COLLABORATIVE ENGAGEMENT ON SOCIETAL ISSUES

WP7 - Communication and Dissemination

The social sciences and humanities contributions to citizen science

Insights from the COESO project journey

date 29.12.2023

Deliverable 7.6

Report on the social sciences and humanities contributions to citizen science

Grant Agreement number	:	101006325
Project acronym	:	COESO
Project title	:	Collaborative Engagement on Societal Issues
Funding Scheme	:	H2020-EU.5. - SCIENCE WITH AND FOR SOCIETY
Topic	:	SwafS-27-2020 - Hands-on citizen science and frugal innovation
Project's coordinator Organization	:	EHESS-OpenEdition
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WP and tasks contributing	:	WP7 - Communication and dissemination
WP leader	:	Max Weber Stiftung
Task leader	:	EHESS-OpenEdition

Dissemination level	:	PU - Public
Due date	:	31.12.2023
Delivery date	:	29.12.2023

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I. Summary

The present report provides some insights about the social sciences and humanities (SSH) contributions to citizen science, from the experience of the European project COESO – Collaborative Engagement for Societal Issues. COESO is a research and innovation, mission oriented project, with the aim to support more citizen science and participatory research in the social sciences and humanities (SSH), through the development of a dedicated digital platform, and with a specific focus on small-scale and highly collaborative participatory projects that are carried out by SSH researchers and members of the third sector (especially from non-profit and social economy organizations).

This report highlights how the underrepresentation of the SSH contribution to citizen science has consequences on the growth of the practice, manifesting mainly as a lack of recognition and funding. For this reason, a larger effort of mapping more examples of participatory research and citizen science with the SSH is needed in the European research area, including taking stock of the long standing tradition of participatory practices in the SSH, that goes by different names, such as public humanities or action research.

This report, along with other initiatives, provides a starting point for this mapping effort. It also focuses on the ten participatory projects that have been supported in the COESO framework: it describes their goals and main outcomes, and draws the main takeaways from the experience of supporting them, in particular the needs in terms of communication and mutual learning spaces.

Along the chapters, some further readings are suggested, and two access logos are used:

🔓	(1) the orange version indicates a full open access resource;
🔒	(2) the gray version indicates a closed access, or printed only resource.

List of mostly used abbreviations

COESO	Collaborative engagement on societal issues (*European project*)
SSH	Social sciences and the humanities
STEM	Science, technology, engineering, and mathematics
VERA	Virtual ecosystem for research activation (*digital service*)
OPERAS	Open scholarly communication in the European Research Area for social sciences and humanities (*Research infrastructure*)
EHESS	École des Hautes Études en Sciences Sociales (*Research performing organisation*)
CNRS	Centre national de la recherche scientifique (*Research performing organisation*)
GDPR	General data protection regulation

II. Why do we focus on the contribution of the "SSH" in citizen science

Context

The present document is a summary report from the COESO project work, taking stock of desk research, field learnings and community feedback collected during its preparation (2018–2020) and its implementation (January 2021-December 2023) phases. The COESO project was coordinated by a research performing organization focused on social sciences and humanities (SSH) research – the French École des Hautes Études en Sciences Sociales – and a French research infrastructure committed to fostering scholarly communication and open science in the SSH – OpenEdition. The main outcome of the project – the Virtual Ecosystem for Research Activation (VERA) – is now part of the portfolio of services of the European research infrastructure OPERAS.

The COESO project

The COESO project (Collaborative Engagement on Societal Issues) is a 3-year participatory research project (January 2021 until the end of December 2023), funded by the European Commission through the Horizon2020 – Science with and for Society grant[1], and supported by the OPERAS research infrastructure. The COESO project's overall objective is to overcome the obstacles that hinder the development of citizen science in the social sciences and humanities (SSH), thus facilitating and supporting SSH participatory research.

During its implementation phase, COESO supported ten citizen science pilot projects, representing a variety of disciplines, societal challenges and types of engagement with engaged stakeholders in different European countries. These "engaged stakeholders" contributing to the ten COESO pilots were artists, journalists, local association members, public administrations, public service providers, or social enterprises. Together with SSH researchers, within their pilots, they designed and carried out common research activities. All the COESO pilots were small-scale, and most of them highly collaborative, showcasing a diversity of collaboration types between researchers and the third sector (especially the non-profit and social economy sectors) or the public sector.

The COESO project developed the [Virtual Ecosystem for Research Activation (VERA)](#)[2] and engaged with research funding organizations to enhance financial support to citizen science. It moreover explored the frontiers of innovation in the social sciences and humanities' public engagement through mutual learning experiences – where the pilots' members shared their experiences of collaboration – and transmedia writing experimentations. Finally, a proof of concept has been developed (the "Cooperation Analytics") to explore how it could be possible – through natural

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[1] https://cordis.europa.eu/project/id/101006325
[2] vera.operas-eu.org

language processing (NLP) – to measure the quality of collaboration between researchers and engaged stakeholders within their own citizen science project.[3]

As a project funded by the European Commission, COESO was coordinated by the School for Advanced Studies in Social Sciences (EHESS – École des Hautes Études en Sciences Sociales[4]), in Paris, through the joint research infrastructure OpenEdition. COESO gathered 15 beneficiary partners and 4 third parties from 6 different European countries: France, Portugal, Italy, France, Belgium and Germany. It included 6 academic research centers and institutions, 2 public and 1 private foundations, 3 small and medium-sized enterprises (SMEs), 5 associations and 1 non-governmental organization (NGO). During the second year of implementation, new collaborations joined the project through an open call for pilots: 16 new organizations, distributed across 9 countries, thus expanded the COESO activities to Croatia, Estonia, Denmark, The Netherlands, Spain and Tanzania.

COESO was positioned as a meeting point between various European communities: the social sciences and humanities community, the citizen science community, as well as the open scholarly communication community. The final conference "Connect.Collaborate.Create"[5], organized on October 19th–21st, 2023 at the Campus Condorcet in Paris-Aubervilliers, in collaboration with the PRO-Ethics project, was a culminating point of this cooperative perspective, bringing together a large diversity of practitioners, supporters and funders of citizen science and participatory research involving the social sciences and the humanities.

After the project's end, the services' frameworks in support of SSH participatory research developed within the project – including a mutual learning exercise model and funders engagement activities – will be supported by OpenEdition and OPERAS, and the VERA platform will be managed as an OPERAS service.[6] The COESO blog[7] is currently envisioned to remain as an informational gathering point around SSH citizen science practices.

OpenEdition and OPERAS: two infrastructures for scholarly communication in the social sciences and humanities

The VERA platform, developed within the COESO project, is part of the OPERAS portfolio of services, included in the "Research for Society" category together with the Hypotheses.org blogging platform. OPERAS aims to support citizen science as a crucial dimension of open science. This effort aligns with the strategy of the French infrastructure OpenEdition, which co-leads the development of OPERAS, with the support of the French National Centre for Scientific Research (CNRS – Centre National de la Recherche Scientifique) which coordinates the

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[3] For further information about the Cooperation analytics, se the three corresponding deliverables released within the COESO project: "Development and Implementation of the Cooperation Analytics (COESO D.5.1)" (Boullier and Pidoux 2021); "Report on Test and Final Development of the Cooperation Analytics (COESO D.5.2)" (Pidoux et al. 2022); "Report on activism and science within Citizen Science (COESO D.5.3)" (Pidoux, Boullier, and Ando 2023).

[4] https://www.ehess.fr/en

[5] https://ccc.sciencesconf.org/

[6] Further information about the first plan for the exploitation of the COESO results is available on "Plan for the Exploitation and Dissemination of Results (PEDR) (COESO D.7.7)", December 2023 (Achenbach and Smaniotto 2023).

[7] https://coeso.hypotheses.org/

OPERAS French national node.

OpenEdition[8] is a comprehensive digital infrastructure for scientific communication in the social sciences and the humanities. Recognized as one of the French national research infrastructures, it brings together four complementary platforms focused respectively on academic journals (OpenEdition Journals), book series (OpenEdition Books), research blogs (Hypotheses.org) and academic events (Calenda). It is coordinated and developed through OpenEdition Center, a joint research unit of the French National Centre for Scientific Research (CNRS – Centre National de la Recherche Scientifique), Aix-Marseille University, EHESS and Avignon University. Among the four OpenEdition platforms, Hypotheses.org[9] has been particularly mobilized within the COESO project as an international academic blogging platform dedicated to the social sciences and the humanities (Fanget and Smaniotto 2021).

OPERAS[10] is the research infrastructure supporting open scholarly communication in the social sciences and humanities in the European Research Area (ERA). Its mission is to coordinate and federate resources in Europe to efficiently address the scholarly communication needs of European researchers in the field of social sciences and humanities (SSH). Today OPERAS gathers more than 50 members from 16 countries and counts on the commitment of its core members from France, UK, Germany, Italy, the Netherlands, Poland, Greece, Croatia, Slovenia and Portugal.

With a goal to support scholarly communication in the SSH, both OpenEdition and OPERAS provide comprehensive digital services for SSH research, and also include networking, training, and community management support. Since supporting participatory practices and developing a digital platform such as VERA, which provides easy access to a catalog of selected tools to support collaboration, requires to take into account the diversity of data-related practices in the SSH, it is of particular relevance that both infrastructures are fully integrated in the open science ecosystem, at the national and international level. For these reasons, OpenEdition and OPERAS collaborate with other SSH research infrastructures supporting diverse research practices, and in particular with SSH data-focused infrastructures such as Huma-Num[11], DARIAH[12], CESSDA[13] and CLARIN[14]. OPERAS also works in tight collaboration with SSH-focused networks like ENRESSH[15] and EASSH[16], as well as with discipline-neutral e-infrastructures like EGI[17] and OpenAIRE[18].

Scope and limitation of this report

This report was initially foreseen to focus on the specific "issues" related to the practice of citizen science from the SSH perspective, only taking stock from the COESO pilots' experiences.

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[8] https://www.openedition.org/?lang=en
[9] https://hypotheses.org/
[10] https://www.operas-eu.org/
[11] https://www.huma-num.fr/about-us/
[12] DARIAH - Digital Research Infrastructure for the Arts and Humanities (https://www.dariah.eu/)
[13] CESSDA - Consortium of European Social Science Data Archives (https://www.cessda.eu/About)
[14] CLARIN - Common Language Resources and Technology Infrastructure (https://www.clarin.eu/content/clarin-nutshell)
[15] ENRESSH - European Network for Research Evaluation in the Social Sciences and the Humanities (https://enressh.eu/about-2/)
[16] EASSH - European Alliance for Social Sciences and the Humanities (https://eassh.eu/)
[17] https://www.egi.eu/
[18] https://www.openaire.eu/about

At the time of the project preparation phase, this need to focus on the pilots' "issues" in implementing participatory research was related to the platform design perspective[19]. Paying attention to the COESO pilots' challenges and specificities, during their implementation, continuously fed the VERA platform design, and the main takeaways from the pilots' experiences are summarized in the last section of this report. But as soon as the project started, another need emerged for a more extensive mapping of existing SSH participatory practices: both to better know them – and include this knowledge for the benefit of the VERA platform design – and also as their lack of visibility has been observed as one of the reasons undermining their recognition. During the work for the "Landscape study on funding schemes for Social Sciences and the Humanities' Citizen Science activities (COESO D.4.1)" (Pelacho and Sanz 2021) we identified that one of the main reasons for this lack of visibility was a matter of terminology: the SSH disciplinary communities of practice implementing participatory research were not recognizing themselves as "citizen science", and the European citizen science community was not aware of SSH citizen science projects and how to find them.

