticism of criticism.
- the methods, which correspond to qualitative paradigms (close, theoretical, exegetic or hermeneutic reading) or quantitative paradigms (the corpora, the statistics, the sociological or digital tools).
- The frameworks of readability, which are crystallized in the prevalence of particular approaches: positivist, aesthetic, social, cultural, economic, political, diachronic, synchronic, depending on the perspective taken.

Additionally, we need to recognize that the limits and tools of the expanded humanities are not fully clear, although that is one of its greatest virtues, a sign of its potential and futurability. The shift toward other epistemes and methodologies entails a notable critical and technological effort, which moreover stirs up the debate on what is authentic or valid for each discipline - that is, on the legitimacy of methods. This is in spite of the fact that it is clear that the well-oiled, correct and pure methods do not truly advance knowledge; rather this is done by those that face up to ontological and epistemic challenges, such as those proposed here. The studies by Daniel Torres Salinas, Sara Mariottini, Wenceslao Arroyo-Machado, Ana Gallego Cuiñas, Azucena González Blanco and José Antonio Pérez Tapias tackle the theoretical challenge that the inclusion of big data in the Humanities entails, above all for the inclusion of new object of study and frameworks of readability in literary studies and philosophy. In the following section, devoted to methodologies that combine the humanistic with data science, Wenceslao Arroyo, Nicolás Robinson, Francisco Benítez, Esteban Romero, Miguel Calderón and Carolina Gainza address how scientometrics, blockchain, linguistic corpora, and algorithms expand the possibilities of the humanities, language and literature in Spanish. And in the third section, focused on practical applications that can serve as an example to other researchers, Carolina Ferrer opts for the possibilities of criticometrics, Diana Roig-Sanz, Alessio Cardillo and Ventsislav Ikoff examine network science, Pedro Ruiz the combination of qualitative and quantitative analyses in poetry, and Ana Gallego Cuiñas and Daniel Torres Salinas look at the study of writer figures and the reception of literature on social networks.

All of them refer to object of study based in the Ibero-American area to drive the idea that there is a need not only for humanist but also decolonial and inclusive Big Data. Mass data tend to make invisible both the ideology and the situated

materiality<sup>9</sup> of the information and of the media, which by themselves do not light up the world, as Byung-Chul Han (2021; 18) would say. It is as important to reveal the correlations between data and the establishment of patterns as it is to deconstruct their ideological and geopolitical bias (Habermas 1986), the task of the humanist researcher, trained in *close reading*, alert against false neutrality. And at the same time, this researcher must be open both to the challenges imposed by the digital society of their time and to the use of the new, technological "toolbox", as Benjamin understood it, that big data and AI make available to them.

This book is planned to pave the way into this field of opportunities for the humanities (language, literature, philosophy, cultural studies) and the social sciences (data science and economics) and is aimed to function as a kind of introductory manual, theoretical and practical, to the Humanities and Big Data in Ibero-America, or better still, to the expanded humanities of the Global South. This should be of use for researchers interested in an emerging subject area that has and will have an indisputable epistemic impact on humanistic studies for the rest of the twenty-first century.

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<sup>9</sup> The expanded humanities, as well as being decolonial and inclusive, must be sustainable committed to what has been called "digital sobriety" - taking into account the carbon footprint of websites and the high energy consumption of high resolution, which have a pronounced environmental impact.

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