# EASST Review

European Association for the Study of Science and Technology



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## Previewing the 2022 EASST Meeting in Madrid: a travel guide

When we started thinking about the content of this EASST Review, we were living in a world that slowly seemed to be opening up again. We thought it would be a good idea to connect to this spirit and present you a preview of the Madrid conference and a special issue about STS in Spain. While at the moment we seem to be getting back into lockdowns across Europe and the state of uncertainty continues over winter, we are still glad that we can provide you with a preview of what awaits us in Madrid in summer. We genuinely hope that this edition will spark some enthusiasm for what EASST has in store for 2022 and that this adds some sunshine and intellectual joy to the festive period.

One person we will all very much miss during the next conference and as part of the EASST community is our dear colleague and friend Andrew Webster who passed away this Autumn. It seems only fitting that the new section **Remembering** is dedicated to him this time and SATSU is welcoming any additional thoughts about Andrew on their website: https://www.york.ac.uk/satsu/inmemoryofprofessorandrewwebster/.

Before diving further into the content of this issue, we would like to warmly welcome Andrea Núñez Casal as guest editor for this issue. With her knowledge of STS in the Spanish context she has been pivotal in the making of this edition. She temporarily took over the place of Sarah Schönbauer, who we want to congratulate with the birth of her son: very happy news! Another important change in the team behind the EASST Review is the shift in editorial assistant. Sabine Biedermann has taken care of the publication for a long time, first working alongside Ignacio Farías and over the past year helping us to understand what it takes to produce a Review. We want to thank her for all she has done for EASST, and the Review and we are hoping to say thank you in person soon. We are very glad that James Besse is taking over Sabine's work and looking forward to collaborating with him over the years to come. James is doing his PhD at Science, Technology, and Innovation Studies at the University of Edinburgh, studying the design and implementation challenges of the EU Settlement Scheme in the context of Brexit. As such the connection between the UK and Europe is close to his heart and he is keen to contribute to EASST.

This EASST Review is about the upcoming EASST 2022 Meeting in Madrid (now July 6-9, 2022) and STS in Spain. First, Vincenzo and Tess Doezema, will give an update about the conference preparations, including announcement of date change, followed by a special focus on the plenary sessions awaiting us from post-growth to science fiction. As place matters in research, and it is always better to get to see a place through the eyes of locals, we envisioned this volume of the Review as an 'STS travel guide', a modest intellectual and experiential guide to reflect on our upcoming meeting. With tourism being a key sector of the Spanish economy, we hope that our proposition of conceiving the present volume of Review as a 'travel guide' becomes a playful invitation to ruminate about, practice, and experience other forms of tourism in Spain, beyond stereotypes of sun, fiestas and siestas. As such, the Review maps the heterogenous and pluralistic ways in which STS is practiced in Spain. STS multiple is dedicated to Spanish research groups relevant to STS and Cherish not Perish highlights the Spanish

journals *Arbor* and *Dynamis*. We have invited contributions of groups and journals broadly and we still welcome additional contributions which we will publish in the upcoming months on the conference website.

Our intention in the preparation of this review was driven by our aim to show the diverse ways in which STS in practised in the host country of our forthcoming 2022 Meeting. **STS multiple** embodies those divergences, similarities, and idiosyncrasies of STS by including research groups from Vigo, Valencia, Ciudad Real, Madrid, and Barcelona. This section of the Review will show the interplay between an STS drawing on (critical) innovation studies, techno(bio)politics, technofeminism and disability studies among others, and an STS shaped and reshaped by the deep-rooted intellectual tradition in the History and Philosophy of Science, Medicine, and Technology in the country. An example of this transformations is the pioneering research field of Science, Gender, and Technology initiated in the past century by colleagues from the Science, Technology and Society Department of the Institute of Philosophy (CCHS, CSIC). The work of these colleagues has built, for decades, inclusive onto-epistemologies (see Alcalá, Pérez Sedeño y Santesmases, 2007), for instance highlighting the crucial role that women played throughout the history of Spanish science (see Santesmases, 2018).

Travel guides are about places. Likewise, tangentially, we believe that the work of our colleagues that these pages showcase, offer a rich opportunity through which to approach and experience Spain in its multiple and plural configurations: its rich, confronted cultures and (at times brutal) histories; its wounded silences; its jovial, joyful, and hopeful differences; its pluralistic ways of enacting and being in these diverse composites of lands or "territories of difference(s)" (Escobar, 2008). These territories of differences that compose more-than-one Spain, are indissociable from its imperial and colonial past and, consequently, from the ongoing historical responsibility and debt of Spain with Latin America. This fact brings us to the question of language and 'translations'. As you will see, this Review does not include the section Translations yet it embodies it by reflecting on shifts in meanings of STS in Spain and its concepts across borders, languages, and times. Spanish language, argues philosopher Reyes Mate, is "the language of an empire that ends up being spoken by conquerors and conquered" (2021, p. 14). Simultaneously, thinking in Spanish implies to be challenged by the «experiential richness of language"; it means to discover the "vocation of the South" (ibid) by which knowing and experiencing are one.

Os deseamos un muy buen descanso vacacional y un buen comienzo del año nuevo. ¡Nos vemos en 2022! As always, we welcome contributions to our next Review coming out in Spring.

The EASST Review editors, Andrea, Niki and Vincenzo



## IN MEMORIAM Andrew Joseph Webster (1951-2021)

In a letter dated 1st of February 1992, R.K. Merton wrote a lengthy note amounting to two typed pages addressed to the young author of the new monograph *Science, Technology and Society*. Merton, long recognised as a founding figure in the sociology of science, complements the author on his "repeated effort to inform the reader about the currents, and cross currents, in the sociological study of science and technology without introducing noisy, controversious rhetoric." Then, towards the end of his exegesis, he apologises for going on at such length having made a "fairly recent acquisition of a computer" which "tempts one into greater detail than originally intended." Merton valued what we all remember as Andrew's unique style, harmoniously bringing ideas and people together, contributing to the development of STS in the UK, Europe and beyond.



Andrew Joseph Webster was born on the 8th of August 1951 growing up in a quiet suburb of Manchester. He had a strong sense of identification with Manchester becoming an ardent lifelong Man City fan and seeing the club through its many changing fortunes over the years. He was raised and educated a Roman Catholic attending first St John's RC school and then later Xaverian College from 1962 to 1969. He excelled at music becoming an accomplished pianist and chorister, passions that would continue throughout his life.

He left school believing himself to have a religious vocation and was sent by the Xaverian religious order to Boston MA to undertake his noviciate. His time in Boston was defined by the turbulence of the early 1970s, the civil rights and anti-war movements in which he played an active part. In a curious twist of events, Andrew narrowly avoided conscription having been issued with US military draft papers in error, until he was able to convince the authorities of his British citizenship. Returning to the UK in 1971, he lived at Xaverian House in Strawberry Hill, London, but deeply missed the more open and progressive scene in Boston. Feeling increasingly constrained, he put religious life and indeed Catholicism itself behind him. Nevertheless, this said something important about the motives of a young person guided by the need for vocation, a calling and sense of purpose. These are all qualities that Andrew's friends and colleagues would come to recognise in him throughout the years to come.

He had enrolled in a degree programme in social science at the South Bank Polytechnic as it was then, later leading to a PhD in the Department of Sociology at the University of York, moving there with his wife Helen in 1974. At York, Andrew was supervised by Mike Mulkay, another major contributor to the emerging sociology of scientific knowledge (SSK), working alongside a cohort of other young PhD students who would go on to play leading roles in STS internationally.

His first academic post was as a lecturer in Sociology at the Cambridge College of Arts and Technology (CCAT) now Anglia Ruskin University, where he worked for the next twenty-one years. Even with an enormous teaching load Andrew was able to develop a formidable research and publishing profile. He brought out *Introduction to the Sociology of Development* in 1984, the 1991 *Science, Technology and Society,* followed by one of the most widely used sociological textbooks to emerge in the 1990s (published with colleagues at Anglia).

In 1988, Andrew established the Science and Technology Studies Unit (SATSU) as a way of reaching out to a broader community of sociologists, seeking to understand fundamental shifts occurring across the knowledge economies. Much of his work around this time pioneered sociological research into the changing relationships between academia and industry, public and private sector knowledge producers, and the increased blurring of institutional identities. One of his first ESRC funded projects was a study of the restructuring of public research organisations under Thatcher's programme of privatisation. Andrew's work, with others, focussed on the increasing commercialisation of public science with projects on patenting and critical research on government Foresight programmes. SATSU grew in numbers and established a strong portfolio of UK and EU-funded projects, having a formal 'public launch' in 1998 with a keynote by Arie Rip.

In 1999 Andrew and SATSU, including a small group of international researchers, moved to the Department of Sociology at the University of York, something of an intellectual home for Andrew over the years. Shortly after arriving, Andrew was appointed the director of the ESRC/MRC's major five-year programme of research on 'Innovative Health Technologies', also building on Andrew's involvement in early policy debates in Westminster on genetics and biotechnology. Further ESRC and EC funding led to projects on the sociology of regulation in the context of stem cell science and regenerative medicine

(the REMEDIE and REGenableMED projects). He co-edited Palgrave's *Health*, *Technology and Society* series together with Sally Wyatt resulting in over twenty books to date. Andrew was boundlessly energetic, engaged and insatiably interested in so many sociological aspects of the life sciences, medicine and biology.

Under Andrew's steer SATSU became an important node within the STS community, from early relations with likeminded centres in the UK to involvement with the wider European community, also via EASST. Over the years SATSU welcomed many colleagues to its seminars, workshops and conferences, not least the 2002 EASST York conference. The conference programme 'Responsibility under Uncertainty' is still available on the EASST website and shows a wide variety of themes, many still relevant today. The conference highlight had to be dinner amongst the carriages and vintage steam engines of the York Railway Museum.

A whole generation of young STS researchers journeyed through York, with Andrew and SATSU colleagues providing a lasting academic base that was both intellectually stimulating and socially welcoming. A successful EU application saw SATSU become a Marie Curie training site, mentoring doctoral students from all over Europe researching the new genetics and the integration of science, society and policy. The shared York experience provided a strong foundation for continuing collaborations over the years, eventually leading to the more global 'Bio-objects network' co-directed by Andrew and funded by the EU Cooperation in Science and Technology Action (COST) initiative with seventy or so members from over twenty countries. Work published by the network received the first EASST Amsterdamska award for creative collaboration on the volume *Bio-Objects: Life in the 21st Century*. As Andrew himself had to acknowledge with classically understated modesty, the concept 'bio-object' had become 'very mobile'.

Andrew was a highly recognised facilitator and insightful leader of people, serving as Head of the Department of Sociology at York (2005-2009) and then Dean of Social Sciences (2010-2014). Amongst many other initiatives, Andrew established the Science and Technology Studies doctoral training programme in collaboration with colleagues at Leeds and Sheffield. Nationally he was pivotal in founding the UK's Association for Studies in Innovation Science and Technology (AsSIST-UK) contributing to the connection between STS and innovation studies and consolidating the role of STS in UK policymaking. He 'retired' in 2018 becoming Emeritus but sustaining a demanding research schedule now coupled with one of his favourite pastimes, hiking in the hills and woodlands of North Yorkshire with Helen, his lifelong friend and companion.

Andrew will be as much remembered for his truly wonderful personal qualities as his professional achievements. His door was always open and, no matter how incredibly busy he must have been, he was available to listen, to advise and to share a witty anecdote or two. His whole personal ethic was, in a way, about hospitality. He was brilliant at the art of making connections, the crossover no one had thought of. His skill in guiding researchers to develop their work and careers was recognised with the 4S mentoring award, praising his kindness, sense of humour and his ability to value everyone's contribution and bring them to a higher level: "a rare combination of an excellent researcher and research manager - who is extremely generous and supporting... a great inspiration for how one can combine an ambitious academic research career without losing sight of the more social aspects of life."

Many of us will remember fond memories of the Webster's Summer BBQs where Andrew, with that twinkle in his eye, would ply everyone with just another glass. He also made the effort, every year, to take his research group out on a day trip somewhere. It was on one of those occasions that Andrew took SATSU to the Yorkshire Sculpture Park to walk amongst work by Barbara

Hepworth, Henry Moore and others. While walking around, Andrew spotted something, this was a huge iron artwork in a storage area of the park. He wandered off for a bit, and then reappeared. No one thought more of it. But some months later an enormous truck and crane appeared outside the Department of Sociology and installed that same vast monumental artwork on the lawn. It's four metres high and four tonnes heavy. It's a colossal organic hollow shape made of hot rolled steel called 'Beyond and within' by Joanna Mowbray. It looks like it's been there forever and will be there forever more. Nestling amongst those trees. That was Andrew, beyond and within, a gentle and lasting force in the world. Our mentor and friend is survived by Helen his wife, his two wonderful sons Matt and Nick, and now a growing brood of grandchildren.