Taking then seriously that terminology matters (Eitzel et al. 2017), not only with regards to the diversity of disciplinary languages but also with regards to natural languages – given the often local nature of the initiatives that we wanted to identify – there is clearly a need to find a means to map out more and diverse "representations" of SSH citizen science and participatory research activities, thus expanding the perception of the citizen science landscape, both for the citizen science community and the SSH community. But this mapping would have needed a larger and coordinated exploration across several European countries, and in the respectives languages, taking into account also the disciplinary vocabulary variations country-by-country. To fulfill this mapping gap, an effort would be needed at the European scale similar to the work undertaken by the French network Particip'Arc in 2018–2019 in France (see the report "Particip-Arc. Recherche Culturelle et Sciences Participatives", 2019) and the mapping done by Göbel, Mauermeister, and Henke (2022) for Germany. This is then the main limitation of this report: it has not been possible – for both project design and contingent organizational reasons – to reallocate resources to mobilize extended transnational communities for this information collection. Acknowledging this limitation, the readers are invited to approach this report as an introduction to the topic of the contribution of social sciences and humanities to citizen science.

This report has been composed mainly through desk research and literature review. This research used several ways to collect information: (1) the first means was the exploration of platforms cataloging citizen science such as Eu-citizen.science[20], Zooniverse[21], SciStarter[22], Particip'Arc[23], where only the Particip'Arc platform has a specific focus on the cultural sector, and knowing that Eu-citizen.science, Zooniverse and SciStarter tag system rely on the projects' owners self-declarations; (2) a second means was browsing public humanities databases (such as the US based Humanities for all database[24]), and also seeking out projects within disciplinary communities in Europe, for instance within the Public History or Public Archaeology communities. But exploring the large field of public humanities asked also to dive into a qualitative understanding of single projects and their implementation, in order to identify participatory projects among public engagement activities: so, again, this report relies only on

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[19] This need has been further explicited in an article presenting both the COESO project framework and the French national project PLACES (places.hypotheses.org): see (Chibois and Smaniotto 2023).
[20] https://eu-citizen.science/projects
[21] https://www.zooniverse.org/projects
[22] https://scistarter.org/finder?active=true
[23] https://www.participarc.net/projets
[24] https://humanitiesforall.org/

exploratory research and not on exhaustive research within these databases. Finally, the exploratory and non-exhaustive literature review has been based on multilingual keywords searches, but mainly covering English and French literature.

Additional information has been collected during the three-year journey of COESO, and includes: (1) the results of the exploratory survey realized for the "Landscape study on funding schemes for Social Sciences and the Humanities' Citizen Science activities (COESO D.4.1)" (Pelacho and Sanz 2021); (2) the information collected thanks to the COESO open call for new pilots that gathered 172 proposals from 15 countries[25]; (3) the information collected during the COESO pilots' implementation and the mutual learning exercise activities; (4) the information collected from extended networking activities: the COESO consortium members participated in more than 100 conferences and workshops – (organized or attended as contributors) across Europe (see the "Report on Dissemination Activities (COESO D7.5)"[26]).

Additional examples of projects have been collected through the call for contributions to a special issue on "Citizen science with and within the social sciences and the humanities" edited for the philosophy journal *Etica&Politica/Ethics&Politics* (Smaniotto and Passani 2023b), and the call for contributions for the conference "Connect.Collaborate.Create"[27], organized by the COESO project in collaboration with the PRO-Ethics project, in Paris-Aubervilliers, in October 2023.

What does the "SSH" cover?

The "SSH'' acronym stands for "Social Sciences and Humanities".

As well as the acronym STEM (that stands for "science, technology, engineering, and mathematics"), or the noun "natural sciences" (that includes disciplines as biology, physics, chemistry or astronomy), "SSH" gathers under its umbrella a diversity of disciplines and generally includes (just to name a few): anthropology, archaeology, economics, human geography, linguistics, communication science, political science, sociology, history, philosophy, arts.[28]

The use of disciplinary acronyms such as STEM or SSH assumes that there exists a certain kind of "unity" of the disciplines gathered under the one umbrella, unity that is often identified with the object that they study. But this "unity" may be affected by country-based specificities linked to national scientific policy priorities, degree programs and the public-private research landscape, as well as the intertwined evolutions of the corresponding research traditions.[29] This means that the acronym "SSH" holds together a large, diverse and complex ecosystem of

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[25] For reasons related to the General Data Protection Regulation (GDPR), the information collected for the purpose of the open call couldn't be analyzed for secondary purpose reuse, but they provided useful insights about where to orient the searches, showcasing a large diversity of projects that not only *could* be carried on, but *actually are* carried on.

[26] https://zenodo.org/doi/10.5281/zenodo.10372498

[27] https://ccc.sciencesconf.org/

[28] The three volumes book *The Making of the Humanities* provides insights of the historical and current evolution of the field of the humanities: see (Bod, Maat, and Weststeijn 2014), while the book reviews collection "A History of the Social Sciences in 101 Books" (Lemieux, Berger, and Macé 2023), and in the original in French (Berger et al. 2017) provide an overview of some of the main works that shaped the field of the social sciences in the last century.

[29] The authors of the COESO landscape study on funding schemes provided some country-based examples of disciplinary boundaries variations (Pelacho and Sanz 2021).

disciplines, with their methodologies, typologies of objects and typologies of data, as well as the corresponding research environments, both physical and digital.

Given the interconnection between the scientific landscape evolution and scientific policy with its consequent funding, both at the national and European level, speaking as "one voice" – the voice of the "SSH" – when it comes to shaping larger national or European policy, is a powerful way to make that voice more likely to be heard. For instance, the transition from one European framework program to another are moments when reports and position papers supporting the relevance of the SSH are disseminated.[30] The fundamental assumption of such advocacy actions is that disciplinary practices have specific needs, demanding dedicated infrastructures and services. For the same reason, the COESO project and this report refer to "SSH" as an umbrella term encompassing the diversity of disciplines it refers to.

Nonetheless, at the same time, advocating for the recognition of the "SSH" contribution shouldn't reduce the disciplinary diversity within the SSH, and this is true also when it comes to participatory practices. For this reason, it is paramount to give visibility to hidden initiatives by facilitating their discovery, and to design support services for participatory research and citizen science that meet the needs of the diverse range of SSH approaches. In the long-term movement to institutionalize citizen science as a recognized research practice, it is crucial for the humanities and social sciences disciplines to highlight those practices within them that belong to citizen science, in order to have them recognized and promoted.

Research specificities within the "SSH"

The COESO project is focused on participatory research with and within the SSH, and the VERA platform is specifically designed to support citizen science projects that include SSH approaches. In the report "Future of Scholarly Communication. Forging an inclusive and innovative research infrastructure for scholarly communication in Social Sciences and Humanities", researchers and practitioners who are engaged in building the OPERAS infrastructure, discuss some crucial challenges related to scholarly communication, among which are: business models, FAIRification, bibliodiversity, scholarly writing and research quality assessment (Avanço et al. 2021). Some of the main highlights from this report underline the scarcity of human resources and specific funding compared to the abundance of existing projects; the diversity of data-related practices in the SSH, and the consequent importance of considering and preserving the specificities of the diverse research domains within the SSH, while also providing coordination and training related to FAIR data practices. Furthermore, the relevance of multilingualism and the consequent challenge to support it, while making national production known internationally, is mentioned as particularly relevant. The relevance of multilingualism is equally related to data management, as underlined by the report "Research Data Management for Arts and Humanities" from the Dariah Research Data Management Working Group (Tóth-Czifra et al. 2023): SSH data is very often written in national languages, resulting in most scholars needing to work with multilingual sources, which requires international online catalogs and databases to be multilingual, too.

Diversity of outcome formats and diversity of types and approach to data, are two major

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[30] See for instance "Embedding Social Sciences and Humanities in the Horizon 2020 Societal Challenges" (Science Europe 2013) or "Priorities for Strengthening Social Sciences, Arts and Humanities Research in Horizon Europe" (The Guild 2023).

characteristics of SSH research. The diversity of outcome formats reflects the diversity of approaches to "writing" within the SSH domains - and the term "writing" is to be understood here as encompassing not only written texts, but also a variety of "inscriptions", such as tables, maps, images or diagrams (Jacob 2014). Furthermore, writing in the social sciences and humanities is often a collaborative process that accompanies the whole research process and for this reason constitutes the research itself: this makes it difficult, for instance, to detach the "data" from the "output" format, and this is also why monographs usually play a more important role in the humanities than in other disciplines. The recent report from the ALLEA Working Group E-Humanities, "Recognising digital scholarly outputs in the Humanities" (Maryl et al. 2023), further elaborates on the diversity of SSH research outputs, including the formats developed since the digital turn of the humanities: scholarly editions, online databases, bibliographies, dictionaries, or encyclopedias, and new genres such as academic blogs, interactive web platforms, open notebooks, infographics, maps, and podcasts. All these formats suffer a lack of recognition.

Exploring novel formats and genres of "writing" is valuable in the SSH, and it is equally valuable within small-scale, locally-based participatory practices because these formats are "liberating, communicative, interactive and collaborative" (Avanço et al. 2021), as well as usually written in the local language. For those research activities that are not data-driven, but methodology or experiment oriented, the outputs' formats, especially the non-standard ones, become crucial to render what has been accomplished during the research journey.

For this reason, within the COESO project, we also explored the possibility of a transmedia website, displaying a plurality of approaches to participatory research and the "data" behind: the website "São José"[31] features an interactive map, to organize in a geographical framework, a set of materials, including interviews, archives, focus groups, and portraits (Leon-Quijano 2022). Rendering the ethnography of a participatory research project involving historians, social anthropologists, environmental activists and local citizens, it includes ethnographic data that cannot be unbundled from the storytelling format they are integrated with, because it provides both the context and the contributors' standpoint. The publicity of the content was also negotiated with the contributors, and this negotiation was an integral part of the research.

Regarding the second major characteristic, that is the diverse types and approaches to data, SSH practices deal with human creations and phenomena: sources and research data and outputs often include personal information and sensitive data. As in the health domain, data reusability and FAIRification calls for special attention (Caria 2020b; Avanço et al. 2021, p.23). In the SSH, data sharing practices often happen within confidentiality restraints – both for legal reasons as well as for the purpose of sustaining trust-based interpersonal relationships. Thus, understanding how to implement effective data sharing, following the open science criteria, is one of the main challenges of collaborative citizen science involving SSH disciplines.

Often handling personal sensitive data, SSH participatory research needs then specific approaches to comply with the European legal standards of the General Data Protection Regulation (GDPR), while producing qualitative knowledge through citizen science methodologies. On one side, GDPR seriously restricts the possibilities of sharing between partners through any digital platform in the name of citizens' privacy, and this implies obligations for SSH collaborative citizen science projects to undertake a heavy and complex work (both legal and administrative)

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[31] https://saojose.huma-num.fr/intro

to declare the objectives, the forms and the protections of their data policy (Caria 2020a). On the other side, qualitative SSH citizen science research needs to share data – on a mostly digital world – about individuals, regarding their social, cultural, historical, political, geographical, and so on, dimensions, within interprofessionals collaborations (Caria 2020b), and this can be supported by a clear regulation framework.

The specific needs in managing research data within SSH disciplines affects how participatory practices within these disciplines are carried out, as the European project YouCount – that applied a participatory approach for the study of youth social inclusion across nine European countries – demonstrated at the European level (Ridley et al. 2022).

Resources to go further		
	EN	Tóth-Czifra, Erzsébet, Marta Błaszczyńska, Francesco Gelati, Femmy Admiraal, Mirjam Blümm, Erik Buelinckx, Vera Chiquet, et al. «Research Data Management for Arts and Humanities: Integrating Voices of the Community». Zenodo, 30 August 2023. https://doi.org/10.5281/ZENODO.8059625.
	EN	Avanço, Karla, Ana Balula, Anna Buchner, Lorena Caliman, Claire Clivaz, Carlos Costa, Mateusz Franczak, et al. «Future of Scholarly Communication. Forging an Inclusive and Innovative Research Infrastructure for Scholarly Communication in Social Sciences and Humanities». Zenodo, 29 June 2021. https://doi.org/10.5281/ZENODO.5017704.
	EN	Ridley, Julie, Ingar Brattbakk, György Pataki, Alexandra Czegledi, Fortuna Procentese, Flora Gatti, et Reidun Norvoll. «D1.3 Methodological Framework for Data Collection and Analysis», 28 February 2022. https://zenodo.org/record/6303118.

The "underrepresentation" of the SSH in the citizen science field, and its consequences

Since the effort has been started to consolidate a European citizen science community, several articles and book chapters have explored the current continental landscape of citizen science. The ones focusing, or including a reflection, on the place of the social sciences and the humanities within this landscape, highlight a lack of uptake of the practice within the SSH disciplines.

So, for instance, S. Hecker, L. Garbe and A. Bonn (2018) – following the data collected in 2016 through an explorative survey of the European citizen science landscape (focused on types of citizen science projects, their perceived impact and added value, challenges, current funding schemes for citizen science, and project outcomes), that collected 174 responses – highlight a predominance of life and environmental disciplines in citizen science projects, with a very low representation of SSH (11% for all SSH disciplines). In the same survey they also explore the level of participation of citizens in the project: they find that more than half of the projects are

"contributory," (meaning: "scientists generally design projects to which members of the public primarily contribute data"), and, in their results, only 11% of the projects are considered as "co-created" (meaning:, "scientists and members of the public work together and participants are actively involved in most or all aspects of the research process."). The authors' conclusion is thus that "the European Citizen Science landscape is currently dominated by contributory and collaborative projects that are mainly related to the life sciences". A similar ratio has been found by A. Czeglédi (2022) in her sample of 32 semi-structured interviews conducted in Hungary during 2021.

Tauginienė et al. (2020), in their article dedicated to citizen science in the social sciences and humanities, with a specific focus on the role of SSH in interdisciplinarity projects, and following Crain et al., (2014), assert that citizen science has been predominantly pursued within the realms of the natural sciences. From their study, based on a meta-synthesis from a set of 344 full-text papers in English, Spanish and French, they conclude that social sciences and humanities face considerable barriers to "infiltrate" citizen science and that SSH are yet largely underutilized within citizen science, and that humanities in particular search for a better-defined locus in citizen science.

Again, Scheller et al. (2020, p.15) affirm that "the historical sources of citizen science origins [are] mainly in natural science". Their study, aiming at exploring the state-of-the-art of "citizen social science", is based on a corpus within the Web of Science (WoS) database.

These mapping efforts are indeed mainly based on major English language databases such as the Web of Science, where the underrepresentation of SSH disciplines – rather characterized by a multilingual landscape – is documented (Pranckutė 2021). It is worth noting then that Tauginienė et al. (2020) considered the Clarivate Analytics Core Collection (Science Citation Index Expanded, Social Science Citation Index, Arts & Humanities Citation Index, Conference Proceeding Citation Index—Science Edition & Social Science & Humanities Edition) and EBSCOhost research databases. Tauginienė et al. (2020, p.2) reminds us that the SSH disciplines offer a long history and experience in fostering and reflecting the relationship and co-working practices between lay people and scientists, and they do it "predominantly under different terms such as participatory (action) research". Furthermore, they also underline that "the translation of the term 'science' outside English speaking countries is broader and comprises humanities and social sciences, which in the back translation of 'citizen science', a broadly used term, may cause confusion".

Thus, as underlined in the special issue dedicated to citizen science with and within the social sciences and the humanities (Smaniotto and Passani 2023a), there is value in taking more seriously into account the multilingual and socio-culturally grounded practices of the SSH disciplines: this means (1) not limiting the corpus of study in English-based databases like Scopus or Web of Science, and (2) considering a multilingual set of keywords related to participatory practices.

These two points address the additional fact that different natural languages do not necessarily embrace the direct translation of the English "Citizen Science". Just to mention few examples: in Italian, "citizen science", when translated, can be translated as "scienza civica" or "scienza partecipata"; in French it is mainly translated as "recherche participative"; in Spanish as "ciència ciutadana". Any kind of search on the topic needs to take this diversity of names into account and not only rely on direct translations. Searches relying only on "citizen science" as a keyword in English, even if the search engine is equipped for multilingual searches, is very likely to produce results that not only have an underrepresentation of SSH projects, but also with an

underrepresentation of participatory practices, in general.

The above mentioned mappings have also been performed considering projects that already self-recognize – or are labeled – with the umbrella term "citizen science", thus not considering citizen science related participatory practices that are not labeled as such. The consequence is: (1) a general perception that SSH are less represented than other disciplines in the citizen science field, (2) that SSH contribution in the development of participatory practices is not fully taken into account, and (3) that SSH researchers are perceived as not engaged in these practices. In other words, not diving into this "long-standing" tradition of participatory research within the SSH prevents citizen science practitioners and supporters as well as SSH researchers from recognizing, acknowledging and being fed by this tradition. This produces a big gap in the understanding of how citizen science with and within the SSH is performed and can be supported and further enhanced, keeping the SSH contribution to citizen science as a blind spot in the field – to take an expression from Kieslinger et al. (2017).

A second consequence is related to funding, as the attention and resources that can be allocated to such endeavors are influenced by the naming and framing used in public policy and funding. SSH projects struggle to be funded and that's even truer when it comes to participatory research: the administrative boundaries that delimit the funding streams targeted at researchers, creative industries, and cultural heritage institutions or associations create boundaries that curtail and sometimes make the funding of participatory projects difficult. COESO addressed this cross-cutting challenge of citizen science projects by engaging with funders to understand better how their funding activities are structured, and how they could foster more funding for participatory research with the SSH.

Resources to go further		
🔓	EN	Smaniotto, Alessia. «Fostering Funding for Citizen Science in the Social Sciences and Humanities – Policy Brief #1 (COESO D.1.4)», COESO project deliverables, 30 June 2022. https://doi.org/10.5281/ZENODO.6794981.
🔓	EN	Smaniotto, Alessia, and Antonella Passani. «Citizen Science with and within the Social Sciences and the Humanities. Guest Editors' Preface ». Etica & Politica/Ethics & Politics, Monographica. Citizen Science with and within the Social Sciences and the Humanities, XXV, no 2 (2023): 9-23. https://www.openstarts.units.it/handle/10077/35349.

Participatory research, citizen science, or… ?

Until this chapter, the current report focused on the "SSH," and less has been said about "citizen science." Although, as the relevance of "naming and framing" has been stressed, it is clear that defining the perimeter of "citizen science" influences the possibility to recognize specific participatory research practices as "citizen science" - an issue more extensively developed in (Smaniotto and Passani 2023a).

Academics care about the terminology used to describe their research because it places their

work within particular communities of practice. For this reason, it is not to be taken for granted that all the researchers and practitioners implementing contributory or participatory approaches within the social sciences and the humanities, recognize themselves as practitioners of citizen science. Thus, a constant effort in translating epistemic languages from one "umbrella term" to another, without losing the nuances of their specific meanings, is needed, as well as welcoming all efforts to bridge the different epistemic worlds. This should be an effort in translating disciplinary languages: identifying what they have in common, and learning from what is untranslatable. Acknowledging and respecting this diversity will allow the community to learn and take advantage of a great variety of methodologies, stakeholders involved, data and output formats, as well as local and professional languages used, to advance the frontiers of knowledge.

At the same time, labeling the diversity of practices under the "citizen science" umbrella term, allows the community to be able to recognize the different types of practices within citizen science. This, multiplied by the diversity of natural languages, will increase the capacity to find the practice both in the literature and in the field.

Generally recognized as a scientific research activity carried out in cooperation between professional and non-professional researchers, citizen science is defined in many ways. The more widely used definitions of citizen science stress the importance of the active participation of all the parties involved in the research (Haklay et al. 2021), this way distinguishing citizen science from other practices more oriented towards science communication or science education, where the participants have a passive stance. This means also being careful when it comes to distinguishing citizen science from the broader field of "public engagement" in research activities, that may include science communication, consultations, science education or civic responsibility actions, along with active collaboration with non-professional researchers. But indeed, the attention to the active participation of the different parties involved *does* stem from the public engagement tradition, and it is for this reason that it is relevant to seek the contributions to citizen science from the SSH also within the public engagement domains.

As often recalled, referring to Cooper C.B. and Lewenstein B.V. and their "Two meanings of Citizen Science" (2016), the name "citizen science" has been used by two different scholars on both sides of the Atlantic: the British sociologist Alan Irwin, who wrote in 1995 "Citizen Science: A Study of People, Expertise and Sustainable Development", and the American ornithologist Rick Bonney, who wrote in 1996 "Citizen science: A lab tradition". These two references are widely mentioned and discussed in their differentiated perspectives (see in particular Strasser et al., 2019). What is of interest to recall here from Irwin's book, is the reason why he chose to use that name – "citizen science" – that he found so "pleasingly alliterative", as he wrote. For him, it conveys two senses of the relationship between science and citizens: (1) a science which "assists the needs and concerns of citizens", and (2) a form of science developed and enacted by citizens themselves, meaning "the contextual knowledges which are generated outside of formal scientific institutions" (Irwin 1995, Preface, p.xi).

As Strasser et al. (2019) recalled, Alan Irwin's book was published in the midst of the British debates about the value of "public understanding of science", three years after the launch of the journal also called "Public understanding of science" (Strasser et al. 2019), and ten years after the so-called "Bodmer report", also titled "The public understanding of science", published by the Royal Society in 1985 (Bodmer 1985). The Bodmer report explicitly defined "science" as covering "mathematics, technology, engineering, medicine" (the so-called "STEM") and the natural sciences: it is considered the starting point of a reinforced attention to science education as well

as to science communication as the means to deliver to the public - considered a "receiver" of the message - a more understandable version of research results, where both "science communication" and "science education" refer to STEM and natural sciences. What would later be called, instead, "public engagement with science" implies a comprehension of the public as active part in the processes of knowledge production, and it stems from the acknowledgement of practices that are discussed, for instance, by Brian Wynne in his "Risk, Environment and Modernity" (1996), about the controversies between farmers' and scientists' knowledge of the fallout from the Chernobyl disaster on British soil. Wynne, who in the same year co-authored with Irwin "Misunderstanding Science? The Public Reconstruction of Science and Technology" (1996), also directed ten years after, for the European Commission - with Ulrike Felt - the report "Taking European knowledge society seriously" (Felt and Wynne 2007). In all this path, the emerging vision is that in order to build and consolidate a common knowledge base within societies, participation in the production of science is more effective. But these approaches - the "public understanding of science" and the "public engagement with science" - are now far from being so strictly separated. They are moving, intertwining, fields: as Luneau et al. (2021) put it, "citizen science" can be understood as a means for creating knowledge, educating the public and democratizing science *all at once*.

What this exclusively British-oriented historical interlude highlights, is that not only in STEM and natural science, but in the SSH as well, citizen science practices can overlap with other approaches such as public engagement activities, and be confused with – or understood as being – science communication and science education. In this report, we apply the use of the umbrella term "citizen science", but we also argue for the importance of acknowledging that SSH contributions to citizen science may be hidden under different names, such as public humanities and action research, and we call for examples of this kind of research to be highlighted and labeled as citizen science, whenever applicable.

III. Examples of citizen science within the SSH

Contributory projects

The ECSA Ten principles of citizen science are accompanied by explanatory notes (Haklay et al. 2020), in which the authors underline a certain ease in recognizing projects as "citizen science" when they: 1) have a clearly defined research hypothesis and 2) involve a wide range of volunteers participating either in data collection or data analysis. This observation can be applied also to projects from the humanities and social sciences.

For this type of project, the term "contributory", rather than "crowdsourced", is preferred in order to state more clearly both the importance of the *active* and conscious participation of the contributors, as well as the distinction between the voluntary participation in these projects, and disguised labor within the larger digital platforms economy. But both terms – "crowdsourced" or "contributory" – can be found in the literature and in the descriptions that the concerned

projects use for themselves.[32]

In contributory projects, one identified leader – individual or organization – defines the research question, the methodology and the protocol that must be followed by the participants, and asks for contributions to collect a – usually – large amount of data. This type of project often requires a lot of resources in order to be completed, the participation consists in providing theses resources, and the participants' cognitive engagement can be minimal or more elaborated depending on the project.