Written by Nik Brown and Niki Vermeulen



'Beyond and Within' (hot rolled steel -H 370 x W 547) by Joanna Mowbray

### STS EVENTS

# Politics, technology and futures in times of crisis: a note of anticipation for the upcoming **EASST 2022** conference

Vincenzo Pavone, Tess Doezema

What are the politics of (the) future(s)? That is, what are the various political conflicts and formations associated with imagining and enacting futures — futures that are calculated through complex processes of projection and modeling, and futures that are collectively imagined as good, right, and attainable? And the inverse: what kinds of sociotechnical formations do we ourselves seek to enact or avoid—how does (or should) our research contribute to the piecemeal and cumulative production of futures? Further, how does the increasingly widely articulated sense of instability and uncertainty configure those processes of future making?

With these questions, we propose to create conversation and draw together knowledge about politics, technoscience, and worldmaking in the next EASST conference, which will take place in Madrid between the 6th and the 9th of July 2022.1

Prediction, anticipation and projection of events and circumstances yet-to-come are potent tools for ordering, building, enclosing, and modeling our present. STS scholars have long pointed out the role that science, technology and innovation play in this process. This topic is indeed not new, but the current moment of instability —of continuously compounding crisis—uniquely raises the salience of these questions, making them more urgent and visible than they otherwise might be.

As we pointed out in the conference theme, the current pandemic is not alone in disrupting human and non-human lives and livelihoods. The record-setting heat waves of summer 2021, along with unprecedented floods in Northwestern Europe, not to mention the *medicane* Apollo that recently hit Sicily, remind us that we are already well beyond the point of no-return in the climate crisis. These events come to unsettle our daily lives after a decade characterized by the 2008 financial crisis and the subsequent recession and debt crisis, which propagated across the world.

This is a moment in which various modes of human interconnectedness are (re) constructed and made visible as sociotechnical systems *at risk*. Our hope is that the EASST conference in Madrid may be an opportunity to collectively consider the role of STS research in the contemporary proliferation of more or less articulated attempts to redefine problems, to set new agendas, to reframe challenges, and to produce new sociotechnical imaginaries to steer and order the uncertain present using the light of imagined futures.

We propose that these political processes deserve special attention in our scholarly community, because in these moments of crisis new opportunities may arise, and the proliferation of different, contrasting futures makes our present more open to previously inconceivable alternatives. In this endeavor, both our scientific gaze and our constructive participation are called upon to contribute, study and imagine, to cast light and be self-reflexive at the same time.

Accordingly, we are setting up a conference program that seeks to address these compelling issues in a dynamic and interactive way. In this short text, we have the privilege to share with the EASST community a preview of the conference events, with which participants will be invited to engage within and beyond traditional panel formats. Specifically, we have planned to host two plenaries and four sub-plenaries, in which we will share reflections, knowledge, strategies and concerns about what we refer to in the title of the conference as the *politics of technoscientific futures*.

1 Please note: Due to the NATO Summit that will be held on the 29th and the 30th of June on the same premises we had originally booked for our conference, we had to postpone the conference by one week. The new dates are the 6th to 9th of July 2022, in the same venue. We apologise for all the inconveniences caused, but this had to be done due to reasons of force majeure.

The first plenary session, chaired by Carmen Romero Bachiller, will address the topic of the conference in a dialogical setting, where Amade M'Charek and Annalisa Pelizza will engage in conversation about the migration crisis at European borders. Amade's analysis of forensic care work connects the lives of the people lost in the Mediterranean with broad reevaluations of former colonial domination and current extractivist practices. Annalisa's work focuses on technological border control and the production of migrants as other in the EU. These issues have taken on new urgency under the COVID pandemic, accompanied by the increasing presence of extreme right political positions throughout Europe and the threat they pose to democratic ideals. Speaking from the vantage point of their scholarly work, this conversation will engage STS research through explicitly feminist and anti-racist lenses.

The subplenaries will then direct our attention to various sites at which technoscientific futures are under active contestation. Mario Pansera will chair a sub-plenary that takes up the debate about the future of growth and de-growth. Growing evidence of accelerating climate change and ecological destruction gives new force and urgency to the movement to advance knowledge and theory regarding alternative forms of economic order, and related questions regarding the relationship between technological innovation, knowledge production, and routinized modes of capitalist accumulation. Innovation has been, so far, framed as a way of transcending limits, thus functioning to legitimize infinite growth. Seeking to subvert existing assumptions about the relationship between innovation and growth, this sub-plenary will invite discussion about new narratives of collective well-being as well as new innovation practices and policies. Can we push the imagined scope of innovation beyond the technological, and consider patterns of cultural and institutional change, resilience, and revision that might support the continued flourishing of a wide range of planetary life forms? How might science and technology take shape in a system that is not based on the premise of endless growth? What policies, infrastructures and organizational forms are needed or are more likely to facilitate a post-growth innovation era? These are just some of the questions that will inspire and challenge us during this sub-plenary.

The climate crisis, of course, is not the only agent of destabilization acting on the contemporary landscape. The politics of technoscientific futures must also contend with important concerns about artificial intelligence and the mobilization of algorithmic tools in fields as diverse as healthcare, urban mobility and labor markets. A wide variety of social, economic, ethical and political issues have emerged along with this process of sociotechnical transformation. The use of algorithms and the accountability of developers, users and customers involved in their generation or adoption is progressively, and compellingly, dominating public debates. Mauro Turrini, Nuria Vallés (from the local organizing committee), together with Ulrike Felt (from the scientific committee) are preparing a sub-plenary on algorithms, prediction and narratives of futures. They will host a roundtable on the futures involved in the use of algorithms, promises, and emerging new forms of governmentality and resistance. Notably, this sub-plenary is conceived as a dialogue between academia and activist collectives of digital rights including but not limited to the automation of everyday life, population control, civil rights, the domestication of algorithms, and the construction of new imaginaries of collective life.

In times of crisis, as we know all too well, the politics of futures are not only imagined and performed through policy measures, political debates or technological innovation. Science fiction plays a key role: images and words invoking the future are often used by companies and governments to promote new products, such as medical treatments and devices, autonomous vehicles, and big science investments. With this in mind, the conference will include a sub-plenary on science fiction and science futures. Sally Wyatt, Michela Cozza and Nina Witjes will help us to investigate the complex and fascinating relationship between science and science fiction, where science fiction is often the source of inspiration for scientists

and engineers, while science studies can be a source of inspiration for science fiction writers and artists. Addressing topics as diverse as the anthropocene, energy & climate change; datafication, Al space exploration & interplanetary travel; health, genetics & the enhancement/extension of human life, this sub-plenary explores different ways that speculative and science fiction (SSF) are used not only as a source of visions and imaginaries for scientists, engineers and others, but also as a method and device for STS scholars to engage with interlocutors during fieldwork and with wider audiences. Bringing together academic scholars, screenplay writers and artists this sub-plenary will stimulate the (individual and collective) EASST imagination through paying attention to, and engaging with, poetic, literary and artistic renderings of techno-scientific futures. The organizers have also announced a science fiction competition, the winners of which will be announced during the proceedings. Shortly, in these pages, we will open a writing contest in which participants can send short stories or poetry pieces about science fiction and science futures. The winners will get a symbolic prize at the conference and will have their manuscripts published in the EASST Review.

Finally, it would not make sense to talk about crisis, politics and futures without explicitly centering the perspectives of early career scholars, and seeking to address the tangle of intergenerational justice issues ingrained in the politics of technoscientific futures. Our final sub-plenary, organized jointly by Adolfo Estalella, Violeta Argudo, Esther Ortega (from the local organizing committee) and Sarah Rose Bieszczad (from the scientific committee) will address speculative ecologies. Their proposal reminds us that the current environmental and health crisis is not only revealing the constitutive vulnerability of our world, but also creating speculative spaces to identify and explore the possible. This process, though, cannot be decoupled from contemporary speculations about the many possible forms of our scholarly practice. How should our modes of research respond to the challenges of our time? How could we renovate our scholarly practices? This sub-plenary will address these questions, drawing in the concept of 'speculative ecologies', and focusing on those organized collectives that offer us the possibility to speculate not just with different futures but alternative presents too. Involving early career scholars from across Europe, the sub-plenary will not engage with the production of fictions or forecasts: on the contrary, it will focus on practices that are rooted in the present and resist the fateful future.

In the closing sentences of the conference theme, we suggest that a closer study of the dynamics by which the past and the present are known, and correspondingly acted on and re-described in the name of better futures, is an urgent task for our STS community. We also promise that the conference will provide a memorable opportunity for scholars across all the fields and areas of science and technology studies to rise to the occasion of collective destabilization to engage critically and creatively with the technoscientific politics of futures. We hope that these unique and inspiring moments of collective engagement and debate will help us to deliver on our promises.

#### SUBPLENARY ONE

IMAGING A POST-GROWTH SOCIETY: SCIENCE, TECHNOLOGY AND INNOVATION BEYOND GROWTH

Organizer(s): Mario Pansera (University of Vigo)

The feasibility and desirability of endless economic growth is increasingly being questioned by scholars and activists. While envisioning alternative economic models is key to assure the sustainability and wellbeing of present and future generations, few studies have analysed what might be the role of 'innovation' in a post-growth era. Innovating has become the imperative for the survival and expansion of any form of organisation. This sub-plenary starting point is that untangling innovation from growth is key to imagining a post-growth era. If growth is going to be unsustainable, we need new narratives as well as new innovation practices and policies that would accordingly also have to change and increase the scope of the innovation concept itself, beyond technology, into cultural and institutional change, and indeed social life and social order. The STS community has only recently begun to get involved in the debates about post-growth and de-growth. STS contributions may enrich the ways in which we imagine and configure STI systems, which are in turn crucial for enabling a sustainable future and an adaptation to the challenges of the climate crisis. But how science and technology will look like in a system that is not based, and doesn't not rely, on endless growth? Under which conditions STI without growth would be able to flourish? What levels of technological complexity can we reach in a non-growing economy? What policies, infrastructures and organizational forms are needed or are more likely to facilitate a post-growth innovation era? Questions that have been so far rarely asked within STS and STI circles are now at the heart of what this sub-plenary will address.

#### SUBPLENARY 2

ALGORITHMS, PREDICTION AND NARRATIVES OF FUTURE. A ROUNDTABLE ON THE FUTURES INVOLVED IN THE USE OF ALGORITHMS, THEIR PROMISES AND THEIR NEW FORMS OF GOVERNMENTALITY AND RESISTANCE

Organizers: Mauro Turrini (IPP-CSIC), Ulrike Felt (University of Vienna), Nuria Vallés (University Autónoma Barcelona)

This sub-plenary is conceived as a dialogue between academia and citizen participation, as one of the privileged strategies proposed by STS, to build new narratives around the role of AI in our lives. For this reason, academics with different expertise and people from activist collectives of digital rights collectives are invited as speakers. For this reason, the session will be organized around a series of questions introduced by the discussant (and previously discussed with the speakers), on issues such as: the automation of everyday life, population control, civil rights, the domestication of algorithms, the construction of new imaginaries of collective life, etc.

#### SUBPLENARY 3

#### SCIENCE FICTION AND SCIENCE FUTURES

Methods, forms and norms
Techno-science-fictional
Gazing at the stars
(Haiku)

#### Organizer(s):

Sally Wyatt (Maastricht University); Nina Klimburg-Witjes (University of Vienna) & Michela Cozza (Mälardalen University)

Speculative and science fiction are often sources of inspiration for scientists, engineers and in popular culture, while science studies can be a source of inspiration for science fiction writers and artists. Images and words invoking the future are often used by companies and governments to promote new products, such as medical treatments and devices, autonomous vehicles, and big science investments. This panel explores different ways that speculative and science fiction

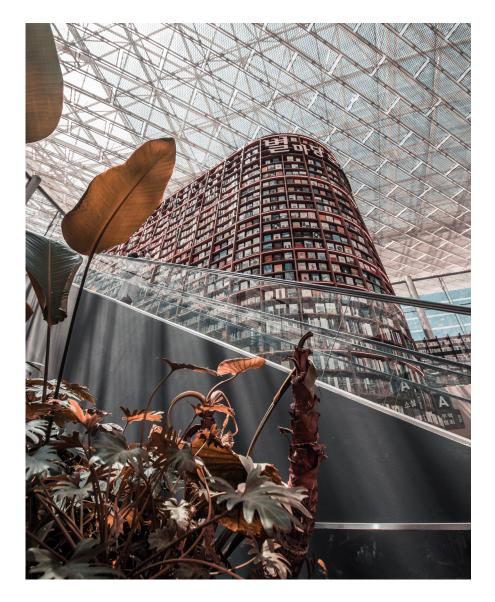


Fig 1: Picture made by Berti Weber

(SSF) are used not only as a source of visions and imaginaries for scientists, engineers and others, but also as a method and device for STS scholars to engage with interlocutors during fieldwork and with wider audiences. The aim of the sub-plenary is to stimulate the (individual and collective) EASST imagination through paying attention to and engaging with poetic, literary and artistic renderings of techno-scientific futures. Speakers will be invited to explore some aspect of the role of SFF in different domains, including Anthropocene, energy & climate change; datafication, AI space exploration & interplanetary travel; health, genetics & the enhancement/extension of human life. There are many different aspects to this, including how SFF shapes the hopes, promises and fears that appear in the discourses of research agendas, public policy, design, media, and education. The panel will be accompanied by a competition for short stories & poetry related to science-technology-futures (details for the competition will be announced by the end of the year and winners awarded at the EASST conference 2022).