In the humanities and social sciences, this type of project is most often found in those disciplines applying data-driven approaches, such as linguistics, history, and archaeology, just to name few, and more broadly interdisciplinary fields like cultural heritage, especially since the acceleration of the digitization of heritage collections and the renewed need to enhance them.[33]

One example is the need to prepare machine-readable transcriptions of digitized manuscripts: the transcription activity can be opened up to a large non-academic public or early-stage students. An example of these initiatives in Europe is the Transcribe Bentham initiative launched in 2010, which has the aim to engage the public in the online transcription of manuscripts written by Jeremy Bentham through a dedicated digital portal (see also the project portal for more information). Such initiatives can also facilitate opportunities for their community members to work in smaller, local groups of "citizen scholars", like in the case of the project Migrant connections (Nicklaus 2021): the COESO pilot 5, "Writing across borders" was part of this larger endeavor. Transcription activities and platforms can be facilitated and supported by local libraries, like in the case of the Humathèque, the Campus Condorcet library in France, and its project Transcrire, or by larger European initiatives like Europeana, with its project Europeana Transcribe.

Another research practice that can benefit from the opening to a larger public contribution, is the need for collecting, identifying and enriching with metadata a large amount of documentary sources represented through digital images. These projects can be led by individuals, learned societies, and public or private research organizations or institutions – especially museums. Two examples in the fields of archaeology in the United Kingdom, for instance, are the "CITiZAN project" – which involves volunteers to identify, manage and protect threatened archaeological sites of the UK's coastal areas – led by the London Museum of Archaeology; or the "Portable Antiquities Scheme", led by the the British Museum and Amgueddfa Cymru – Museum Wales, encouraging the recording of archaeological objects found by people in England and Wales while walking, gardening or going about their daily work. The visual studies and historical project PhotoNormandie, initiated in France in 2007 by an independent researcher and still running, aims at enriching the descriptions of more than 3,000 photos and 300 historical films of the Battle of Normandy. Ajapaik is a contributory platform managed by the Estonian Photographic Heritage Society, building up an Estonian photo library.

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[32] For a glimpse on the origin of the word "crowdsourcing", and insights on the practice from examples of a crowdsourced project in the US, see (Reese 2016). In 2023, in their paper on scrutinizing the factors affecting participation in contributory citizen science projects, Khoi Manh Ngo, Carolin Susann Altmann and Friederike Klan never use the word "crowdsourcing". For a critical perspective on crowdsourcing in the platform economy see Renault (2015).
[33] The French project "Collabora", lead by Marta Severo and funded by the French national research funding agency (ANR), build an online observatory of contributory platforms for cultural heritage: https://anr-collabora.parisnanterre.fr/observatoire/ (last accessed on Dec 6th, 2023).

In the field of linguistics, contributory projects can help enrich the knowledge about spoken languages and their evolution, or threatened languages. For instance, the Austrian project IamDiÖ – "On everyone's mind and lips – German in Austria", addresses the use and perception of the German language in Austria as well as the attitude of people towards it (Heinisch 2020). In the same field, the example of the "Glossaire des patois de la Suisse romande" shows, with its 125 years history, that contributory practices within the social sciences and the humanities existed before the digital turn (Nissille and Kloetzer 2023).

Dealing with the need for collecting, exploring, documenting and enriching information from diverse places, sources and languages, as its core activity, history is another discipline where contributory projects come to play an important role in expanding research capacity. The Luxembourg Centre for Contemporary and Digital History (C²DH), at the University of Luxembourg, counts diverse historical contributory projects, such as the Warlux project (Janz 2023), the Historesch Gesinn project, or the Memorecord project, contributing to shape a renewed understanding of historical events, to collectively collect the history of the country.

The challenges of this type of initiative raise similar questions to those of contributory projects in the STEM disciplines and the natural sciences, including the attention on data quality or the relationship with volunteers and the importance of their active participation, as well as the projects' sustainability in the long run (Reese 2016; Janz 2023; Heinisch 2020). To just name two examples related to data quality control, both *Le Glossaire des patois* and the Warlux project - mentioned above - paid specific attention to how the knowledge collected is controlled and evaluated: for the glossary, structured pre-printed forms for collecting the information, extensively explained instructions, as well as a regular follow-up with the core participants, was the strategy for controlling the quality of the data; the Warlux project relied on the research team for combining the information collected with additional investigations and verification of historical facts and documents.

Resources to go further		
⚛	EN	Zourou, Katerina, and Mariana Ziku. «Citizen Enhanced Open Science in Cultural Heritage – Review and Analysis of Practices in Higher Education», 21 July 2022. https://doi.org/10.5281/ZENODO.6875125.
🔒	EN	Terras, Melissa. «Crowdsourcing in the Digital Humanities». In A New Companion to Digital Humanities, by Susan Schreibman, Siemens Ray, and John Unsworth, 420–38. John Wiley & Sons, Ltd. 2015. https://doi.org/10.1002/9781118680605.ch29.
🔒	EN	Hedges, Mark, and Stuart Dunn. «Academic Crowdsourcing in the Humanities». Elsevier. 2018. https://doi.org/10.1016/C2015-0-04363-5.
🔒	FR	Severo M., Shulz S., Thuillas O. «Culture en partage. Guide des plateformes culturelles participatives». Fyp, 2022 (printed only)

Participatory projects

Acknowledging that we more easily find contributory projects involving a lot of people for gathering data, may lead to the conclusion that this makes up most of "citizen science". But these endeavors that ask for the contribution of a large panel of participants to collect a big amount of data, need to make a significant effort in communication, and they also need a technical infrastructure that enables the data gathering and control. We may rather formulate the hypothesis, then, that what is thought to be the cause ("it is because citizen science is mostly crowdsourcing that we find more contributory projects") could instead be the consequence of specific communication and infrastructural needs: we more easily find – and consequently represent – citizen science as mostly contributory, because these types of projects, by design, need an environment that facilitates their findability and the possibility for people to engage with them, and that facilitate and support the data recording and archiving.

But there are other models of collaboration between professional researchers and non-professional researchers that not only apply a different approach to participation, but also have different scales: they can involve far fewer participants, be very local, and work on innovating methodologies or processes, rather than collecting data. But recognizing these projects as "citizen science", can be challenging: not only because of the overlapping with other types of public engagement activities, but also because typical scientific dimensions belonging to the SSH, may not be considered "scientific" – or not be considered scientific "enough." The debate about whether the humanities should be considered "science" or not, is longstanding (Bouterse and Karstens 2015), but what is useful to recall here is just that even though SSH researchers live and operate in the same social frame and world of values they are studying, they apply - like the scientists in other disciplines - a set of "epistemic values" that allows scientific inquiry and the building of non-arbitrary value judgments, even when the choice of a specific object of inquiry is driven by political engagement (Callegaro and Girard 2011).

This is important to precise because in highly collaborative participatory projects, the collaborations go beyond the contribution of collecting data following a protocol designed by researchers: this design itself – up to the research question formulation, is negotiated and can be re-shaped by all the parties involved, and this methodology can be seen by some as a risk for the autonomy of research. It was then important to remember that SSH researchers are trained to take a neutral stance with regards to a chosen issue at stake, and the evidence collected, before coming to conclusions.

Differently than the contributory projects, the participatory ones can be less data-centric, and less oriented towards automated processes: consequently, the possible data and outputs produced through heterogenous methodologies are diverse in form and can be difficult to integrate into the existing shared research databases. These two qualities – the openness to an iterative and reflective approach to the research question formulation, and the focus on innovating methodologies and practices – are something that participatory research, in general, has in common with non data-driven SSH research practices: and even more, in SSH research directly involving the study of specific communities and social groups – for instance within sociology, anthropology, community psychology, to just name a few – this makes it particularly hard to identify the boundaries that separate commonly used methodologies in these fields from what could actually be labeled as "citizen science".

Like in contributory projects instead, one crucial element that helps disentangle the practices is

the active contribution of "participants", defined as those who, in a given research collaboration, do not have the role of professional researchers, but act in a different capacity (as a professional from another field, as a community or association member, as a worker in another socio-economical field, …). In addition, what is implied in this type of participation, it is not only a conscious cognitive production, but a conscious participation in what can be called the "governance" of the project, namely how the partners organize their actions as a collective, and distribute the roles within their common project.

Scheller et al. (2020) recognizes the close connection of citizen science with the rich participatory tradition in social sciences and humanities: "from various fields of social sciences and humanities a vast variety of participatory methodologies, methods and approaches have been established in the last five decades"; "social sciences provide long-standing experiences and expertise to conduct participatory research". In Albert et al. (2021) as well, it is stressed that "participatory methods that have a long legacy in the social sciences". The next section introduces examples from participatory approaches that are not usually called "citizen science" but actually correspond to the practice, in order to not leave this long tradition behind, and value it, inviting to take from it what we recognize as actual and relevant examples of what we now call "citizen science".

Action research and citizen social science

When the COESO project was designed, and we included the Hypotheses.org platform among the scholarly communication services that would support our pilots, the platform already hosted content related to participatory research with the social sciences and the humanities. Two blogs, in particular, referred to the participatory action research field in France: *Les urbaines*[34], a research collective started in 2013, and the *PARCS network*[35], created as well in 2013 as a national "GDR" ("Groupement de recherche"), that in the French research landscape means a tool of the CNRS whose aim is to encourage exchanges between CNRS scientists, academic partners, companies and other stakeholders. The PARCS network is hosted by a research center in the field of ecology (Centre d'Ecologie Fonctionnelle et Evolutive - CEFE) in Montpellier.

Participatory action research is a research approach, which is used by a large community and is a documented tradition that – as for the public humanities – goes back to the 70s (Cornish et al. 2023), it has its journals (for example the International journal of action research or Action Research), and can be used as an "umbrella" term by its own, including other practices such as partnership research (Numans, Van Regenmortel, and Schalk 2019). Participatory action research is a relevant approach mobilized also in community psychology (Kagan 2012).

Two recent European projects, funded under the same funding programme as COESO, within the Horizon2020 framework program[36], implemented citizen science initiatives involving social sciences approaches: CoAct – Co-designing Citizen Social Science for Collective Action[37], and YouCount – Empowering youth and co-creating social innovations and policymaking through

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[34] https://urbaines.hypotheses.org/
[35] https://parcs.hypotheses.org/
[36] The "Science with and for society" programme. CoAct has been funded under the call SwafS-15-2018-2019 - Exploring and supporting citizen science, while YouCount and COESO has been funded under the call SwafS-27-2020 - Hands-on citizen science and frugal innovation.
[37] https://cordis.europa.eu/project/id/873048, https://coactproject.eu/

youth-focused citizen social science[38]. Both these projects relate to the action research tradition, and both embrace a new term whose first occurrence is recorded in 2014: "citizen social science" (Scheller et al. 2020). Thanks to these two projects, the relationship between action research and citizen social science is currently more explored.

Albert et al (2021), introducing "citizen social science" in the collective book "The science of citizen science", defend the potential of this term to bridge different approaches, disciplines and values. They also claim that the term could help overcome the barrier – or even the reluctance – that some researchers may feel with regards to participatory action research, as they perceive it more as a form of activism than as research (Albert et al. 2021). This concern of a potential loss – when not a lack – of scientificity when "science" comes too close to the social fields, is a common concern about the scientific practices in general, and not specific to participatory approaches in the social sciences and the humanities, as a recent special issue of the French *Revue d'anthropologie des connaissances* touches upon (Li Vigni, Louvel, and Raimbault 2023).

Resources to go further		
🔓	EN	Mayer, Katja, and Stefanie Schuerz. 2022. 'Policy Report: Opportunities and Challenges of Citizen Social Science'. Zenodo. https://doi.org/10.5281/zenodo.7466620.
🔓	EN	Butkevičienė, Egle, Raminta Pučėtaitė, Jolanta Vaičiūnienė, Reidun Norvoll, Patricia Canto, Usue Lorenz, Sarah Juricek, et al. 2021. «D1.2 Report on the Conceptual, Innovative, Evaluation and Ethical Framework for Youth Citizen Social Science». https://doi.org/10.5281/ZENODO.5810258.
🔓	EN	Canto-Farachala, Patricia, and Reidun Norvoll. 2023. 'Guest Editorial of Thematic Series: YouCount: Action Research and Citizen Social Science'. IJAR – International Journal of Action Research 19 (2): 107–11. https://doi.org/10.3224/ijar.v19i2.02.

Public humanities

Can we consider public humanities citizen science, or not? Following what we saw previously about public engagement (see p.14-16 of this report), part of the activities undertaken within the domain of public humanities can be considered citizen science, but not all of them. If it matters to dive into the public humanities fields, it is because there it is possible to find other examples of the actual contribution of SSH to participatory research.

What does the term "public humanities" include? If we combine browsing Wikipedia – a well-known collective endeavor to collect and share knowledge – and performing some literature review, we may come out with a quite long – still non exhaustive, in random order, and of course likely to open long debates – list of practices to dive into: public history, applied history, archival science, cultural heritage management, oral history, popular history, local history, public philosophy, philosophy for children, applied ethics, field philosophy, philosophy outreach, service

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[38] https://cordis.europa.eu/project/id/101005931, https://www.youcountproject.eu/

learning, popular philosophy, activist philosophy, public anthropology, applied anthropology, practicing anthropology, public interest anthropology, policy-oriented anthropology, reverse ethnography, public sociology, applied social sciences, policy sociology, etc.

As Barbara Heinisch wisely puts it: there is a "conceptual jungle" out there. In a blogpost she wrote for a blog dedicated to the public humanities within the digital humanities, hosted by Hypotheses.org, she reminds her audience that not all that pertains to the public humanities can be considered citizen science (Heinisch 2021), and she – together with other co authors – rather advocates for using the term "citizen humanities" (Heinisch et al. 2021) in order to distinguish those practices involving the active participation of non-professional researchers (the "citizen humanities"), from other practices more related to science communication or public relations in the humanities (the "public humanities", then).

The most structured communities within the field of the public humanities have their journals (some examples: Public History Review, Antropologia pubblica, or the Public Philosophy Journal), and their associations (some examples: Società italiana antropologia applicata, APA Committee for Public Philosophy, or Fédération internationale pour l'histoire publique). In Europe, the largest and more organized of these communities appears to be the community of public history.

If the term "citizen humanities" could prove useful today, in order to better separate practices that now will take advantage in being distinguished, it is still useful to point out that at least until 2016 – date of the first occurrence of the term "citizen humanities", according to Heinisch et al. (2021) – the term "public humanities" (in all the variations listed above, and more) also covered practices including the active participation of engaged publics. This also means that the more structured communities, having their discussion spaces like journals and conferences, may not see an interest in reaching the "citizen science" community. Nonetheless, some initiatives take this bridge, as for example the project Public History as the New Citizen Science of the Past (PHACS), hosted at the Luxembourg Centre for Contemporary and Digital History (C²DH) at the University of Luxembourg, and developing both public history and participatory models for interpreting the past. The historical approach implemented within one of the five local pilots of the European project, CitieS-Health (Citizen Science for Urban Environment and Health), also related to public history approaches (Malavasi et al. 2023).

The just mentioned CitieS-Health project is also a good example of a transdisciplinary project where the social sciences and humanities are mobilized to compose, all together with other disciplines, a comprehensive understanding of a societal issue. The Italian pilot within CitieS-Health investigated the prevalence of chronic kidney diseases in the context of potential industrial pollution on health and, in particular, the presence of heavy metals in the environment, in eight municipalities of Valle del Serchio, in Tuscany. Researchers from social sciences and humanities – namely history, sociology and ethics, together with the citizens involved in their part of the research, completed the epidemiological data with social and historical data gathered through a co-created approach to contextual and local knowledge.

Resources to go further		
⊚	EN	Heinisch, Barbara, Kristin Oswald, Maike Weißpflug, Sally Shuttleworth, and Geoffrey Belknap. «Citizen Humanities». In The Science of Citizen Science,

		Katrin Vohland, Anne Land-Zandstra, Luigi Ceccaroni, Rob Lemmens, Josep Perelló, Marisa Ponti, Roeland Samson, et Katherin Wagenknecht (Eds.), 97-118. Cham: Springer International Publishing, 2021. https://doi.org/10.1007/978-3-030-58278-4_6.
	EN	Herman, Frederik, Sjaak Braster, and María Del Mar Del Pozo Andrés, éd. «Exhibiting the Past: Public Histories of Education». De Gruyter, 2022. https://doi.org/10.1515/9783110719871.
	IT	Ziglioli, Lucia. «Filosofia Pubblica e Citizen Science: Verso Una Citizen Philosophy?» Etica & Politica/Ethics & Politics, Monographica. Citizen Science with and within the Social Sciences and the Humanities, XXV, n° 2 (2023): 153-69. https://www.openstarts.units.it/entities/publication/1cd74c89-0728-46e6-823e-61e98fed4a85/details.
	IT	Dragoni, Patrizia, and Mara Cerquetti, éd. «L'archeologia pubblica prima e dopo l'archeologia pubblica». Supplementi 9/2019. Vol. 9. Supplementi de Il capitale culturale. Studies on the Value of Cultural Heritage. EUM – Edizioni Università di Macerata, 2019. https://riviste.unimc.it/index.php/cap-cult/issue/view/104/showToc.
	EN	Lamphere, Louise. «The Convergence of Applied, Practicing, and Public Anthropology in the 21st Century». Human Organization 63, n° 4 (2004): 431-43. https://www.jstor.org/stable/44127389
	EN	Burawoy, Michael. «For Public Sociology». American Sociological Review 70, n° 1 (February 2005): 4-28. https://doi.org/10.1177/000312240507000102.

The ten COESO pilots: a diversity of disciplines, stakeholders and challenges

In order to ensure that the VERA platform is effectively designed to support small-scale participatory practices involving SSH research, the COESO project supported and collaborated with ten hands-on citizen science activities corresponding to this type of collaboration. The ten pilots involved SSH researchers and engaged stakeholders willing to tackle together a shared societal issue. They are examples of the different types of participatory research collaborations previously seen in this section, or a combination of them – as citizen science projects can also combine participatory and contributory approaches: meaning the combination between a tight collaboration between the pilots' partners and/or community members, and the involvement of a larger community of participants to additionally collect their contribution.

Inspired by the ExCiteS group[39] and their "extreme citizen science" approach (Haklay 2013; 2011),

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[39] ExCiteS is an interdisciplinary research group and a research programme on Extreme Citizen Science at UCL - University College London, supported by a diversity of research funding program since 2011. It gathers geographers, anthropologists, computer scientists, human-computer interaction experts, designers, electronic engineers, ecologists and other fields. Among other activities, they developed a digital data collection tool for people with low technical literacy: the Sapelli Collector (https://www.sapelli.org/). See also Moustard et al. (2021).

but with a focus on small-scale partnerships between SSH researchers and civil society members in Europe, the COESO project supported ten citizen science pilots implementing highly collaborative participatory approaches, from the problem formulation to the common analysis. Besides the development of the VERA platform, the support provided to the pilots' members included mutual learning sessions (Benei and Leon-Quijano 2023) and accompaniment in the use of a research blogging platform, not only to share the projects' results, but also to enhance the teams' co-research activity (Fanget and Smaniotto 2021). All the pilots contributed to the VERA platform design by participating in co-design sessions, while the members of the first five pilots also took part in semi-structured interviews with the VERA platform's UX-designers.

Within the COESO project design logic, the first five pilots were co-designed together with the concerned partners, in order to ensure a first diverse panel of SSH participatory research examples: both to ensure that diverse collaboration challenges were indeed addressed – stemming from their diversity in terms of types of organization and methodologies – and also to showcase them as examples to which the larger community could "recognize" themselves, or define by opposition, if any.

The second batch of five pilots were selected through an open call for contributions and all of them have thus been designed independently from COESO: some were new projects conceived especially to answer the call, some others were an evolution or extension of a pre-existing collaboration between the partners involved. They were selected from among 172 proposals received (Achenbach 2022).

The first five pilots include contributions from different disciplines of the social sciences and the humanities (history, philosophy, political science, sociology and anthropology) and involve artists, journalists, associative members, local authorities. They addressed specific societal issues: mass tourism, education and gender, resilient societies, fight against crime, and migrations. They all have a dedicated blog on the Hypotheses.org platform, and they all submitted at least one public deliverable that is now available on Zenodo.

The **Lisbon Tourism Observatory (Pilot 1)** reflected on the effects of tourism on the transformation of daily uses of urban space in Lisbon, focusing on the local district of Santo Antonio. It gathered researchers from the Centre for Research in Anthropology (CRIA) and the Universidade Autónoma de Lisboa, and members of an NGO focused on sustainable development (ZERO – Associação Sistema Terrestre Sustentável), and they involved local inhabitants and local authorities – including Santo Antonio Parish Council, one of Lisbon's 24 civil parishes – in the activities they designed together. The members reported their activity in their final report "Lisbon Tourism Observatory Final Report (COESO D.2.3)"[40], and an ethnography of their pilot has been carried out to document their research (see the Sao José website[41] and the accompanying report "São José, a transmedia and multimodal website on the Lisbon Tourism Observatory engagement in the urban space (COESO D6.2)"[42].

Blog: Cidade (In)visível. Turismo e outras práticas quotidianas em Lisboa
(https://civtur.hypotheses.org/)

Dansophie/Dancing philosophy (Pilot 2) gathered researchers in philosophy and in performance studies from the Université Polytechnique Haut de France (UPHF)[43] and dancers and choreographers, members of the Cadmium Compagnie. It was a double folded pilot: on one side the philosopher and the dancer-choreographer tackled the question of desire and recognition both from the body knowledge and cognitive knowledge perspectives, and created a pedagogical approach applicable in diverse workshop frameworks; on the other side the performance studies researcher and the choreographer expert in dance notation documented the work of the philosopher and the dancer through both a software for documenting creative processes (MemoRekall) and Laban kinetography, that led to the development of new version of the software. The pedagogical approach is explained from the philosopher's standpoint in her report "The movement of an embodied thought: Pilot 2 Dancing Philosophy Report (COESO D.2.6)"[44]; a "choreographic score"[45] was delivered that describes the Laban kinetography, the work of the philosopher and the dancer, and invites the readers to the experience; the use of the MemoRekall software for the pilot purpose is described in "Documenting collaborations with video annotation: MemoRekall Capsules (COESO D.2.4)"[46].

Blog: Dansophie/Dancing philosophy – Projet de recherche participative dans le cadre du projet européen COESO (https://dansophie.hypotheses.org/)

The pilot project **"Social evolutions through the common reuse of properties confiscated to mafias" (Pilot 3)** brought together a political science teacher at Sciences Po in Paris and activist, founder of the non-profit association Crim'Halt, and a journalist supported by the paneuropean media Cafebabel. They went on two Italian fieldwork trips to investigate the social impact of redistributing property confiscated from the mafia, exploring if and how solutions journalism could support the eliciting of good governance practices across European countries, and how it can be enhanced by a research-based approach. The report "Solutions journalism outputs (COESO D.2.7)"[47] provides an insight of their collaboration and introduces the article series "New Landlords"[48], published on Cafebabel.com and available in English, Italian and French.