#### SUBPLENARY 4

#### SPECULATIVE ECOLOGIES FOR A VULNERABLE WORLD

Organizers: Adolfo Estalella (University Complutense Madrid); Violeta Argudo-Portal (IPP-CSIC): Esther Ortega-Arjonilla (University Tufts Skidmore Spain); Sarah Rose Bieszczad (Leiden University)

With the current environmental and health crises revealing the constitutive vulnerability of our world, the creation of speculative spaces to identify and explore the possible is more urgent than ever. This move must go hand in hand with speculations about the many possible forms of our scholarly practice: how should our modes of research respond to the challenges of our time? How could we renovate our scholarly practices? In this sub-plenary we would like to address these questions drawing in the concept of 'speculative ecologies'. There is a long-tradition in STS demonstrating that beyond the formal and institutionalized modes of knowledge production, there thrives in our societies modes of impure science and wild research that shows alternative ways to face the challenges of our world. Social movements, civic organizations, and organized collectives have taught us how to pose the challenging questions that our world in crisis needs. In this sub-plenary we would like to think with our counterparts, those organized collectives that offer us the possibility to speculate not just with different futures but alternative presents too for their modes of inhabitation offer other modes of engagement with the world. The speculative practice that we invoke is thus not engaged in the production of fictions or forecasts, on the contrary, it is a practice rooted in the present that resists the fateful future. We would like to open a dialogue about how different organized collectives engage with speculative ecologies. First, we are interested in those efforts whose practical engagement entails a form of speculation with different ecological relations: from activists of extinction rebellion to scientists that demonstrate how we can learn from nature to respond to the present challenges—just to give two possible cases. Second, we are interested in collective projects aimed at the renovation of our academic environment (or, in our parlance, the ecology of practices of academia), initiatives that create the speculative conditions to bring into existence alternative scholarly practices—from novel practices of evaluation for academic work to alternative modes of teaching or different ways of academic organization.

### STS MULTIPLE

## THE BARCELONA SCIENCE AND TECHNOLOGY STUDIES GROUP (STS-B)

Miquel Domènech, Francisco Tirado

THE BARCELONA SCIENCE AND TECHNOLOGY STUDIES GROUP (STS-B) WAS FOUNDED IN 2013. STS-B'S OBJECTIVES HAVE EVOLVED IN A QUITE CANONICAL WAY FROM A PAST INTEREST IN THE STUDY OF SCIENCE AND TECHNOLOGY TO ITS CURRENT APPROACH TO STS IN WHICH THE EMPHASIS IS ON THE ANALYSIS OF THE CENTRAL ROLE OF SCIENCE AND TECHNOLOGY IN DIFFERENT SOCIAL AND CULTURAL PROCESSES. THUS, STS-B RESEARCHERS HAVE PAID ATTENTION TO ISSUES SUCH AS AGING, PUBLIC HEALTH, CARE, ENVIRONMENTAL CONTROVERSIES, SOCIAL MOVEMENTS, AND PROCESSES OF SOCIAL AND CULTURAL INNOVATION.

The Barcelona Science and Technology Studies Group (STS-b) was founded in 2013 thanks to the confluence of two research groups from two Catalan universities with long histories of research in STS. These were the Group of Social Studies of Science and Technology (Grupo de Estudios Sociales de la Ciencia y la Tecnología - GESCIT), founded in 2002, from Universitat Autònoma de Barcelona (UAB) and Social Action and ICT (Acció Social i TIC-ATIC) from Universitat Oberta de Catalunya (UOC).

Later, in 2017, researchers from ATIC detached from the group, which became almost exclusively formed by UAB researchers. Nowadays, the group is composed of eight full members and located in the Department of Social Psychology at the Universitat Autònoma de Barcelona.

Under one acronym or another, researchers who form the STB-b group have been working on STS in Spain for about 25 years. This means that when describing their research trajectory, the time span they cover goes beyond the date of the group's foundation. In this sense, it would be difficult to set a specific date for the start of the group's activities. However, we believe that the date of 1998, when Miquel Domènech and Francisco Tirado published the text "Sociología simétrica. Ensayos sobre ciencia, tecnología y Sociedad" [Symmetrical Sociology. Essays on science, technology and society], could serve as a guide to date the beginning of the group members' research in STS. It is worth noting that doing STS in Spain was no easy task at that time. There was no local community of reference, STS content was not present in any university degree and proposals for research projects with this approach were difficult to place in public funding calls. Even today, it is still an infrequently trodden path, with serious difficulties in finding institutional recognition. Be that as it may, in our group we are proud to have contributed to tracing that path, to have made it a little wider, and to have helped the development of STS in Spain, however modest its institutional presence may be. What follows is a brief outline of our journey

Since its inception, STS-b has made an effort to broaden the spectrum of studies of science and technology according to the evolution this area has had in recent years. Thus, its research objectives have evolved from a past interest (1995-2005) in the study of science and technology focused on issues such as the social impact of techno-scientific innovations or the understanding of science and technology to its current approach (since 2006 onwards) to STS in which the emphasis is on the analysis of the central role of science and technology in different social and

cultural processes. In this vein, STS-b is committed to the analysis of science and technology out of the classical and clearly identifiable institutions such as laboratories or research centers and instead studies how science and technology are spread and intertwined in open and varied social practices. Thus, STS-b researchers have paid attention to issues such as aging, public health, care, environmental controversies, social movements, or processes of social and cultural innovation.

The research activity of the group consists of four main areas of interest. The first has to do with the study of public participation in the knowledge society. The changes having led to the increasingly consolidated dominant role of knowledge in our societies have radically transformed the conditions for taking part in public and political life. Among these changes, the increasing importance of scientists or experts in deliberative and decision-making processes stands out. In our research we have tried to discern to what extent this predominant role of expert knowledge may be an obstacle to citizen participation in public controversies or political processes. It has been of particular interest to us to analyze in depth the participatory mechanisms mixing lay people and experts that have proliferated as the 21st century has unfolded. Such hybrid forums can take place as institutional (top-down) initiatives, promoting participatory mechanisms such as public consultation and consensus conferences, or as social mobilization (bottom-up) actions, such as those of concerned groups calling for greater participation in the definition of social care policies in Spain. We have been studying both forms of public participation, with a special interest in identifying the role that expert and non-expert forms of knowledge play in the elaboration of contemporary public policies and the exploration of new ways to pluralize political decision making about science and technology.

Much of the work of STS-b researchers has to do with the "participatory turn" in STS, always based on a commitment with the development of a critical view towards certain forms of participation that turn public involvement into an empty exercise (Aceros and Domènech, 2020). Representative research from STS-b on public participation in science and technology includes the following projects: "The Transformation of Public Controversies in Knowledge Society. A psychosocial analysis of experts and citizens' participation in the debate on water resources" (2005-2008); "Consensus Conferences in Knowledge Societies. An Essay of Dialogic Democracy with Older People and Experts" (2012-2014) and "Citizenship in the Knowledge Society: analysis of obstacles to citizen participation in deliberative processes" (2013-2014).

STS-b's second area of interest is care technologies. The significant long-term care needs of contemporary societies have generated a boom of innovations such as social alarms, telecare, self-tracking technologies and e-health designed to promote independent and healthy living. Their users are responsible for taking care of his/her own health, of monitoring his/her own activity and for making decisions related to his/her lifestyle, bearing in mind its associated risks. This definition of 'independent living' has often played the role of a future-oriented norm, as a promise that would help prevent the collapse of health and social care systems. Drawing mainly on innovation studies, we have been interested in analysing how healthiness, autonomy, care and solidarity, as well as certain social identities, are inscribed in technology design. At the same time, we have sought to show how users interact with these innovations, how they resist them or appropriate them (López & Domènech, 2009). In this area of research, two projects stand out: "Technology and attention to dependence: analysis of the psychosocial effects of telecare implementation" (2009-2011) and "Health and Technoscience. Citizen Participation in Social Appropriation of Knowledge and Technological Design Processes" (2015-2017). In this last project, our interest in citizen participation converged with the analysis of health technologies. In collaboration with a group of engineers, we explored the feasibility of involving children in the design of social robots for children's hospitals.

The third area of interest for STS-b is biomedicine and biosafety. In this area, we analyze contemporary practices (especially referring to science and technology) that form and shape a new conception of life at the turn of the 21st century. From this line, we scrutinize epidemics, bioterrorist threats, biomedical advances, bio-neoliberal developments, biosafety standards and bio-surveillance protocols or agreements. We have paid special attention to how risk has become a bio-risk and how new mechanisms for managing bio-risks have been formed. This has allowed us to highlight different contemporary phenomena in relation with life management such as the construction of future and virtual scenarios as an alternative to classical risk calculation systems. We have also paid attention to the production of expert knowledge on the basis of visual and illustrative perceptions in order to facilitate its public reception. And, finally, we have described the emergence of a new public health intelligence focused on epidemics and massively using social networks to predict future outbreaks or the rise of global surveillance networks that involve ordinary people in biosurveillance practices (Tirado & Torrejón-Cano, 2020).

Finally, the group has been involved in the development of ethical frameworks for care technologies. The reflection on the ethical implications of technological innovations runs through most of our projects, but on certain occasions, it has been the main focus of our research. One example of this is our participation in the European Union funded project entitled "EFFORT - Ethical Frameworks for Telecare Technologies for older people at home" (2008-2011). In the last few years, we have been focusing on the implementation of social robots for care, as in the current project "Ethics for Robots caring for us" (2018-2021). Our aim in this project has been to depart from the Ethical, Legal and Social Implications (ELSI) approach, common in social robotics. We have observed that this approach tends to bifurcate reality as if science and society were two different systems. It focuses on very general aspects of social issues such as legal frameworks of research or very specific ones such as the use of informed consent in interactions with users. In other words, this is a perspective that tends to address "social" aspects as if they have little or nothing to do with scientific activity, and pays little attention to the practices and perspectives of research/innovation practitioners and the meaning they give to ethical and social issues. However, as we have shown in different works, addressing issues that go beyond the ELSI paradigm, such as the imaginaries of designers and engineers (Vallès-Peris & Domènech, 2020), can shed new light on the understanding of innovation processes and contribute to a design and implementation of new technologies that is more harmonious with social needs. In this sense, we have used the notion of imaginary - in a way close to Castoriadis's radical imaginary - as a tool to unravel ethical, political and social concerns that care robots entail, and, at the same time, elaborate alternative images of good care.

As mentioned above, the institutionalization of STS in Spain is quite limited, which means that STS-b's activity in this field is mainly concentrated on research, with little impact on teaching. However, it is worth mentioning that the Barcelona Science and Technology Studies Group carries out training activities through its doctoral program entitled "Person and Society in the Contemporary World". One of its lines of research is devoted to STS and dozens of PhD students have passed through it since its creation in 2013, which makes it a rather unique case in the Spanish context.

One indicator that all these years of work seem to be bearing fruit is that two of the most recent degrees at our university - Artificial Intelligence and Science, Technology and Humanities - include STS-related subjects in their content. For our group, this has been the best reward we could have imagined. Undoubtedly, there is still a long way to go, but these small achievements show us that we are on the right track.

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### CARE & PREPAREDNESS IN THE NETWORK SOCIETY.

Israel Rodríguez-Giralt, Daniel López Gómez

Few doubt that we are globally facing a care crisis. A crisis aggravated by the transformation of the Welfare State and the proliferation of climate, environmental and technological risks and disasters. This crisis is challenging the traditional organizations and arrangements through which life is sustained and our worlds are made livable. In this context, the aim of CareNet is to understand the centrality of care in our societies and particularly, how knowledge and technology contribute to creating, transforming and sustaining networks of care, support and preparedness. Our approach to care is inspired by feminist technoscience and our way of doing STS is very much informed by care studies and theories (López Gómez, 2019; Latimer and López Gómez, 2019; Rodríguez-Giralt & Tironi, 2020). In this regard, we consider care both as an affective and ethical practice as well as a material doing that is not innocent (Puig de la Bellacasa, 2011). It is rather articulated through power relations and may reproduce forms of domination and different sorts of violence. Thus, rather than romanticizing it, our aim is to "unsettle care" in technoscience (Murphy, 2015)

So far, our exploration of care in technological societies has revolved around three main areas of inquiry:

Firstly, we have cultivated ethico-political and epistemic interests in the infrastructural aspects of care. We have approached socio-spatial relations of labour, care and the body in urban care infrastructures (Cassián-Yde, 2019) processes of design and use of telecare systems for older people (López Gómez, 2015), off-catalogue and DIY technical aids for accessibility politics (Sánchez Criado & Rodríguez-Giralt, 2016), mutual support systems and online platforms for social connectedness in later life (Beneito-Montagut et al. 2018; López-Gómez, Beneito-Montagut, and García-Santesmases, 2021). We have also focused on independent living initiatives and services for and by disabled people (Moyà, 2018), as well as infrastructures for ageing in the community and alternative social care configurations (López, Estrada, Farré, 2021). We have participated in a number of research projects aiming to understand how these infrastructures are made, how they are designed and arranged in practice (López & Sánchez-Criado, 2015; Sánchez-Criado, López, Roberts, & Domènech, 2014; Sánchez-Criado & Rodríguez-Giralt, 2016).