Blog: Usage social des biens confisqués à la mafia – Recherche et journalisme de solution (https://usbc.hypotheses.org)

Another pilot project implemented a collaboration between social science researchers and journalists on the topic of organized crime, this time gathering criminologists (founders of the university spin-off Crime&Tech and members of Transcrime, research center of the Università Cattolica del Sacro Cuore) and investigative journalist members of the Italian association IRPI – Investigative reporting project Italy, that explored the **"Accessibility and appropriability of tools and databases for journalists to foster investigative reporting's impact" (Pilot 4)**, building on a previous collaboration for the European project Datacros[49]. During the COESO implementation, the IRPI journalists tested the employment of a set of tools, risk indicators and databases

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[43] The researcher in performance studies, who is also the conceiver of the MemoRekall software, later moved to the Université Rennes 2, that has been then included to the COESO consortium as third party.
[44] https://zenodo.org/records/6788039
[45] https://zenodo.org/records/6788008
[46] https://zenodo.org/records/6619635
[47] https://zenodo.org/records/6788064
[48] https://cafebabel.com/en/article/tag/new-landlords/
[49] DATACROS – Developing A Tool to Assess Corruption Risk factors in firms' Ownership Structure (ISFP-2017-AG-CORRUPT-823792) is a research project co-funded by European Union Internal Security Fund – Police, aimed at developing a tool prototype to detect anomalies in firms' ownership structure that can flag high risks of collusion, corruption and money laundering in the European single market.

developed within Datacros on two new specific use cases (the real estate and maritime industry sectors) and they produced with the researchers a dataset that also provided new elements improving the research in these fields. Through this new joint work, they also explored what would be the structural needs for a sustainable framework for sharing sensitive data between public authorities, researchers, investigative journalists, including the use of private owned databases. They produced a first report demonstrating how the use of these tools can improve investigative journalism and foster transparency and accountability ("Report on accessibility to sensitive and privately-owned databases (COESO D.2.8"[50]), and a second report on the technical and legal framework that should be created for sharing confidential data in compliance with EU relevant rules ("Report on the technical and legal framework for sharing confidential data (COESO D.2.9)"[51]). The outcome of the application of the tool to the real estate use case is the investigative report "La battaglia di Roma Est: Centocelle nel mirino della criminalità organizzata", available on Irpi Media[52].

Blog: THE BACKSTORY – Un percorso condiviso tra ricerca e giornalismo (https://thebackstory.hypotheses.org/)

The pilot **Growing migrant knowledge (Pilot 5)** also built from an existing initiative: the Migrant connections[53] is a digital research infrastructure for historical migration research whose aim is to foster research on transatlantic communication systems and on spaces of knowledge production and mobility. The initiative gathers scholars on migrations, archivists and citizen scholars, with the aim to develop systemic collaboration for addressing contemporary migration questions. The initiative is also linked with an international network of scholars focused on both migration and knowledge studies: the Migrant Knowledge network[54]. Within COESO, researchers from the German Historical Institute of Washington (one of the eleven research institutes of the German Max Weber Foundation) and citizen scholars interested in the topic, worked on a specific corpus of sources (diaries and other ego-documents). The activities of the pilot within the framework of COESO are documented on the report "Writing Across Borders outputs (COESO D2.10)"[55].

Blog: Migrant connections (https://migconn.hypotheses.org/)

The second batch of pilots addressed additional specific societal issues: inclusive urban mapping with and for disabled citizens, caring communities with and for aging people, water quality and the recognition of women's knowledge, climate change on coastal territories, and food insecurity among children. The new pilots appeared to be mostly including or stemming from interdisciplinary and applied research fields such as urban planning, development studies, economy, marketing, digital anthropology, medical anthropology, health studies.

These additional pilots all together gather 16 organizations distributed across 9 countries. As the first five, all of them animated – to different extents – a dedicated blog on the Hypotheses.org platform, and they were supported by a dedicated community manager in order to do so. Unlike the first five, pilot 6 to 10 did not have to provide any public deliverable, but sent a final report

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[50] https://zenodo.org/records/6410800
[51] https://zenodo.org/records/6400571
[52] https://irpimedia.irpi.eu/centocelle-criminalita-organizzata/
[53] https://migrantconnections.org/s/en/about
[54] https://migrantknowledge.org/
[55] https://zenodo.org/records/7595480

on their activities to the COESO partner managing the cascade funding open call. Instead, they have been more directly involved than the first five in contributing to the development of the Cooperation Analytics (see note 3, p.6).

DiMDiCi – Digital Mapping with Disabled Citizens (Pilot 6) engaged a group of people with disabilities in the co-design of an inclusive digital collaborative mapping tool in Herne (Germany), an open-source software tool for participatory mapping implemented on digital maptables called OGITO (Open Geospatial Interactive Tool)[56]. The project involved researchers from the department of Community Health at the German university of applied sciences for health in Bochum (Hochschule für Gesundheit) and from the Faculty of Geo-Information Science and Earth Observation of the, University of Twente (The Netherlands), together with the disabled citizens involved in the co-design process, and members of the welfare organization Diakonische Stiftung Wittekindshof (Germany) - that advises and offers support to people with various disabilities, and members from the Municipal Administration of the city of Herne. The City of Herne participated actively in the project to uptake the knowledge gained in the sectoral plan for health promotion.

Blog: DiMDiCi – Digital Mapping with Disabled Citizens (https://dimdici.hypotheses.org/)

AGORAge (Pilot 7) was co-lead by a researcher at the Medical Anthropology Research Center of the Rovira i Virgili University (Spain), within the Department of Anthropology, Philosophy and Social Work, and a member of ISRAA – Istituto per Servizi di Ricovero e Assistenza agli Anziani, a public assistance and charitable institution in Treviso (Italy) that acts as an older adults public service provider. The citizen science action has been carried out in the cohousing and nursing homes managed by ISRAA, which aims to promote a process of social intervention to encourage the inclusion in their neighborhoods of older people who live in care facilities. The project relied on seniors' active contributions throughout the entire process, and practitioners from the ISRAA staff were also involved. The main outcome of the project is the "AGORAge: Caring Community Toolkit", addressed to those who are interested in implementing initiatives to promote the creation of caring communities in which the social inclusion of older people is given special consideration. The toolkit can serve researchers and professionals dealing with social intervention as well as policymakers, service providers, and municipalities, and it is available in 5 languages: English[57], Italian[58], Spanish[59], Catalan[60], and French[61].

Blog: AGORAge (https://agorage.hypotheses.org/)

Women Water Watch (Pilot 8) engaged researchers from the Institute of Development Policy from the University of Antwerp (Belgium) and the Aqua Farms Organisation (Tanzania) with the aim of increasing women's voice in water resource management – and thus recognizing their role as key actors in water knowledge and management, through a coordinated activity of water quality mapping "from the river to the glass". Members of the Mzumbe University were also involved, thanks to additional program partnership with the University of Antwerp.
The pilot represented an opportunity for the involved communities to rethink gender relations, along with raising awareness of the social and environmental issue of water quality in

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[56] The code is available at https://github.com/rosaguilar/ogito
[57] https://zenodo.org/records/8119965
[58] https://zenodo.org/records/8120334
[59] https://zenodo.org/records/8120214
[60] https://zenodo.org/records/8120148
[61] https://zenodo.org/records/10198426

Tanzania. Through "village meetings", not only the women involved as monitors in the data collection phase were included, but also the whole community they belong to. A specific attention has been paid to activities and tools geared towards increasing the awareness of primary school children. Throughout the project implementation a large set of tools has been used to communicate with various stakeholders: e.g. games, songs, flags, radio, open source data portals, murals. The story behind the project is among the selected ones for the Cafebabel series "Common ground"[62].

Blog: Women Water Watch - Citizen Science for co-creation of water knowledge (https://waterwatch.hypotheses.org/)

Playful Futures (Pilot 9) brought together members of Edgeryders OÜ, a distributed social enterprise based in Tallinn (Estonia) and gathering a large community interested in social innovation, researchers in digital ethnography from the TANTlab of the University of Aalborg (Denmark) and members of the Culture Hub Croatia (CHC), a non-profit organization focused on education, culture and creativity for development of local Croatian communities. They explored the potential of online LARPs (Live Action Role Play) to increase the ability of citizens to imagine their lives in economies and societies radically different from their own. The game, which has also been adapted for offline play, is focused on climate change in coastal communities, and targets most young adults. The project's purpose was to test the potential of online LARPs in allowing citizens to imagine their lives in economies and societies radically different from existing ones, and to create a safe space for addressing ecological grief.

Blog: Playful Futures – sci-fi online LARP ethnography for Mediterranean coastal communities, (https://playfutures.hypotheses.org/)

The **Lunch Box Monitor (Pilot 10)** involved researchers from the Department of Marketing, Innovation and Organisation at Ghent University (Belgium) and four Flemish schools. It has been supported through the project design, including the schools selection, by Let Us (Belgium) – social enterprise with expertise in urban food policy, the Belgian NGO Rikolto – engaged for an international sustainable food chain and the Flemish Institute of Healthy Living, a government-funded, non-academic center for health promotion and disease prevention. These non-academic partners were also involved as advisory board members during the project implementation. The project aimed at providing knowledge on the nutritional quality and environmental sustainability of children's packed lunch-boxes in Flanders, and stimulating targeted actions and policy recommendations. The means to reach this goal has been developing an inclusive and non-stigmatizing methodology to objectively register what children (6–12 years) bring in their lunch-box, and realize a large-scale measurement (e.g., via photo booth with lunch-box scanner). This methodology was co-designed with the concerned group: meaning the children, their families and the teachers.

Blog: THE LUNCH-BOX-MONITOR PROJECT – Insight into the nutritional quality of school lunch-boxes to assess food insecurity among primary school children (https://lunchbox.hypotheses.org/)

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[62] Cafébabel Team. «Researchers Are Working with Local Communities to Make a Tangible Impact». Cafébabel, 26 avril 2023. https://cafebabel.com/en/article/researchers-are-working-with-local-communities-to-make-a-tangible-impact-64464a1b383ae5868134a53f/.

IV. Main takeaways from the experience of supporting the COESO pilots

The challenges of participatory research are explored in the respective disciplinary fields implementing participatory approaches that we mentioned in the previous section. But one recent study is of particular interest to mention in this report, a study done by Göbel, Mauermeister, and Henke (2022) and exploring citizen social science projects in the German context. They define "citizen social science" as "scientific research in the humanities and social sciences, carried out in cooperation between professional and non-professional researchers". From their study, they argue that participatory research activities in the SSH are very diverse in their disciplinary traditions and organizational settings, and that civil society organizations (CSOs) play a vital role in SSH participatory projects, as we have also seen. They state that a more adequate description of citizen social science activities is that "such projects are concerned with facilitating cooperation with co-researchers and other partners in consortia inside and outside of academia", and, to capture the specificities of citizen social science, they introduce the notion of "cooperation capacity": the "ability of individual and collective actors to establish connectivity and relations—inside the heterogeneous consortia as well as between them and other actors outside—to generate scientific knowledge through participatory research."

Leveraging on their work to draw a conclusion from the experience of the COESO project, the first point to note is that supporting small-scale and highly collaborative SSH citizen science projects, ask to focus on supporting the cooperation capacity between the involved partners.

Secondly, following what we saw in the first section, several of the specific qualities of SSH research in general – the use of local languages, the diversity of sources and outputs' formats, and the heterogeneous nature of data – are also common to small-scale citizen science practices. In this respect, small-scale collaborations usually need even more support and "translation" efforts, than contributory – or "crowdsourced" – research-led projects.

If we sum up the contributions of the ten COESO pilots in producing knowledge, we see that they not only contributed in developing new software code (P2, P4, P6) and collecting data on specific societal issues (P8, P10), but they also – mainly – co-designed several replicable approaches or processes, such as:
-   workshop models with inhabitants to inform public policies, stemming from preliminary historical documentation and ethnographic work (Pilot 1);
-   a pedagogical methodology bridging body knowledge and cognitive knowledge (Pilot 2);
-   the enhancement of a professional practice (in our case: solutions journalism) with SSH fieldwork methodologies (Pilot 3);
-   the development of common investigative IT tools reusable by both journalists and researchers, and a sustainable framework for sharing sensitive data (Pilot 4);
-   an example on how to rely on transcribing historical sources in order to contribute to transatlantic dialogue on migration (Pilot 5)
-   approaches to service development with vulnerable groups, such as people with cognitive disabilities (Pilot 6) or elders (Pilot 7)
-   capacity building activities with and for a village community (Pilot 8)

- designing a game suitable for accessing community collective intelligence on a societal challenge (Pilot 9) or to raise awareness about it (Pilot 8)
- a methodology for health monitoring with the concerned group that is inclusive and non-stigmatizing (Pilot 10)

Although they did produce these approaches that can possibly be replicated, the effort to document them, in order to make their uptake possible, is not to be taken for granted. Starting then with the crucial point of communicating and disseminating their research, it appears that small-scale and local projects lack the capacity to be visible, even before obtaining a large outreach. But support in communication is helpful for them not only to echo their work and results to a larger – and potentially multilingual – audience, it is helpful also to support them in embracing alternative formats when appropriate.

The pilots' blogs appeared as a useful and light gathering point to share the ongoing processes of the pilots' research journey: a facility that also supported the summary of the pilots' activities, thus providing to the readers of this report the possibility to rely on more elaborated descriptions, while waiting for further publications. But the editorial management of their blogs required resources that even the support of a dedicated community manager may not be sufficient to fulfill. It should also have taken more into account the existence of other communication channels that the pilots' members were adopting because they wanted to be part of a community exceeding their pilot level. Although Hypotheses.org can be seen as effective to support the creation of "communities of practices" (Chibois and Smaniotto 2023), other communication channels were of equal importance for some pilots' members, such as, for instance, the "Communitor"[63] platform for Pilot 8 (Women Water Watch), or the Edgeryders communities spaces[64] for Pilot 9 (Playful Futures).

Regarding the realization of their collaboration more in general, the pilots' experience as highly collaborative small-scale participatory research shows that going through the different phases of the collaboration is a challenge itself that cannot be taken for granted. Because they grow organically and are not following a predetermined path, this type of participatory research project is more fragile than other types of collaboration, including when it comes to funding because, due to their hybrid nature, they have more difficulty in finding their place within siloed funding opportunities, as stressed in the first COESO policy brief focused on fostering funding for citizen science with the SSH (Smaniotto 2022).

The work of accompanying the partners in their collaboration journey, can benefit from an external "eye" that looks at their cooperation from a neutral stance. This is for instance the case of the French independent lookout systems of the "tiers-veilleurs" (third party watch dogs) an intermediation function between academic actors and civil society which has gradually been established in France through research programs since 2009 (Coquard 2020; Brossaud and Fiorini 2022). These third-party monitors take on the role of a "mediator" or "facilitator" of participatory research to overcome some of the obstacles inherent in collaborations, and which may appear in any given project: for example, an imbalance in power relationships, differences in the languages and professional values and methods of each party, and differences in expectations about the

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[63] Communitor (https://commun1tor.wixsite.com/my-site/about) is a virtual platform hosted by the commercial website builder Wix.com aiming at gathering a community of practice around community-based monitoring. It is a coordination effort led by Nathalie Holvoet - also Women Water Watch co-leader - at the University of Antwerp.
[64] https://edgeryders.eu/categories

end products.

It must be considered, indeed, that the constant work of alignment between each other is a permanent mutual learning experience: agreeing, reshaping the common goals of the research, converging on a method, performing collective action – including data collection – is not a prerequisite that can be guaranteed in advance, but a constant process within the collaboration that happens through diverse communication channels, digital or not. In this respect, to understand and learn how to embrace the challenges and benefits of collaboration, the mutual learning models seem more appropriate than – or at least a necessary complement to – knowledge transfer trainings or classes, as mutual learning models provide a framework more likely to take into account the epistemic diversity of the parties involved.

Finally, taking into account and integrating the partners' diversity is an action that needs time, for sure, but that also needs appropriate spaces, both digital and physical, to both engage in mutual learning experiences and find appropriate documentation about participatory experiences similar to theirs. The sciences shops, for instance, existing in Europe for almost fifty years, are an example of the type of support that can be provided to facilitate collaborations between researchers and civil society organizations and individuals (Savoia et al. 2017).

For all these reasons, small-scale SSH participatory research needs support that is more tailored, locally grounded, and based on networking and translation capacity. Such comprehensive support cannot be provided by a single service provider – even when it comes to large research performing organizations such as universities. A coordinated open science ecosystem is needed that synergizes services that are specialized or comprehensive, with a local or a regional dimension and scope, digital or physical. In this ecosystem, what a platform like VERA can bring in support to SSH participatory research is not only the possibility for potential partners to find each other and to find funding opportunities, but also to find relevant SSH participatory research projects that could be connected to each other. Thanks to the connection with Hypotheses.org, the development of specific communities of practice around topics or SSH participatory research approaches can also be created. Thanks to the connection with Eu-citizen.science, the VERA community is connected with the larger European citizen science community.

Following these main takeaways, and including the observations reported in the previous sections, some recommendations are provided in the second COESO policy brief ("For more citizen science in social sciences and humanities (COESO D.1.5)"), focused on possible paths to have more citizen science with and within the social sciences and the humanities (Smaniotto and Achenbach 2023).

V. Conclusion

Bridging citizen science and SSH participatory practices means both making the citizen science community aware of the SSH participatory practices, and making the SSH communities who are implementing participatory approaches comfortable in recognizing their practices as citizen science.

A long tradition of participatory practices exists within the SSH and this tradition should be valued when relevant, whatever its name, while moving towards new terminology to identify citizen science practices in these disciplines. Starting from that, a larger mapping at the European scale, that takes into account disciplinary diversity and the multilingual nature of SSH research, should be undertaken to unveil a large set of examples of participatory research in the SSH.

SSH contribution to citizen science exists both in the domain of contributory (or "crowdsourced") projects and in the domain of participatory projects. The latter are more likely to be hidden and hindered in the current landscape, not only due to matters of terminology, but also because their small-scale and local nature often goes with a lack of resources and a diverse approach to producing outcomes, which can weaken the capacity of such projects to communicate about their existence and their results.

The ten COESO pilots provided examples of participatory projects in the SSH, covering a diverse range of disciplines, stakeholders involved and research topics. Supporting these pilots provided useful insights about the types of outputs that could be considered in order to document participatory projects' activities, and insights about the needs in terms of support that these small-scale participatory projects can benefit from. The list of outputs produced by the pilots also highlights what type of contributions and impact can be expected from such projects.

Acknowledging the diversity of practices, and foremost the specificity of small-scale and highly collaborative participatory projects involving SSH methodologies and approaches, calls for specific support. The VERA platform is one of the digital services that contributes to fostering more citizen science with and within the SSH, integrated into a larger ecosystem of services in support of citizen science.

VI. Cited references

Achenbach, Kelly. 2022. 'COESO's Open Call: How to Select Just Five'. Billet. *COESO - Collaborative Engagement on Societal Issues* (blog). 27 March 2022. https://coeso.hypotheses.org/1029.

Achenbach, Kelly, and Alessia Smaniotto. 2023. 'Plan for the Exploitation and Dissemination of Results (PEDR) (COESO D.7.7)', December. https://doi.org/10.5281/ZENODO.5109264.

Albert, Alexandra, Bálint Balázs, Eglė Butkevičienė, Katja Mayer, and Josep Perelló. 2021. 'Citizen Social Science: New and Established Approaches to Participation in Social Research'. In *The Science of Citizen Science*, edited by Katrin Vohland, Anne Land-Zandstra, Luigi Ceccaroni, Rob Lemmens, Josep Perelló, Marisa Ponti, Roeland Samson, and Katherin Wagenknecht, 119–38. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-58278-4_7.

Avanço, Karla, Ana Balula, Marta Błaszczyńska, Anna Buchner, Lorena Caliman, Claire Clivaz, Carlos Costa, et al. 2021. 'Future of Scholarly Communication . Forging an Inclusive and Innovative Research Infrastructure for Scholarly Communication in Social Sciences and Humanities'. Zenodo. https://doi.org/10.5281/zenodo.5017705.

Benei, Veronique, and Camilo Leon-Quijano. 2023. 'Public Engagement, Mutual Learning, and Multimodal Practices in Citizen Science: Report on the Activities of WP6 (COESO D.6.1.)', COESO project deliverables, , September. https://doi.org/10.5281/ZENODO.10046771.

Berger, Laurent, Marielle Macé, Gildas Salmon, Cécile Vidal, and Cyril Lemieux, eds. 2017. *Pour Les Sciences Sociales: 101 Livres*. En Temps & Lieux 74. Paris: Éditions EHESS.

Bod, Rens, Jaap Maat, and Thijs Weststeijn. 2014. 'Introduction: The Making of the Modern Humanities'. In *The Making of the Humanities*, edited by Rens Bod, Jaap Maat, and Thijs Weststeijn, 13–24. Volume III: The Modern Humanities. Amsterdam University Press. https://www.jstor.org/stable/j.ctt12877vs.3.

Bodmer, W. F. 1985. *The Public Understanding of Science*. London: The Royal Society.

Boullier, Dominique, and Jessica Pidoux. 2021. 'Development and Implementation of the Cooperation Analytics (COESO D.5.1)', September. https://doi.org/10.5281/ZENODO.5599051.

Bouterse, Jeroen, and Bart Karstens. 2015. 'A Diversity of Divisions: Tracing the History of the Demarcation between the Sciences and the Humanities'. *Isis* 106 (2): 341–52. https://doi.org/10.1086/681995.

Brossaud, Claire, and Cyril Fiorini. 2022. 'Accompagner la recherche participative : le dispositif « tiers-veilleur »'. *Techniques de l'Ingénieur*, November. https://www.techniques-ingenieur.fr/base-documentaire/innovation-th10/sciences-techniques-et-societe-42697210/accompagner-la-recherche-participative-le-dispositif-tiers-veilleur-ag123/.

Callegaro, Francesco, and Charles Girard. 2011. 'La Neutralité'. In *Philosophie Des Sciences Humaines: Concepts et Problèmes*, edited by Florence Hulak and Charles Girard. Bibliothèque d'histoire de La Philosophie. Paris: Librairie philosophique J. Vrin.

Caria, Alexandra Ortiz. 2020a. 'Le RGPD (1) et le projet de création d'une plateforme collaborative'. Billet. *Plate-forme collaborative pour les enjeux sociétaux* (blog). 20 March 2020. https://places.hypotheses.org/2702.

———. 2020b. 'Le RGPD (2) et la recherche qualitative collective en SHS, sont-ils compatibles?'

Billet. *Plate-forme collaborative pour les enjeux sociétaux* (blog). 7 April 2020. https://places.hypotheses.org/2841.

Chibois, Jonathan, and Alessia Smaniotto. 2023. 'Open Digital Infrastructures for Bridging Professional Cultures: The Case of Extreme Citizen Science between Journalism and Research'. *Open Research Europe*, January. https://doi.org/10.12688/openreseurope.15262.1.

Coquard, Charlotte. «Le tiers-veilleur, un acteur de la recherche participative. Note sur l'accompagnement de la recherche participative». Association Sciences Citoyennes, 2020.

Cornish, Flora, Nancy Breton, Ulises Moreno-Tabarez, Jenna Delgado, Mohi Rua, Ama de-Graft Aikins, and Darrin Hodgetts. 2023. 'Participatory Action Research'. *Nature Reviews Methods Primers* 3 (1): 1–14. https://doi.org/10.1038/s43586-023-00214-1.

Czegledi, Alexandra. 2022. 'Citizen Science in the Making: Mapping Participatory Science Projects in Hungary'. In *Proceedings of Engaging Citizen Science Conference 2022*, 418:037. SISSA Medialab. https://doi.org/10.22323/1.418.0037.

Eitzel, M V, Jessica L Cappadonna, Chris Santos-Lang, Ruth Ellen Duerr, Arika Virapongse, Sarah Elizabeth West, Christopher Conrad Maximillian Kyba, et al. 2017. 'Citizen Science Terminology Matters: Exploring Key Terms'. *Citizen Science: Theory and Practice* 2 (1): 1. https://doi.org/10.5334/cstp.96.

Fanget, Emma, and Alessia Smaniotto. 2021. 'COESO Pilots' Blogs on the Hypotheses.Org Academic Platform (COESO D.2.2)', December. https://doi.org/10.5281/zenodo.5889259.

Felt, Ulrike, and Brian Wynne, eds. 2007. *Taking European Knowledge Society Seriously. Report of the Expert Group on Science and Governance to the Science, Economy and Society Directorate, Directorate-General for Research, European Commission*. Luxembourg: European Commission.

Göbel, Claudia, Sylvi Mauermeister, and Justus Henke. 2022. 'Citizen Social Science in Germany—Cooperation beyond Invited and Uninvited Participation'. *Humanities and Social Sciences Communications* 9 (1): 1–11. https://doi.org/10.1057/s41599-022-01198-1.