In these projects, we pay special attention to what usually remains invisible in the grand technological narratives: the complexities of daily-life material practices. Looking at how care is infrastructured requires studying the boring things of care, as Lampland and Leigh Star (2009) would put it. But this is a privileged angle to understand the micropolitics of care in contexts where care is increasingly technological: it foregrounds the distribution and organization of care, the different manners in which it is embodied by the actors involved, the values and normativities around what is good or bad care (Pols, 2015), as well as the materialities, temporalities and spatialities of care.

In recent years, communities, groups and online networks of care have proliferated throughout Europe that aim to construct alternatives to state-, market- and family-based care solutions where the focus is on the community. Our second line of inquiry focuses on how new networks, grassroots and more embodied (Rabeharisoa et al. 2014) forms of activism are redefining care. How they share and generate new ecologies of knowledge and new notions of citizenship around



care. In this regard, we have researched a wide range of self-organized caring communities across social sectors: senior co-housing initiatives, independent living initiatives that provide self-managed services for disabled people, disaster-affected communities building up their resilience, and patients' associations and health-activist groups looking to increase their condition's visibility, demand better health interventions and provide support.

At the intersection of STS, social movement studies, critical ageing studies and disability studies, we also aim to understand the contested role of technoscience (Rodríguez-Giralt, Marrero & Milstein, 2018) in the configuration of old age, disability (García-Santesmases and Arenas, 2017) or mental health (Martínez et al. 2020). These are categories that define specific actors as in need of care and that othered them because the differences in their bodies, agency, interests or capacities are marked as not complying with normative standards. Our research aims to foreground how constructs such as old age (Peine, Marshall, Martin & Neven, 2021), disability, mental health or chronicity are constructed, experienced, embodied and challenged (López & Domènech, 2008; López Gómez & Sánchez Criado, 2021). This has also allowed us to expand the aforementioned intersections and progressively incorporate angles and sensibilities coming from feminisms, queer and crip perspectives, decolonial geographies or critical animal studies (Thovar, 2020).

Thirdly, CareNet also aims to study the role of knowledge and technology in the transformation of our care for/about emergencies, crises and disasters. Drawing on the conceptual and methodological work done by STS and techno-feminist approaches, this line of research critically interrogates the more naturalised, technology-driven and accelerated approaches to disasters, crises and emergencies. We explore how care can work as an epistemic, as well as an ethical-political pillar, to rearticulate disasters, crises and emergencies as much slower (Fortun et al. 2017) and contested processes (Tironi, Rodríguez-Giralt & Guggenheim, 2014; 20). Mundane care practices emerge, in disaster situations, as forms of enduring, healing but also producing knowledge, especially about the most chronic and silenced dimensions, which are often related to inequality, social exclusion and institutional abandonment (Tironi & Rodríguez-Giralt, 2017).



Through participatory, rights-oriented and culture-sensitive approaches to disasters we have been involved in projects like CUIDAR (H2020), devoted to analysing and transforming the exclusion of children and young people from the disaster planning and management (Mort, Rodríguez-Giralt and Delicado, 2019), Pyrolife (ITN, H2020) -a training programme to promote more integrated and inclusive management of wildfires in Europe-, and on creating dialogues with citizens for collaborative management of chemical risk in Catalonia. More recently, we have also been involved in several projects analyzing the impact of pandemics in several care services, from care homes to the role of digital infrastructures in providing social support, connectivity and community resilience among elderly people. Our group combines expertise from a wide variety of disciplines and fields of study: Science & Technology Studies, which is our most common background, but also Disability Studies, Gender Studies, Urban Studies, Digital Sociology, Social work, Psychology, Anthropology, etc. We are convinced that this multidisciplinary, and interdisciplinary approach, strengthens our integrated and comprehensive study of the transformation of care and preparedness.

The group is formed by 2 full-time researchers, whose time is paid by projects and the group's budget. There are also 5 part-time researchers, who combine teaching responsibilities with research contributions, 3 associate researchers who work in other universities and 6 PhD students, all grant-holders. The group also treasures a network of academic collaborators, both nationally and internationally. And equally important, we look after a wide network of stakeholders: practitioners, activists, public administrations, service providers, etc. This is absolutely central for us, as it allows us to promote more participatory, interdisciplinary and socially relevant research. For us, interdisciplinarity has become an object of study —for instance, we have explored how different epistemic communities collaborate in the development of responsible smart technologies (CANDID, H2020)-, but it has also turned into a goal in our research practice. We like to engage in collaborative forms of research where we can experiment with our co-experts, and/or counter-experts, and co-elaborate knowledge and opportunities for social change and intervention (Criado & Rodríguez-Giralt, 2019).



This mode of research usually entails long and careful ethnographical engagements and means to be open to a more radical democratization of the who and how of techno-science. As an ethic of companionship and experimentation, it also means to be open to processes by which scientific truth and credibility, or technical objects, are publicly opened up for debate, scrutiny, control, and co-construction. This explains why the group regularly develops public engagement activities, like open days, open seminars or other forms of open science, where we share and discuss the results of our research with co-experts, stakeholders and concerned groups. As we remarked in the motto of the 2016 EASST/4S Joint Conference celebrated in Barcelona, which we contributed to organizing, we understand STS as an opportunity to perform, share and experiment with Science and Technology "by other means".

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## INGENIO: STS PERSPECTIVES IN THE ANALYSIS OF SCIENCE AND INNOVATION POLICIES

INGENIO (CSIC-UPV) Valencia, Spain.

INGENIO (CSIC-UPV) IS A RESEARCH CENTRE THAT SPANS A BROAD RANGE OF SCIENTIFIC DISCIPLINES IN ITS STUDIES OF RESEARCH AND INNOVATION (R&I) AND R&I POLICY. STS CONTRIBUTES CONCEPTUAL RESOURCES TO MANY LINES OF INGENIO RESEARCHERS' WORK, AND PROVIDES MANY OF THE EXEMPLARY CASE STUDIES THAT INFLUENCE PROJECT DESIGNS. THE TAKE UP AND USE OF STS RESEARCH CONTRIBUTES TO INGENIO'S OWN ENGAGED RESEARCH PRACTICES AND ITS CAPACITY TO HAVE IMPACT IN SCIENTIFIC AND SOCIETAL ARENAS. INGENIO RESEARCHERS ALSO PARTICIPATE DIRECTLY IN STS COMMUNITY CONFERENCES AT INTERNATIONAL AND NATIONAL LEVELS.

INGENIO (CSIC-UPV) is a joint research centre of the Spanish National Research Council (CSIC) and the *Universitat Politècnica de València* (UPV). INGENIO was founded in November 1999, with an initial emphasis on the management of technology and the economics of innovation, applied particularly to industrial sectors in the region of Valencia. However, the centre has expanded and evolved significantly since those formative years and now conducts diverse types of research on the complex relationships between science, technology, innovation and society. INGENIO aims to undertake high quality and socially relevant research that advances knowledge and contributes to addressing societal challenges.

INGENIO is situated in the *Ciudad Politécnica de la Innovación* (CPI) on the main campus of the UPV. As a joint centre, INGENIO includes researchers from both its partner organisations. CSIC employs ten permanent full-time researchers in INGENIO, while the many INGENIO's UPV faculty staff also teach undergraduate and graduate courses. UPV staff also plays the leading role in managing the INGENIO Master's degree in the Management of Science and Innovation. A permanent team of six technicians and administrators provide administrative, managerial and technical support.

In addition to these permanent staff, there is a large contingent of project-based contract researchers and doctoral students. Many of these doctoral students are drawn from a range of different Latin American countries and, in general, INGENIO is a relatively international centre when compared to typical Spanish institutions. Currently, INGENIO has around 60 members in total, of which 21 are PhD students.

The work of INGENIO is organised under five main research lines. While not an STS research group *per se*, INGENIO can be characterised as a centre that includes some STS trained researchers, is strongly STS aware, and is a consistent user of STS scholarship in its diverse lines of work. INGENIO researchers are frequent participants in 4S/EASST conferences and have published in journals like *Social Studies of Science*, and *Science Technology and Human Values*.





Education, Employment & Skills



Social & Environmental Innovation for Sustainability



Innovation Policy Design & Evaluation



Territorial Innovation & Organizational Capabilities

Figure 1. INGENIO research lines

Several current projects in INGENIO use STS theories and methods, typically blending insights about socio-materiality, technical devices, and performative effects with the politics, sociology, management, ecology and economics of research, innovation and socio-technical change. In the area of monitoring and evaluation of R&I, current projects draw on insights from STS in working to design innovative qualitative approaches to the assessment of project and policy interventions. We are working to develop monitoring approaches that support learning and stakeholder community building in R&I interventions and policy. This is influenced significantly by the canonical work of Michel Callon and colleagues (2009) regarding the contributions of societal actors to socio-technical transformations.

Multi-stakeholder governance is a key element in STS approaches to the analysis of sustainability and socio-technical transitions, and this underpins a range of studies at INGENIO. For example, the centre has participated in the facilitation of multi-stakeholder groups at the city level, in the Energy Transition Group of the Valencia 2030 Strategy, at the metropolitan area level in the *Consell de l'Horta*, and at the regional authority level, in the Mirror Group of the Climate Mission. INGENIO researchers are analyzing urban agriculture processes from the perspective of Just Transitions and Urban Agroecology, exploring the cases of urban farming in the city of Valencia and the city of Cali, Columbia. Other ongoing work focuses on the role of citizen science and open-source technologies in contributing to the conservation and recovery of local and traditional agricultural knowledge in Spain by involving diverse actors in the design and development of agro-ecological transitions.

Another current project analyzes the processes of creating medical image data-bases (or databasing) for the development of algorithms for medical diagnostics. The project examines databasing practices and investigates their influence on the control of data used in diagnostics. STS' conception of techno-economic networks and human skills (Callon 2002) has inspired work on distributed human capital dependent on complementary knowledge embedded in technologies, instruments, texts and other human skills. These conceptions underlie past and ongoing work at INGENIO on scientific mobility and research careers.

Several recently completed PhD theses also drew on STS insights in their approach, including studies of data sharing practices in health research, the communication of scientific information via Twitter, and the effects of research evaluation systems on disciplinary epistemic practices. A current PhD project draws on the work of Hilgartner (2017) in focusing on innovation in medical imaging biomarkers.

INGENIO is involved in collaborations with other organisations in a range of different formats. INGENIO is a consortium member in the European Commision funded RISIS2 project that is building an online knowledge base for research and innovation policy studies, combining a range of different datasets. It is also a network partner in the OSIRIS project based at the University of Oslo and funded by the Research Council of Norway. This project studies the generation of research impact as a process, drawing on STS understandings of materiality, distributed agency and boundary work. INGENIO is also a partner in the H2020 project SUPER MoRRI, dedicated to building a monitoring framework for responsible research and innovation. This project draws on STS insights about performativity in seeking to take a responsible approach to the development and use of indicators.

INGENIO is a member of the EU-SPRI forum on research and innovation policy studies and collaborates strongly with other member organisations, including CWTS at Leiden University, CFA at Aarhus University, Fraunhofer ISI, and TIK at University of Oslo. The Agency for Healthcare Quality and Evaluation of Catalonia (AQuAS) is also currently an associated unit with INGENIO. INGENIO intends to continue to work across disciplines with this growing network of collaborators, pursuing a medium-term objective to strengthen our understanding of, and support for, the inclusion of societal actors and values in science, technology and innovation.