Haklay, Muki. 2011. 'Extreme Citizen Science – ExCiteS'. *Po Ve Sham - Muki Haklay's Personal Blog* (blog). 7 March 2011. https://povesham.wordpress.com/2011/03/07/extreme-citizen-science-excites/.

———. 2013. 'Citizen Science and Volunteered Geographic Information: Overview and Typology of Participation'. In *Crowdsourcing Geographic Knowledge: Volunteered Geographic Information (VGI) in Theory and Practice*, edited by Daniel Sui, Sarah Elwood, and Michael Goodchild, 105–22. Dordrecht: Springer Netherlands. https://doi.org/10.1007/978-94-007-4587-2_7.

Haklay, Muki, Alice Motion, Bálint Balázs, Barbara Kieslinger, Bastian Greshake Tzovaras, Christian Nold, Daniel Dörler, et al. 2020. 'ECSA's Characteristics of Citizen Science: Explanation Notes', April. https://doi.org/10.5281/ZENODO.3758555.

Haklay, Muki, Daniel Dörler, Florian Heigl, Marina Manzoni, Susanne Hecker, and Katrin Vohland. "What Is Citizen Science? The Challenges of Definition." In *The Science of Citizen Science*, edited by Katrin Vohland, Anne Land-Zandstra, Luigi Ceccaroni, Rob Lemmens, Josep Perelló, Marisa Ponti, Roeland Samson, and Katherin Wagenknecht, 13–33. Cham: Springer International Publishing, 2021. https://doi.org/10.1007/978-3-030-58278-4_2.

Hecker, Susanne, Lisa Garbe, and Aletta Bonn. 2018. 'The European Citizen Science Landscape – a Snapshot'. In *Citizen Science: Innovation in Open Science, Society and Policy*, by Susanne Hecker, Muki Haklay, Anne Bowser, Zen Makuch, Johannes Vogel, and Aletta Bonn, 190–200.

Heinisch, Barbara. 2020. 'Developing Language Resources with Citizen Linguistics in Austria – A Case Study'. In *Proceedings of the LREC 2020 Workshop on "Citizen Linguistics in Language*

Resource Development", 7–14. Marseille, France: European Language Resources Association. https://aclanthology.org/2020.cllrd-1.2.

———. 2021. 'A Path through the Conceptual Jungle of the Public Humanities'. Billet. *Public Humanities* (blog). 26 July 2021. https://publicdh.hypotheses.org/148.

Heinisch, Barbara, Kristin Oswald, Maike Weißpflug, Sally Shuttleworth, and Geoffrey Belknap. 2021. 'Citizen Humanities'. In *The Science of Citizen Science*, edited by Katrin Vohland, Anne Land-Zandstra, Luigi Ceccaroni, Rob Lemmens, Josep Perelló, Marisa Ponti, Roeland Samson, and Katherin Wagenknecht, 97–118. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-58278-4_6.

Irwin, Alan. 1995. *Citizen Science: A Study of People, Expertise and Sustainable Development*. London: Routledge.

Jacob, Christian. 2014. 'Les inscriptions'. In *Qu'est-ce qu'un lieu de savoir ?* Encyclopédie numérique. Marseille: OpenEdition Press. http://books.openedition.org/oep/658.

Janz, Nina. 2023. 'The Participatory Aspect of Creating a Collection on WWII: Collecting Ego-Documents from Luxembourgish Recruits and Their Families'. *Etica & Politica / Ethics & Politics*, Monographica. Citizen Science with and within the Social Sciences and the Humanities, XXV (2): 81–103.

Kagan, Carolyn. 2012. 'La Ricerca-Azione Partecipata e La Psicologia Di Comunità (Participatory Action Research and Community Psychology)'. In *Psicologia Di Comunità: Prospettive, Idee, Metodi*, by Bruna Zani. Carocci Editore.

Kieslinger, Barbara, Teresa Schäfer, Florian Heigl, Daniel Dörler, Anett Richter, and Aletta Bonn. 2017. 'The Challenge of Evaluation: An Open Framework for Evaluating Citizen Science Activities', September. https://doi.org/10.31235/osf.io/enzc9.

Lemieux, Cyril, Laurent Berger, and Marielle Macé, eds. 2023. *A History of the Social Sciences in 101 Books*. Cambridge, Massachusetts: The MIT Press.

Leon-Quijano, Camilo. 2022. 'São José, a Transmedia and Multimodal Website on the Lisbon Tourism Observatory Engagement in the Urban Space (COESO D6.2)', COESO project deliverables, , December. https://doi.org/10.5281/ZENODO.7595522.

Lewenstein, Bruce V., and Caren Beth Cooper. 2016. 'Two Meanings of Citizen Science'. In *The Rightful Place of Science: Citizen Science*, by Darlene Cavalier and Eric B. Kennedy, 51–62. Consortium for Science, Policy, & Outcomes.

Li Vigni, Fabrizio, Séverine Louvel, and Benjamin Raimbault. 2023. 'How Do the Vectors of Scientific Credibility Reconfigure at the Interface between the Social Worlds?' *Revue d'anthropologie Des Connaissances* 17 (2). https://doi.org/10.4000/rac.30500.

Luneau, Aymeric, Élise Demeulenaere, Stéphanie Duvail, Frédérique Chlous, and Romain Julliard. 2021. 'Le tournant démocratique de la citizen science : sociologie des transformations d'un programme de sciences participatives'. *Participations* 31 (3): 199–240. https://doi.org/10.3917/parti.031.0199.

Malavasi, Giulia, Bruna De Marchi, Antonella Ficorilli, and Annibale Biggeri. 2023. 'Epidemiologia Ambientale Ben Temperata: Etica, Sociologia e Storia in Un Progetto Di Citizen Science'. *Etica & Politica/Ethics & Politics*, Monographica. Citizen Science with and within the Social Sciences and the Humanities, XXV (2): 35–54. https://www.openstarts.units.it/handle/10077/35350.

Maryl, Maciej, Marta Błaszczyńska, Ilaria Bonincontro, Beat Immenhauser, Szilvia Marothy, Eveline Wandl-Vogt, and Joris J. Van Zundert. 2023. 'Recognising Digital Scholarly Outputs in the Humanities'. ALLEA Report. DE: ALLEA. https://doi.org/10.26356/OUTPUTS-DH.

Moustard, Fabien, Muki Haklay, Jerome Lewis, Alexandra Albert, Marcos Moreu, Rafael Chiaravalloti, Simon Hoyte, et al. 2021. 'Using Sapelli in the Field: Methods and Data for an

Inclusive Citizen Science'. *Frontiers in Ecology and Evolution* 9. https://www.frontiersin.org/articles/10.3389/fevo.2021.638870.

Nicklaus, Yella. 2021. 'Interview with Saarland Citizen Scholars'. Migrant Connections. 21 June 2021. https://www.migrantconnections.org/s/en/item/844.

Nissille, Christel, and Laure Kloetzer. 2023. 'Le Glossaire: 125 ans de sciences citoyennes en dialectologie'. *Etica & Politica / Ethics & Politics*, Monographica. Citizen Science with and within the Social Sciences and the Humanities, XXV (2): 55–79. https://www.openstarts.units.it/handle/10077/35351.

Numans, Wilma, Tine Van Regenmortel, and René Schalk. 2019. 'Partnership Research: A Pathway to Realize Multistakeholder Participation'. *International Journal of Qualitative Methods* 18 (January): 1609406919884149. https://doi.org/10.1177/1609406919884149.

'Particip-Arc. Recherche Culturelle et Sciences Participatives'. 2019. https://www.participarc.net/ressources/azgfg-2019-rapport-particip-arc

Pelacho, Maite, and Francisco Sanz. 2021. 'Landscape Study on Funding Schemes for Social Sciences and the Humanities' Citizen Science Activities (COESO D.4.1)', COESO project deliverables, , July. https://doi.org/10.5281/ZENODO.5137246.

Pidoux, Jessica, Dominique Boullier, and Yuma Ando. 2023. 'Report on Activism and Science within Citizen Science (COESO D.5.3)', December. https://zenodo.org/doi/10.5281/zenodo.10372467.

Pidoux, Jessica, Dominique Boullier, Natalya Avanesova, and Thibaut Soubrié. 2022. 'Report on Test and Final Development of the Cooperation Analytics (COESO D.5.2)', June. https://doi.org/10.5281/ZENODO.6787833.

Pranckutė, Raminta. 2021. 'Web of Science (WoS) and Scopus: The Titans of Bibliographic Information in Today's Academic World'. *Publications* 9 (1): 12. https://doi.org/10.3390/publications9010012.

Reese, Jacquelyn Slater. 2016. 'Transcribing the Past: Crowdsourcing Transcription of Civil War Manuscripts'. *Archival Issues* 37 (2): 59–74. https://www.jstor.org/stable/44981990

Renault, Sophie. 2015. 'Crowdsourcing. Blurring the boundaries of the organization and work'. *RIMHE : Revue Interdisciplinaire Management, Homme & Entreprise* 19, 4 (5): 21–40. https://doi.org/10.3917/rimhe.019.0021.

Ridley, Julie, Ingar Brattbakk, György Pataki, Alexandra Czegledi, Fortuna Procentese, Flora Gatti, and Reidun Norvoll. 2022. 'D1.3 Methodological Framework for Data Collection and Analysis'. https://zenodo.org/record/6303118.

Savoia, Annunziata, Bénédicte Lefebvre, Glen Millot, and Bertrand Bocquet. 2017. 'The Science Shop Concept and Its Implementation in a French University': *Journal of Innovation Economics & Management* n° 22 (1): 97–117. https://doi.org/10.3917/jie.pr1.0006.

Scheller, David, Stefan Thomas, Andrea Arnold, Kersti Ruth Wissenbach, Thomas Hervé Mboa Nkoudou, Anna Cigarini, Isabelle Bonhoure, et al. 2020. 'CoActD2.1: Report on State of the Art of Citizen Social Science', July. https://zenodo.org/records/4810909.

Science Europe. 2013. 'Embedding Social Sciences and Humanities in the Horizon 2020 Societal Challenges', January. https://doi.org/10.5281/ZENODO.7019496.

Smaniotto, Alessia. 2022. 'Fostering Funding for Citizen Science in the Social Sciences and Humanities - Policy Brief #1 (COESO D.1.4)', COESO project deliverables, , June. https://doi.org/10.5281/ZENODO.6794981.

Smaniotto, Alessia, and Kelly Achenbach. 2023. 'For More Citizen Science with Social Sciences and Humanities - Policy Brief #2 (COESO D.1.5)', COESO project deliverables, , December. https://zenodo.org/doi/10.5281/zenodo.10372461.

Smaniotto, Alessia, and Antonella Passani. 2023a. 'Citizen Science with and within the Social Sciences and the Humanities. Guest Editors' Preface'. *Etica & Politica/Ethics & Politics*, Monographica. Citizen Science with and within the Social Sciences and the Humanities, XXV (2): 9–23. https://www.openstarts.units.it/handle/10077/35349.

———, eds. 2023b. 'Monographica. Citizen Science with and within the Social Sciences and the Humanities'. *Etica & Politica/Ethics & Politics* XXV (2): 7–225. https://www.openstarts.units.it/handle/10077/35348.

Tauginienė, Loreta, Eglė Butkevičienė, Katrin Vohland, Barbara Heinisch, Maria Daskolia, Monika Suškevičs, Manuel Portela, Bálint Balázs, and Baiba Prūse. 2020. 'Citizen Science in the Social Sciences and Humanities: The Power of Interdisciplinarity'. *Palgrave Communications* 6 (1): 1–11. https://doi.org/10.1057/s41599-020-0471-y.

The Guild. 2023. 'Priorities for Strengthening Social Sciences, Arts and Humanities Research in Horizon Europe', January. https://doi.org/10.48350/177867.

Tóth-Czifra, Erzsébet, Marta Błaszczyńska, Francesco Gelati, Femmy Admiraal, Mirjam Blümm, Erik Buelinckx, Vera Chiquet, et al. 2023. 'Research Data Management for Arts and Humanities: Integrating Voices of the Community'. Zenodo. https://doi.org/10.5281/ZENODO.8059625.