For more information on INGENIO and people involved, please visit the website: https://www.ingenio.upv.es/en

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# ORDINARY SOCIOLOGY RESEARCH GROUP IN MADRID: LEARNING FROM WHAT SEEMS BANAL, FRIVOLOUS AND SUPERFICIAL

Carmen Romero-Bachiller, Amparo Lasén

THE ORDINARY SOCIOLOGY RESEARCH GROUP IS A RESEARCH GROUP SITED AT THE COMPLUTENSE UNIVERSITY OF MADRID (UCM) WORKING AT THE INTERSECTION BETWEEN CULTURAL STUDIES. AND **TECHNOLOGY** STUDIES/SCIENCE SCIENCE TECHNOLOGY AND GENDER STUDIES AND FEMINIST INTERSEC-TIONAL PERSPECTIVES. BY PAYING ATTENTION TO THE "ORDI-NARY", WE DEPART FROM WHAT SEEMS IRRELEVANT OR BANAL, WITH A DETAILED FOCUS ON THE MATERIALITIES, ASSEMBLAG-ES, CARING PRACTICES AND AFFECTS DEVELOPED IN EVERYDAY INTERACTIONSAS A BETTER PLACE TO UNDERSTAND AND LEARN TOGETHER. AT THE VERGE BETWEEN RESEARCH AND TEACH-ING PRACTICES, WE SHARE AN ARTICULATED COMMITMENT TO KNOWLEDGE GENERATED FROM NON-LEGITIMIZED POSITIONS, AIMING TO PROMOTE MORE DEMOCRATIC, NON EXTRACTIVIST AND INCLUSIVE RESEARCH PRACTICES, ALONG WITH ENGAGED LEARNING-TEACHING STRATEGIES.

> According to the Merriam-Webster dictionary, ordinary refers to that "of a kind to be expected in the normal orders of evens: routine, usual" but also that of "common quality" or even "deficient in quality". It also conveys "having or constituting immediate or original jurisdiction". It speaks of "the customary condition of things", and, in British English, identifies those type of meals served at not particularly fancy places for a fixed price at working days. All in all, ordinary seems to relate to largely unnoticed things; tedious, common, irrelevant practices we mostly take for granted. Yet they compound a large part of our quotidian doings and interactions. Ordinary also seems to evoke the continuity of a social order; the keeping of a particular set of things; the inertia of reproducing what is expected. It may seem of little interest to look at those tiny everyday interactions that, more often than not, overpopulate our lives. Yet, what is ordinary when set under the microscope? The materialities; the interconnections and interactions that hold things together; the networks and assemblages that sustain, and continuously recreate the orderings and displays we inhabit; the tinkering and caring practices to set them in motion or to keep them going on. All these issues are brought to the fore if we focus on the ordinary, as STS and particularly feminist STS has largely insisted. The Ordinary Sociology Research Group adjusts its lenses to recognize the extraordinary character of the ordinary.

> The Ordinary Sociology Research Group was formed in 2011 at Complutense University of Madrid (UCM), by a relatively young group of researchers who combine cultural studies analysis, feminist intersectional perspectives and STS/STG research. These three axes are deeply interconnected as can be noted both in academic literature and in the international presence of common departments and research groups. The group also shared an interest in emerging methodologies in teaching and research; a particular form of applying sociological imagination to quotidian life; and a vocation to face inequalities, especially gender ones. Those perspectives structure our doings in a growing research group composed by scholars mostly under 50 and mainly ascribed to the UCM. Amparo Lasen (UCM) is the current Chair of the group, although our practices avoid hierarchical

interactions and positions are rotatory. Other group members are (in alphabetical order): Rubén Blanco-Merlo (UCM); Elena Casado-Aparicio (UCM), Dau García-Dauder (URJC), Antonio A. García-García, Pablo Meseguer-Gancedo (independent scholar), Héctor Puente-Bienvenido (UCM), Carmen Romero-Bachiller (UCM), Lorena Ruíz-Marcos (UCM), Pablo Santoro (UCM), Kiko Tovar-Martínez (UCM), Fefa Vila (UCM). The group includes several postdoc (Marta Blanco-García (UCM), Carlos López-Carrasco (UCM)) and PhD contracted researchers (Irene Blanco-Fuente, UCM; Denís Losada-Varela, UCM; Paula Martín-Peláz, UCM; Miren Olasagasti, UCM).

The group has developed two main lines of research: one centered in emotions, technology and technologically mediated affective relations; the other concentrated around knowledge productions and practices of care in gender-based biomedical interventions. The first line has inquired, for example, mediated and remediated mobile communications in couples (Casado & Lasen, 2014); transformations in the construction of masculinity in selfies representation at online dating apps (Lasen & García-García, 2015); and current reconfigurations on the limits between public and private in technologically mediated interactions. The second line has analyzed the feminist health movement and other health activists groups in Spain stressing their knowledge production and their impact on biomedical knowledges and practices, either in trans and intersex official biomedical caring settings; in sexual and reproductive health; and in mental health at large. This second line emerges from and is set in continuous dialogue with the group on Science, Technology and Gender directed by Eulalia Pérez-Sedeño (IFS-CSIC) in Madrid and was already presented in the STS Multiple section in 2018 (Romero-Bachiller, García-Dauder & Santoro, 2018).

Photograph 1. Members of the Research Group of Ordinary Sociology and participant of the IV Workshop Science, Health and Gender "From the Women's Health Movement to the Feminist Activism in Health, 40 Years of Debate in Spain" organized in the framework of the research project Feminist Epistemologies and Health Activisms (FEM2016-76797-R, 2017-2020).

Photograph: Carmen Romero-Bachiller



These two lines have lately given rise to two simultaneous research projects under the National Spanish Research Plan. The first one, entitled Circuits of shame. Sociability and vulnerability in relations of intimacy (CSO2016-76386-P, 2017-2020) focused on shame and its effects in subjectivity production, social interactions in relations of intimacy and social processes of quotidian ordering. The second, Feminist Epistemologies and Health Activisms (FEM2016-76797-R, 2017-2020), pursued feminist knowledges and epistemologies in transformating of biomedical practices, firstly, by recovering the memory of feminist activists and professional of health practices from the 1970's in Spain and, secondly, by following human milk circulation in regular and informal donations, and the production and commodification of probiotics extracted from human milk microbiome (Romero-Bachiller & Santoro, 2018; Santoro & Romero-Bachiller, 2020). At the moment, we have presented a new research project proposal to evaluation for the National Spanish Research Plan looking at the challenges and transformations generated in health/illness/care processes in the current pandemic context from a feminist and activist perspective, analyzing forms of violence and resistance both in formal and informal care practices.

All these investigations share a commitment to address social inequalities from a feminist intersectional perspective, and a collective playful curiosity to emergent and innovative methodologies in both research and teaching. Our research is also traversed by an emphasis in promoting interdisciplinary dialogues that allow for a collective production of knowledge in fluid connection with research, teaching practices, and pedagogical innovations.

Sited in the largest presential university in Spain, theUCM, a large part of our tasks have to do with teaching, both at undergraduate and graduate level. During all those years 28 doctoral candidates have completed their PhD's supervised by group members. We have also taken part in more than ten teaching innovation projects. Although there is not an STS undergraduate or graduate program as such, members of the group have consistently been in charge of courses on Sociology of Knowledge and Science, STS, Digital Culture & Technoscience, along with courses on Gender Studies, Cultural Studies and Communication in Sociology, Anthropology and at Master level. We have been in charge as well of the formation in Sociology and Social Sciences at the Degree in Nursing. Therefore, our group have had a relevant impact in conforming an emergent interest in STS, STG in young students. Some of our collaborative work on teaching innovations in STS has taken the form of an adaptation of the analysis of controversies as developed by Bruno Latour, which led to a fruitful production -see for instances, the videos (1 and 2) and some of the blogs (example 1, on coronavirus; example 2, on chemsex male-to-male relations) created by 3rd year undergraduate students of the Sociology of Knowledge and Science course in the last two years.

We have relations with national and international research groups, but more specifically we have been part of the Red\_es\_CTS, the STS network in Spain. We have worked consistently and participated in the organization of the Red\_es\_CTS Encounters. We also took part in the local organization of the 4S/EASST Conference 2016 that took place in Barcelona, and, currently in the forthcoming EASST Conference in Madrid 2022, The Politics of Technoscientific Futures.

One of the most characteristic and productive practices implemented by the group have to do with the annual Encounters of Ordinary Sociology uninterruptedly held since 2013. Those Encounters aim to favor exchanges between different disciplines -from Architecture, Arts, Psychology, Nursing, STS and Social Sciences in general- to promote forms of collaborative open knowledges, stimulating innovative, experimental or non-academic formats of presentation and knowledge production, and encouraging students interventions with a high degree of success –(see for instance, the queer/feminist video/intervention developed by Postpotorras for the 2018 Encounter, Butler yo soy guapa?).



Photograph 2. Amparo Lasen, Antonio García-García y Elena Casado presenting one of the Encounters of Ordinary Sociology. Photograph: Amparo Lasen

At the crossroads of investigation, teaching, and open knowledge practices, the Ordinary Sociology Research Group engages in forms of committed articulations between activism, social transformation, learning, and teaching, favoring an STS/STG attentive to nuances, specificities of the socio-material orderings, and caring arrangements of heterogeneous characteristics.

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Carmen Romero-Bachiller (UCM) is Tenured Associate Professor at the Department of Sociology: Methods and Theory, Universidad Complutense de Madrid. Her main research interests are bodies and practices as products of relational materiality, considering vulnerabilities and privileges from a STS/feminist and queer intersectional perspective. She is currently working on health activism reconstructions of biomedical knowledge and practices in human breast milk donation and in problems during the breastfeeding process such as mastitis.

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Amparo Lasen (UCM) is tenured professor at Complutense University in Madrid. PhD in Sociology at La Sorbonne-Paris V, has being researcher at the Centre d'Études de l'Actuel et du Quotidien (Paris V-La Sorbonne), ILondon School of Economics and Political Science and at the Digital World Research Centre, Surrey University (UK). Her main research topics are social implications of new technologies in affects and subjectivities constructions, as well as, study of youth cultures and practices, from a feminism perspective.

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# Post-Growth Innovation Lab Science Technology and Innovation in a postgrowth society

The Post-Growth Innovation Lab is an international, transdisciplinary research group which, broadly speaking, conducts research on the ways in which notions of science, technology and innovation can support the transition towards a post-growth society. Our work seeks to elucidate new narratives, practices and organisations that widen the scope of the concept of innovation, expanding it beyond a narrow focus on green and smart technologies, to initiate a socially sustainable and equitable downscaling of society's throughput, which would enable communities to enhance their wellbeing while remaining within planetary boundaries.

Funded by a European Research Council Starting Grant, alongside the financial support of the Galician Innovation Agency, the Post-Growth Innovation Lab was established in February 2021 at the University of Vigo in Galicia, a region in the North-West of Spain. The Post-Growth Innovation Lab has achieved recognition as a "formal research group" -an institutional status which has been granted by the autonomous regional government, the Xunta de Galicia. Currently, the Lab is home to a number of scholars from a diverse range of disciplines, including Critical Management Studies, STS, Political Ecology, Ecological Economics, and Geography. Its members include a European Research Council grantee, two associate professors, six postdocs, and three PhD students. The lab regularly hosts visiting scholars and researchers, from PhD students to world-leading experts



in their fields, from around the world. While the group's main activities are research-based, some members are involved in teaching at postgraduate levels, especially in areas concerning STS, political ecology and ecological economics. The group is part of a large international network with reputed STS, degrowth and organisation scholars throughout the world.

Notions of post-growth and degrowth have been gaining traction in the social sciences, spanning across a variety of disciplines. To date, however, engagements between post-growth and STS literatures have been rather limited (Vandeventer and Lloveras, 2021). All work at the Post-Growth Innovation Lab starts from the premise that notions of science, technology and innovation are being unreflectively put at the service of economic growth. With this growth-mania, innovations may serve to reassert the expansive logic of capitalism, which is a major driving force of climate change, environmental degradation and social unrest. A critical and reflexive engagement with science and technology is thus necessary to illuminate new post-growth innovation pathways, in which the capitalist imperative of economic growth is be replaced by a new set of values, such as cooperation, sharing, social justice and ecological stewardship. Following from this fundamental premise, the Post-Growth Innovation Lab has developed four broad research areas, which are mutually supportive:

- 1. **The Politics of Innovation.** Our research is geared to democratizing the institutions of science, technology and innovation. This aim requires asking questions such as: What is innovation for? Who's innovation for? Who wins and who loses from any given innovation process?
- Responsible Innovation. The lab is interested in developing models of responsible innovation to ensure that governability and ethical considerations are built into high-risk socio-technical interventions e.g., those associated with highly disruptive and uncertain outcomes, such as geoengineering and autonomous vehicles.
- 3. Grassroots Innovation. Through our work, we aim to broaden the range of what and who is considered a meaningful a source of innovation, going beyond institutional actors and formal domains. More specifically, we are interested in the potential of grassroot innovations as enablers of transformative socio-ecological changes. This requires engaging with bottom-up innovation processes emerging from the practices of grassroots activists, social movements, and users.
- 4. **Post-growth & Degrowth.** The previous research areas constitute the basis from which we interrogate the role of technology, science and innovation in a post-growth world. In other words, what would innovation look like in a post-growth economy? What type of organisations and institutions would be consistent with and supportive of the aims of post-growth innovation? How can one imagine and practice innovation in ways that dislocate the traditional focus on exchange value, productivity, and efficiency? What are the limits of science, technology and innovation in the Anthropocene?

Working from these research themes, the Post-Growth Innovation Lab is involved in a number of national and international projects. The core project is an ERC Starting Grant project entitled "Prospering without growth: Science, Technology and Innovation in a post-growth era" (PROSPERA), running from February 2021 until February 2026, hosted by the University of Vigo and the Galician Innovation Agency (GAIN). The project posits that disentangling



notions of innovation from the pursuit of economic growth is key to imagining a post-growth era (Pansera & Fressoli 2021, De Saille et al. 2020). This project addresses a series of questions that are crucial for both STS and post-growth scholarship: What might organisations look like in a system that is not based on endless growth? Under what conditions would science, technology and innovation without growth be able to flourish? What levels of technological complexity can be achieved in a post-growth economy? What policies, infrastructures and organisational forms can help to facilitate this new paradigm of science, technology and innovation?

Besides PROSPERA, the Post-Growth Innovation Lab is also involved in the coordination of the H2020 project JUST2CE "A Just Transition to Circular Economy". JUST2CE aims at understanding, in a critical and thoughtful way, under which conditions a responsible, inclusive and socially just transition to a circular economy is possible and desirable. The project also explores what technical, geopolitical and social factors can enable or hamper such transformation, and how these aspects can contribute to the development of policies to foster a just ecological transition (Pansera et al, 2021). The results of this analysis will be used to develop a decision support system and macroeconomic analytical tools to design new Circular Economy practices and improve existing ones (101003491 Grant Agreement. Budget 3,620,040.96€.) Finally, the Post-Growth Innovation Lab is involved in the Marie-Sloboska Curie network ReTrace on Circular Economy, an UK Economic and Social Research Council grant on Citizen Participation in Smart City project and a Spanish national project focused on barriers and enablers to the implementation of anticipatory governance of technology in Spain.

We are mindful that additional STS contributions and engagements are much needed in the context of post-growth debates. We are thus open to collaborations, cross-fertilisation, exchanges, or simply expressions of intellectual curiosity that can advance this research agenda. Please, do contact us if you would like to explore possibilities to collaborate with us.

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Dr Mario Pansera is currently employed as a Distinguished Researcher by the UVIGO. He's also an affiliated Researcher at the Autonoma University of Barcelona. He is the PI of ERC Starting Grant for the project PROSPERA (947713) and Coordinator of the H2020 project JUST2CE. He gained a PhD in Management at the University of Exeter Business School in 2014. After his Marie-Curie post-doctoral fellowship in Brussels, he worked as a research fellow at the University of Bristol from 2017 to 2020.

Sonia Pascual holds a degree in Business Studies and a master's in Environmental Studies from a Legal, Economic and Social point of view (perspective). In 2015, Sonia joined the University of Vigo as an R&D Technician, being involved in promoting international and national R&D projects and in knowledge transfer activities. In April 2021, she joined our team as project manager for PROSPERA.

Dr María José Cabaleiro is assistant professor in the Department of Finance Economics and Accounting of the University of Vigo. She studied at the University of Vigo and got her PhD in 2000. Her research focuses on Cooperatives and Social Economy. She iscurrently involved in a project to make economic and financial information of coops in Galicia (Spain) accessible to the public. The first results are already available in https://saves.uvigo.gal.

Dr Carlos Iglesias Malvido is assistant professor in the Department of Applied Economics of the UVIGO. He studied at the University of Santiago de Compostela and got his PhD at the University of Vigo in 2000. His research focuses on Cooperatives and Social Economy. He is also involved with Maria Jose in the project to make economic and financial information of coops in Galicia (Spain) accessible to the public.

Dr. Javier Lloveras joined the team from Manchester Metropolitan University, UK, where he was a Senior Lecturer in Marketing. Javier draws upon critical marketing studies and STS to elucidate non-capitalist processes of market-making and consumer activism which can be aligned with post-growth transitions. His work has been published in leading journals such as the Journal of Consumer Research, Marketing Theory, Ecological Economics, Organization, or the Journal of Macromarketing.

Dr Sofia Greaves joined the lab following her recent completion of a PhD at the University of Cambridge, UK. Her work focuses on the centrality of urban spaces and cities in the reproduction of the ideology of economic growth.

Elisa Schraam joined the lab from the University of Oxford, UK. Her research is concerned with how post-capitalist world-building is made actionable in practice in eco-communities, where she has conducted extensive ethnographic research. Elisa's research draws on more-than-human, non-representational theories as well as economic geography and sociology.

Dr Ben Robra is a postdoctoral researcher for the project PROSPERA. He is also an affiliate at the P2P Lab. Ben holds a BA in Business Administration from the Hamburg School of Business Administration as well as an MSc in Ecological Economics and a PhD in Sustainability from the University of Leeds. His work focuses on economic organisations and degrowth. He engages with a number of critical theories such as Eco-Marxism, Gramsci's work, and Luhmann's social systems theory.

Dr Brais Suarez is currently a postdoctoral researcher under the H2020 project JUST2CE. He holds a bachelor's degree in Engineering and a PhD in Ecological Economics. His current research is focused on exploring innovative and transformative paths to build a fairer social system that, at the same time, preserves the environment. This includes rethinking how the circular economy can be framed under the logics of a post-growth era.

Dr David Soto-Oñate is a postdoctoral researcher at the University of Vigo. He holds a BSc in Business Management and a MSc in Economic Research. He was a Fulbright visiting researcher at the Ostrom Workshop from 2018 to 2021. He has published on a variety of topics, such as the importance of the coherence between cultural systems and formal economic institutions, the requirements of circular economy principles for environmental sustainability, the foundations of the international liability, and compensation regime for oil spill pollution.

Noortje Keurhorst is a PhD student in PROSPERA. She holds a BSc in International Business from Rotterdam University and an MSc in Environmental Sciences from Wageningen University. In Wageningen she studied environmental economics complimented by perspectives from political ecology, feminist economics, and African philosophy. She worked in the field of environmental economics using life-cycle analyses, true cost accounting, and modelling techniques to calculate socio-environmental value.

Josephine Becker is a PhD student funded by PROSPERA. She holds a BSc in Environmental Science (University of Dundee, UK) and a MSc in Sustainability and Behaviour Change (Centre for Alternative Technology and Liverpool John Moores University, UK). Her master's thesis was on the Imaginaries of Degrowth scholars beyond economics, in the pursuit of environmental-just futures. Overall, her research has largely been interdisciplinary, with a strong interest in political ecology, feminist and environmental justice and de/post-growth.

Alejandro Fortuny Sicart is a PhD student funded by PROSPERA. He studied business management at the University of Salamanca and holds an MBA from the IGR-IAE in Rennes in France. His background includes experiences in the car industry and in cooperative organic food shops in France. He is interested in climate change, social justice and alternative ways of living, consuming, thinking and organising.

## Science Technology and Society Group, Institute of Philosophy, CSIC

THE SCIENCE, TECHNOLOGY AND SOCIETY GROUP (STS) WAS FOUNDED IN 2000 AND HAS A LONG EXPERIENCE IN HISTORICAL, SOCIAL, AND CULTURAL STUDIES OF SCIENCE AND TECHNOLOGY. SPECIAL FOCUS IS PLACED ON THEIR SOCIAL IMPLICATIONS, AND THEIR EXPLICIT AND IMPLICIT VALUES. THE MAIN ISSUES ADDRESSED IN THIS RESEARCH GROUP ARE THE HISTORY AND EPISTEMOLOGIES OF SCIENCE AND TECHNOLOGY; STUDIES OF SCIENCE, TECHNOLOGY, AND GENDER; DISABILITY STUDIES; AND THE SOCIAL DYNAMICS OF KNOWLEDGE PRODUCTION.

The STS research group of the Instituto de Filosofía focuses on studies of science, technology, and medicine. It pays special attention to the structures of knowledge production, expert and lay communities and their history, practices, dynamics, and values, including those of energy and the life sciences. It also deals with knowledge transfer processes, including patents and their dynamics. The group's research perspective is interdisciplinary, and includes history, philosophy, sociology, anthropology, biology, art, etc.

Another line of inquiry, pioneered by the group in the Spanish and Latin American context, is research on science, technology, and gender. The group has researched women's work in different areas of science and technology. This has led to the group being present and participating in the most recent and important debates on the feminist agenda. It is noteworthy its active involvement in initiatives and policies to promote equality and visibility of women in science and technology.

The group also researches functional diversity from the perspective of material culture, techniques, and discourses about the body. The group also researches the culture of science, problematizing what we understand science to be, who constructs it and what other possible political cultures of science are possible.

The group also seeks to strengthen research on art, science, and technology. To this end, it is establishing links with national and international groups and researchers and promoting various initiatives with them. The goal is to overcome visions of art that see it as merely illustrative and narrative.

Such visions tend to overlook art's its potential as a tool for thinking about complexity and what is "difficult to narrate" as a characteristic of artistic practice. The group has also activated a collaboration agreement with artistic and cultural institutions interested in this hybridization, such as the Spanish Academy in Rome or Reina Sofía Museum.

The projects led by this group help to "think the present" by bringing to the fore-front past and present controversies that are currently very topical in academic, political, and social forums. The transdisciplinary and the different intellectual backgrounds of the group members allow them to work from different theoretical and methodological approaches; and to reflexively address contemporary problems from a scientific, cultural, historical, and socio-political perspective.

The team has a high rate of scientific production with prestigious journals and publishers (a brief sample is included in the bibliography). It has research work of relevance to society, for example affecting equity policies in science and

technology. It has a notable capacity for disseminating and publicizing its achievements through the media. The group also participates in master's and doctoral programmes and has an excellent record in the supervision of theses and grants.

It maintains connections with national and international research and innovation networks (such as Red Iberoamericana de Ciencia, Tecnología y Género, GENET - Red transversal en Ciencias Humanas, Sociales y Jurídicas, Institute of Science and Technology Studies, Commission on Woman and Gender Studies). It also has experience in in collaborating with groups outside the CSIC that address diverse social problems (climate change, prevention and health consequences, education and scientific culture, technological innovation, precariousness, collective intelligence, conflicts between knowledge, values, interests, and emotions).

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Remedios Zafra is a writer and is a Tenured Research Scientist at the Institute of Philosophy of the Spanish National Research Council. She has been full time professor of Art, Innovation and Digital Culture at the University of Seville. PhD of Arts, International Master's Degree in Creativity and higher studies in Art, Philosophy and Social and Cultural Anthropology. Her research studies and books deal with the interrelationship between Art and Technology, Feminism and Gender Studies and Critical Theory of Digital Culture.

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## RESEARCH GROUP: HEALTH, HISTORY AND SOCIETY [SALUD, HISTORIA Y SOCIEDAD (SALHISOC)]

María-Isabel Porras-Gallo

The starting point of the SALHISOC research group was a regional research project on poliomyelitis, funded by the Regional Government of Castilla-La Mancha (Junta de la Comunidad de Castilla-La Mancha) and FEDER funds in 2008. The group's aim was to contribute to the analysis of the relationship between Science, Technology and Society by studying health problems which have been relevant to Spain, in general, and to the Comunidad de Castilla-La Mancha, in particular. The group also intended to stablish connections between the academy and the clinic and aspired to be a training space for researchers interested on the topic. Although unofficially starting in 2008, the official constitution was delayed until 2013, when we became one of the research groups of the University of Castilla-La Mancha in health sciences as well as part of the Regional Centre of Biomedical Researches (CRIB). Four scholars from this University - three from the Faculty of Medicine of Ciudad Real and one from the Faculty of Physiotherapy and Nursery of Toledo - together with two external Professors from the Universities of Valencia and Alicante became affiliated with the group.

Research conducted by the group is devoted to our two main research lines:

The social history of diseases, particularly the history of influenza, rabies, measles, rubella and mumps as well as the history of neurological and disabled diseases, such as smallpox, poliomyelitis and leprosy. We study the social construction of diseases, the responses and the establishment of means to fight against them, and the articulation of ways of social reintegration. We pay particular attention to the role of Medicine, governments, society, association of affected people, non-governmental organisations and international agencies. We also analyse experiences of affected people.

The history of public health and of the politics of social protection. We study the collective responses offered by societies to health problems throughout history, and the configuration of the public health and politics of social protection, paying particular attention to the role of international agencies. Such international agencies include the Rockefeller Foundation, the Committee of Hygiene of the League of Nations, the World Health Organization, the European Association against the Poliomyelitis, and the Red Cross. In particular, we study the participation of these agencies in the establishment of international cooperation and in making this cooperation an indispensable part of national strategies set up to fight important health problems.

Since 2008, we have had access to several funded national and regional research projects. This has permitted the development of our research and our group, now composed of five scholars from the Faculty of Medicine of Ciudad Real -Marta Velasco Martín, Lourdes Mariño, María-Victoria Caballero, Pedro Luis Romera and María-Isabel Porras- and one from the Faculty of Physiotherapy and Nursery of Toledo -Noelia-María Martín-Espinosa-. The funding has also enabled the

realization and presentation of four PhD theses, and the establishment of important national and international scientific relationships and collaborations with historians of science, general historians, historical demographers, and sociologists.

We have collaborated with Spanish researchers from different universities (including the University Miguel Hernández, the University of Salamanca and the University of Granada) through our participation in nationally coordinated research projects funded by the Spanish Ministry of Science and Innovation from 2013 to 2019. American and Latin-American scientific relationships have been extremely important for our group. We collaborate with researchers from the USA, Canada, Mexico, Brazil, Uruguay, Colombia, Peru and Argentina. Working with them gives us other perspectives and information about similar research problems but focused on different places, and the possibility of putting together our knowledge and experience for improving researches. This has entailed the publication of books, dossiers of scientific journals, research exchanges and the organization of scientific sessions for the Latin American Association of Population (ALAP) and the European Association for the History of Medicine and Health (EAHMH) Congress. We are now participating in an Argentinian research project focused on the social construction of the confidence in the vaccines in the context of the COVID-19 pandemic.

We have established scientific relationships with European professors and researchers from the University of Geneva, alongside many other Portuguese, French, German and Dutch universities. Some of these collaborators are part of our two current research projects. This includes Baptiste Baylac-Paouly from the University of Lyon 1, and Maria Teresa Brancaccio and Eddy Houwaart from the University of Maastricht. These three researchers, who are working on the case of the poliomyelitis, offer us the possibility of doing a comparative analysis of this health problem in four different European countries. Working with María-José Báguena, we have recently published a paper on "The Rise and Fall of State Vaccine Institutions in Spain (1871-1986) in an edited collection (Stuart Blume & Baptiste Baylac-Paouly (eds.), Immunization and States. The Politics of Making Vaccines, London & New York, Routledge, 2021). Working with the Portuguese Antero Ferreira, we have published in 2021 an introductory study to the reedition of the publication of the Portuguese pharmacist Manuel Jose de Passos, Aviso ao povo para nao morrer de bexigas Lima (1873). The book has been published in Portuguese and in Spanish.

The primary academic background of the majority of SALHISOC members is biology and health sciences. Many also hold qualifications in the history and philosophy of science. All staff members have to teach and do research. Two of us also have clinical tasks at the Public Health and Preventive Medicine Service of the General university Hospital of Ciudad Real and teach these subjects at the Faculty of Medicine of Ciudad Real (University of Castilla-La Mancha). At the same faculty, three of us teach 'History of Medicine and Documentation', 'Basis of the Medical Research', 'Care Communication and Bioethics', and 'Epidemiology and Public Health in the 21st Century'. The other staff member teaches at the Faculty of Physiotherapy and Nursery of Toledo.

We have recently lost one senior and valuable researcher, María-José Báguena-Cervellera, from the University of Valencia and the Institute 'López Piñero', who died on 13th March 2021. For four decades, she has studied the introduction of the animate contagion theory in Spain, through the works of French and German bacteriological schools as well as the historical evolution of several infectious diseases (tuberculosis, cholera, rabies, smallpox, poliomyelitis, rubella and measles). We appreciate very much her capacity for altruistic collaboration, her accuracy, generosity and discretion, as well as the way she facilitated working together and us becoming, not only colleagues, but friends. All the current staff members of SALHISOC want to express our recognition and gratitude for her great work and contributions to the group.

#### Main funded research projects and results

Our scientific activity focuses on a range of topics related to the history of science and medicine. One major topic of interest is the history of the poliomyelitis, and the fight against viral diseases in Spain. We pay special attention to the international context, the relationships established with the World Health Organization and other international agencies, alongside the role of socioeconomical factors, laboratory and epidemiological research.

Three research projects have focused on this topic:

- The antipoliomyelitis health care in Spain in the 20th Century (the cases of Madrid, Valencia and Castilla-La Mancha): medical, social and political factors. Funded by the Regional Government of Castilla-La Mancha (Junta de la Comunidad de Castilla-La Mancha) and FEDER funds. [Duration: 01/04/2009 to 31/03/2012]. The fundamental aim of the Project was the reconstruction of the fight against the poliomyelitis, one of the main causes of people with disabilities during the last century, in Madrid, Valencia and Castilla-La Mancha throughout the 20th century.
- The eradication of polio and other viral diseases in the international context: the role of the laboratory, epidemiological research, and socioeconomic factors. Funded by the Spanish Ministry of Science, Innovation and Competitivity/ FEDER. [Duration: 01/01/2013 to 30/06/2016]. In this Project we analysed the role played by the laboratory and epidemiological research and the socioeconomical factors in the eradication of the poliomyelitis in Spain. We also studied the transference of scientific knowledge from other viral diseases and the international sphere to the poliomyelitis research.
- The fight against viral diseases in Spain through its relations with the WHO (1949-1986). Funded by the Spanish Ministry of Science, Innovation and Competitivity/ FEDER. (MINECO/FEDER). [Duration: 01/01/2016 to 30/09/2019]. The Project studied the collaboratives Programmes of the WHO with Spain and the Spanish participation in international activities related to the fight against viral diseases (rabies, smallpox, poliomyelitis, influenza, rubella, measles and mumps) between 1948 and 1986. We contribute to the history of international health and the reconstruction of the Spanish scientific and health politics after the Spanish Civil War.

Our current scientific activity deals with two new topics: 1) the standardisation of the production and application of serums and vaccines in Spain, and 2) the impacts of international scientific research visits. These new topics, which are very related to our previous research projects, contribute to show the transformation produced in the fight against infectious diseases in Spain, France, the Netherlands and Italy during the 20th Century.

'The Standardization and Application of Serums and Vaccines in Spain and Castilla-La Mancha and the Role of International Agencies (1918-2016)'. From 01/09/2018 until 31/12/2022. Funded by the Regional Government of Castilla-La Mancha (Junta de la Comunidad de Castilla-La Mancha) and FEDER. The Project studies the process of standardization of the research, production and distribution of anti-diphtheria, triple bacterial vaccine (diphtheria, pertussis and tetanus) and triple viral vaccine (measles, mumps and rubella). It also analyses the procedure for the administration of these vaccines in Spain and

Castilla-La Mancha and the role played by international agencies (the Health Office of the League of Nations and the WHO), not only from the technocratic aspect of these bodies, but also from individual epistemic communities. The research is completely connected to our main activities devoted to improve our knowledge about the role played by international agencies in the responses against diseases and in the development of the public health.

Grant Programmes for Research Visits and the Role of Public and Private Laboratories in the Fight against Infectious Diseases in Europe (1907-1985). Funded by the Spanish Ministry of Science, Innovation and Universities/ Spanish Agency of Research (AEI) and FEDER founds. [Duration: 01/06/2020 to 31/05/2024]. From a transnational perspective, the project analyses the role played by grant and aid programmes for research visits of scientists (in the main European research centres) in making international cooperation an indispensable part of national strategies set up to fight important health problems, such as infectious diseases in Spain, France, the Netherlands and Italy. Results from the project will contribute to improve the knowledge of our group on the social history of diseases and the history of public health, particularly on the health management and policies to deal with the most prevalent infectious diseases in the European context.

Apart from several scientific papers and chapters of books, our group has coordinated two dossiers in scientific journals (Dynamis in 2012 and *Asclepio* in 2020) and participated in three others international dossiers (*Hygiea Internationalis* in 2015, and *Manguinhos* in 2015 and 2020). It has also published and coordinated the following five books, with important participation of our main national and international contributors/collaborators:

- María Isabel Porras Gallo et al. El drama de la polio. Un problema social y familiar en la España franquista. Madrid. Libros La Catarata, 2013.
- María-Isabel Porras-Gallo & Ryan Davis, (eds.), The Spanish Influenza Pandemic of 1918-1919. Perspectives from the Iberian Peninsula and the Americas, Rochester (EEUU), Rochester, University of Rochester Press, 2014.
- María Isabel Porras Gallo et al. La erradicación y el control de las enfermedades infecciosas. Madrid, Libros de la Catarata, 2016.
- María Isabel Porras Gallo et al. Salud, enfermedad y Medicina en el Franquismo. Madrid, Libros de la Catarata, 2019.
- Porras Gallo, María Isabel, La gripe española, 1918-1919. La pandemia que cambió nuestras vidas y retó a la medicina y los profesionales sanitarios. Madrid, Libros de la Catarata, 2020.

Through our focus on the study of the social construction of diseases throughout history, the responses and the establishment of means to fight against them, as well as the development of the history of public health and the politics of social protection, we think about the role played by science, technology and society in dealing with health problems. Our critical reflection from a historical perspective helps to show the relationships among them and to better understand the diseases affecting our societies. The importance of this role during the current pandemic encourages us to continue working in the same direction in the future, to contribute to improving society's understanding of the health problems it faces.

### CHERISH, NOT PERISH

### ARBOR: A JOURNAL ON THOUGHT, SCIENCE AND CULTURE



https://arbor.revistas.csic.es/index.php/arbor/index

#### arbor@csic.es

Arbor is a journal on thought, science and culture from the Consejo Superior de Investigaciones Científicas (Spanish National Research Council). Its name comes from the Arbor Scientiae, or tree of science, used by Ramón Llull to represent the various branches of knowledge.

Thought, science and culture, conceived at Arbor as hybrid and interconnected areas, are the three large fields that define its content. Thus, Arbor is a transdisciplinary journal that publishes original research and reviews that help to think about and understand the world in its complexity, in close connection with issues that drive current main controversies.

Arbor publishes four quarterly issues per year (March, June, September, and December) in open access on the CSIC electronic journal platform. Three of them are Special issues which consist of a series of articles on a particular topic and a varia section in which reviews, and bibliographical notes are presented. The fourth will be a miscellanea. Since 2007, Arbor has been available online, and a print edition was published until 2013. That year Arbor became an electronic journal published in PDF, HTML and XML-JATS. Contents of previous issues are also available in PDF files.

This journal, founded in 1944 and still publishing today, is the Spanish cultural scientific journal with the longest history of uninterrupted publication. Through its long history, Arbor has different roles in the construction of scientific thought and culture in Spain. In its foundational stage (1944-1953), marked by the autarchic discourses of the post-Spanish Civil War period, the journal was more interested in the human sciences than in the experimental sciences. The intellectual trajectories of its editors, together with the then-strongly-established difference between the two cultures - the humanist and the scientific - influenced its editorial line. The second period (1953-1984) coincided with the end of Spain's international isolation, meaning Spain was kept out of the UN and other international organizations until 1951, caused by Franco's rapprochement with Hitler and Mussolini. During this period, the journal was stabilized as a project and began to publish a greater number of papers in the experimental sciences, in an attempt to exhibit institutional scientific production. In addition, the journal began to pay attention to hitherto unpublished topics, such as contemporary art, and to publish articles on economics. The third stage (1984-2011), which coincided with the consolidation of democracy in Spain, was a period of renewal for Arbor in which it sought, through multidisciplinary reflection, to make this journal a channel of communication between the scientific community and the rest of society. In 2013, the magazine began a new period by shifting to publishing solely online which has allowed its adaptation to the new forms and technologies of publishing.

Since July 2019, Arbor's editorial line has been in a process of redefinition. The Journal's format and target audience were revised, alongside the methods used to evaluate submissions and the language of publication. The journal's new editorial board is interested in content that asks questions and shows the concerns of today's society. Thus, the new structure of the journal seeks to establish dialogues between disciplines and to offer different views on the same topic.

In addition, novel features were introduced by this editorial team in order to respond to the new forms of hybrid and interconnected knowledge generation: the sections "Materials", "Essay-Reviews", and "Debate". "Materials" publishes essays on knowledge produced in non-written formats that help to deepen the monographic theme: this is a place to think about audiovisual, sound, and graphic resources. Contributions in this section include links to such resources, taking advantage of the possibilities of the digital format. These possibilities are further considered in the "Essay- Reviews" section, where classic bibliographical reviews can share space with reflections on other objects like exhibitions, films and sound documents. Finally, the "Debate" section opens up a space for discussion around the main controversies raised by the subject matter of the monograph. This space serves to show, not only ways of working in the construction of knowledge but also the discussion as object and subject (actor-actant) that participate in them.

Nowadays, Arbor faces new challenges because the social, economic, and gender inequalities of the past twentieth century have been compounded by the climate crisis, problems in energy transition, and a major global pandemic. Thus, it is even more increasingly necessary to have spaces to learn, educate, and be informed about scientific and technical issues. Arbor aims to offer this space not only to the research community, but also to society in general. The possibilities of the digital format like the use of audio-visual materials and links to the journal knowledge, as well as the choice of current topics of general interest make Arbor closer to the public.

Arbor is indexed in Web of Science: Arts & Humanities Citation Index (A&HCI) and Current Contents - Arts & Humanities; SCOPUS, CWTS Leiden Ranking (Journal indicators) Core publication, ERIH Plus, REDIB, DOAJ and other national and international databases. It is indexed in Latindex Catalogue 2.0 and has obtained the FECYT (Spanish Foundation for Science and Technology) Seal of Quality.

Journal Citation Indicator (JCI) 2020: 0.87

Rank by JCI: 121/390 (Q2, Humanities, Multidisciplinary)

Source: Clarivate Analytics@, Journal Citation Reports®

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# DYNAMIS ACTA HISPANICA AD MEDICINAE SCIENTIARUMQUE HISTORIAM ILLUSTRANDAM

www.revistadynamis.es

What was the need for this publication project?
How has it changed throughout time?

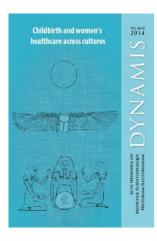
The *Dynamis* journal was founded in 1981 at the University of Granada by five historians of medicine (Luis García Ballester, Teresa Ortiz-Gómez, Rosa María Moreno, Guillermo Olagüe and Esteban Rodríguez Ocaña). The first editorial note acknowledged the influence of Pedro Laín Entralgo, and justified the publication of the new journal by the growing interest in the history of science, in particular the history of medicine, in Spain. From the beginning, the aim of this academic enterprise was to broaden the understanding of the social aspects of medicine from a perspective that included the history of scientific, educational, and medical institutions.

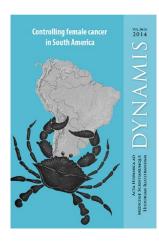
Today, *Dynamis* has an international and multidisciplinary Advisory Board and an Editorial Board whose members are distinguished historians of medicine and science based at different Spanish academic institutions. The professional rigour and intellectual acuity of the Editorial Board, together with the journal's engagement in emergent research lines and topics, has enabled *Dynamis* to remain prominent both locally and internationally. The journal has also continued to enjoy contributions from both European and American experts in the history of science and medicine.

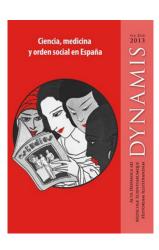
The journal benefits from extensive institutional support. It is co-edited by two Spanish universities with support from the Vice Rector's Office for Scientific Policy and Research of the University of Granada and the Research Vice-Rectorship of the Autonomous University of Barcelona. Moreover, *Dynamis* has received financial support from the University of Cantabria, and the Miguel Hernández University, as well as the HUM-773 research group on the History of Medicine of the University of Granada.

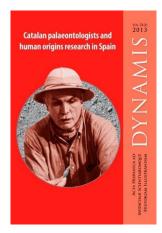
Dynamis has successfully fulfilled the generally recognized periodicity, uniformity and normalization criteria; it also fulfills the 33 parameters of Latindex quality system. In Spain, it is considered a journal with "good quality content and normalization, which occupies a high position amongst Spanish scientific journals." Since 2016, Dynamis has been included in Thomson Reuters-ISI database, being the only Spanish journal currently indexed in the category History and Philosophy of Science (SSCI and SCIE). It can be found in the following Thomson Reuters products: Science Citation Index, Social Science Citation Index and Art and Humanities Citation Index. The Spanish Foundation for Science and Technology (FECYT) has recently awarded Dynamis its quality stamp and an excellent evaluation.

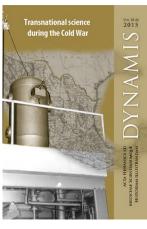
*Dynamis* has consolidated as an attractive vehicle form the scholars in the history of science and medicine. The criteria of the Spanish National Commission for the Evaluation of Research Activity (CENAI) and the National Agency for the Evaluation of Quality and Accreditation (ANECA), are essential for planning and

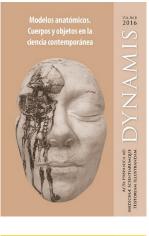


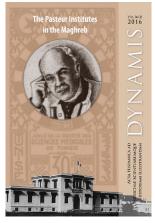


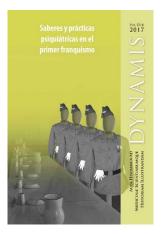


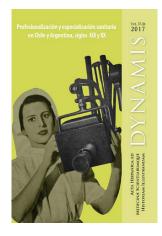


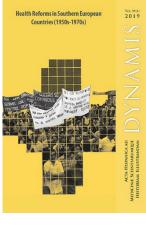




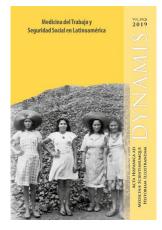


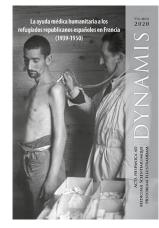




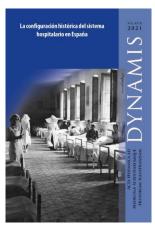












progressing in the academic careers in Spain. One of such criteria is the publication of an article in an ISI-indexed journal before obtaining a doctoral degree, and this has made *Dynamis* even more attractive to scholars who work or wish to work in Spanish academic institutions. To this end, Dynamis has published high-quality contributions from doctoral candidates and early career scholars, offering an important venue for the dissemination of their work.

*Dynamis* publishes original, double peer-reviewed research studies (articles, notes or documents) and reviews in most of the languages of the European Union. This includes: Spanish, English, French, Italian, German, Portuguese and Catalan. From 1981 to 2010, one single volume of about 500 pages was published every year. Since 2011, two issues are published a year, and each issue consists of about 250 pages.

Although initially focused on the history of medicine in Spain, *Dynamis* has evolved as a truly multidisciplinary and international enterprise. The journal is open to contributions from other parts of the world, and the Editorial Board has recently expanded to included researchers from different institutions and universities in Spain and beyond.

Dynamis is keen to consider proposals for special issues. Several monographic issues have appeared so far, dealing with a wide range of topics. These include the history of illness (vol. 11, 1991), the national factor in the evolution of science (vol. 12, 1992), systems of health in the work place and professions in a welfare state (vol. 13, 1993), public health in contemporary Spain (vol. 14, 1994), women, gender and health practices (vol. 19, 1999), improving public health in the interwar years in Europe (vol. 28, 2008), isotopes in 20th century technoscience (vol. 29, 2009), the circulation of antibiotics (vol. 31-2, 2011), controlling female cancer in South America (vol. 4-1, 2014), transnational science during the Cold War (vol. 35-2, 2015), the Pasteur Institutes in the Maghreb (vol. 36-2, 2016), health reforms in South European countries (vol. 39-1, 2019), managing giftedness in contemporary society (vol. 40-2, 2020), historical configuration of the hospital system in Spain (vol. 41-1, 2021), among many others.

A comprehensive list of special issues can be found here:

https://revistadynamis.es/en/home/

The Dynamis Editorial Board has received offers to be purchased or included in private editorial enterprises but has rejected these offers to retain academic independence of the journal. The technical side of the editing process falls mostly on the Editorial Board, which makes the cost of publishing two issues a year possible within the limited budget. Another challenge was the recent (2021) shift to Chicago Manual of Style as a referencing system. Since its beginnings Dynamis used footnote references but the new database environment made a change pressing. The decision about which reference system to use and implementing it was difficult as it required harmonising views of the interdisciplinary Editorial Board. The priority was choosing a style which would make cited works visible and easily recognisable for bibliometric purposes, but also allow for flexibility for referencing a wide range of primary sources. A previous challenge was linked with the the journal's inclusion on Thomson Reuters databases (2006), especially the Journal of Citation Reports, after which the number of manuscripts submitted to Dynamis grew exponentially. The Editorial Board's reaction was to increase the frequency of publication, from one to two issues and around twenty manuscripts a year.

Another challenge was linked to the journal's digitalisation process, which included all published volumes since 1981 and was completed between 2005 and 2008. All the volumes are now available through the Barcelona Autonomous University

Repository (RACO), which is accessible through the journal's website. Initially, *Dynamis* imposed a 6-month embargo, meaning that the journal version of the manuscript became could be freely used after half a year from publication had passed. The embargo rule was lifted in 2014, making the journal fully and immediately open access. Since 2010, *Dynamis* has also been included on the Scielo platform, which, together with RACO and the institutional repository of the University of Granada, strengthen the journal's visibility.

From a publication policy standpoint, *Dynamis* pursues three ideals. First, it has been particularly concerned with gender equality and therefore makes sure to keep a balance in the team of leading editors, as well as in the Editorial Board and in the authorship of articles. There are mechanisms in place to ensure gender balance in the Boards and in the publication outcome.

Second, the journal seeks to promote truly multi- and cross-disciplinary research. The articles cover a range of topics, such as the history of ancient Hippocratic-Galenic medical practices, the humanitarian health of refugees after the Spanish Civil War, parapsychological theories and science exhibitions in the 19th Century, and the debates about abortion in the last decades of the 20th century. This wide array of topics makes the journal difficult to categorize or fit within any fixed label. While the core of the contributions come from professional historians, *Dynamis* regularly publishes contributions from sociologists, anthropologists and philosophers of science. *Dynamis* has also homed articles and special issues, such as the 2018 special issue on Contraception, sexuality and gender, which prioritized novel methodologies such as oral history of health.

Finally, the third aim of *Dynamis* is to promote multilingualism in the history of medicine and science. Instead of only publishing in English or Spanish, the journal is open to several languages.

#### HAVE THERE BEEN ANY DIFFICULTIES IN CREATING AND SUSTAINING THIS PUBLICATION PROJECT?

All the articles published in *Dynamis* are freely and immediately accessible online in three spaces: the RACO database, SCIELO (2010), and the journal's website. The journal pursues a green open access policy and does not charge any author fees. The journal's institutional financial support covers the printing costs and the design of the front page.

Offering support in the process of publication without any fees makes *Dynamis* a very attractive journal for both senior and junior scholars in and outside of the Hispanic world. Needless to say, finding experts willing to collaborate with the editorship is not always easy.

Despite such problems, the journal has managed to maintain a high scholarly standard and its policy of true open access. The key challenge, linked to the previous point, is maintaining the journal as an independent and gold standard open access journal, which does not charge authors any processing, publication or open access fees.

#### WHAT READERSHIP DO YOU ADDRESS?

The core readership are historians of medicine and health, although the journal appeals also to historians of science, general historians, and health professionals. *Dynamis* also attracts academic lecturers, who use the articles in their teaching preparation. The introductions to special issues play an important role in this process, and the open access availability ensures that articles are immediately accessible to anyone interested.

#### WHAT CONTRIBUTIONS ARE YOU LOOKING FOR?

The journal publishes original articles, book reviews, essay reviews and relevant primary sources with commentary. The editors are interested in receiving articles based on original historical research dealing with any topic related to the history of science. *Dynamis* only publishes articles in which the authors engaged in a critical assessment of primary and secondary sources and are able to offer new insights. Furthermore, the journal publishes literature reviews offering a thorough and interesting overview and discussion of recent publications made in a specific area of research. A third category of publications is short book reviews, which are written upon invitation and previous agreement with an editor.

### News from the Council

#### News from EASST council

Maja Horst, President Elect of EASST

EASST Council held its fourth 2021 meeting in December where we discussed a number of issues and questions. Most importantly, we heard about the progress of the organization of the EASST conference to be held in Madrid. As our Conference Chair, Vincenzo Pavone, aptly put it, we are all 'taking a leap of faith' in planning for an in-person conference. We hope that it will be possible to come together and see each other in real life after this very long virtual existence. We discussed options of streaming plenaries and making recorded presentations possible, but for financial reasons we will not be able to make a fully hybrid conference. However, we will do our best to accommodate to whatever conditions we will meet in July. Since the Council meeting we have unfortunately learned that we have to postpone the dates one week due to a NATO Summit (they have basically taken our space at the IFEMA conference centre). We also have to admit that some conference fees will be more expensive than at previous conferences. Council has chosen to prioritize relatively cheap participation for concession members, but this means that regular fees become more expensive as the conference venue is not cheap (but the only viable option). Nevertheless, I am sure we will end with a great conference. I am already very grateful to the local organizing team for all the work they have put into this.

We also discussed our journals, including a need to formalize and make transparent our governance system for the journals. We are very happy with the development of our two publications, the S&TS Journal and the EASST Review, but we are also aware that the entire publication landscape is undergoing dramatic changes. A first step will be to formalize governance structures and make them available for EASST members. Next year we will engage in a bigger discussion on how we want the European STS publication ecology to develop further. Finally, we spent some time agreeing on a new setup for admin support of EASST. We will change our contract with NomadIT so that they provide all the admin backup we need.

Lastly, we said a heartfelt thank you to President Ulrike Felt, whose term is ending this year. Uli has done a tremendous job for EASST (besides being a central figure in STS in so many other ways) and we cannot thank her enough. We were all sad that we could not meet up in Vienna in person to congratulate her on a job well done. As the new president I will make certain to express our gratitude to Uli once again at the general members meeting at the July conference.



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EASST Review on the Web: http://easst.net/easst-review/

Past Editors: Ignacio Farías, 2015-2020; Ann Rudinow Sætnan, 2006 - 2014; Chunglin Kwa, 1991 - 2006; Arie Rip, 1982-1991; Georg Kamphausen, 1982.

The Association's journal was called the EASST Newsletter through 1994.

Cover Image is shot in the 'Bosque de Oma' created by the Basque sculptor and painter Agustin Ibarrola.



