Academia Europaea | Barcelona Knowledge Hub



2023 Annual Report of Activities

10 January 2024

2023 ANNUAL REPORT OF ACTIVITIES

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2023 ANNUAL REPORT OF ACTIVITIES

1. EXECUTIVE SUMMARY

1.1 Overview

The Barcelona Knowledge Hub (AE-BKH), founded in 2013, is the node of Academia Europaea (AE) in southern Europe and the Mediterranean region. Its main aim is to promote activities of interest for AE Members in this area and for the scientific community in general, with the end goal of helping consolidate a genuine European area of research, education and innovation.

Since this year, the AE-BKH is currently hosted by the Catalan Foundation for Research and Innovation (FCRI), a private organization that disseminates research and innovation among society to promote scientific culture, careers in science and technology and public-private relationships and entrepreneurship in these fields. The FCRI, headquartered in Barcelona and directed by Dr Jordi Mas, provides the AE-BKH with the institutional framework necessary to carry out its activities.

Its staff consists of an Academic Director, Prof. Jaume Bertranpetit and a Hub Manager, Maite Sánchez. AE-BKH's partners are the Barcelona City Council and the Government of Catalonia (Universities and Research Secretariat). The hosting in the FCRI allows the hub to interact and ask for help to the staff that covers many different areas of administration (Design, communication, computer services, etc.).

A new Steering Committee and a new Advisory Board have been put in place and they have already begun their role. Steering Committee had had two annual meetings (2n of March and 29th of November) while the Advisory Committee meeting has been appointed by the 18th of January 2024.

1.2 Annual programming Scientific Dialogues and work sessions

The AE-BKH successfully have carried out its activities, combining the use of virtual tools with limited in-person attendance in a 'hybrid' format. As in previous years, the pillars of its annual program featured educational and social outreach events open to the general public:

- Kick off meeting (25th of April 2023), presentation and 1st Seminar
- Scientific Dialogues (October to December 2023)

1.3 *Disputatio of Barcelona* 2023: "The Origin of Human Violence." (13th of November 2023)

AE-BKH held the annual activity at the Barcelona city council (Saló de Cròniques) under the title: "The Origins of Human Violence" on the 13th of November at 18 p.m. Next Disputatio is planned to take place in October-November 2024.

1.4 Building Bridges 2023

The 34th Annual Conference of Academia Europaea (AE) and 13th of the Young Academy of Europe (YAE), took place in Munich as it was hosted by the AE Munich Hub on 9-11 October. The plenary program, featuring leading international scholars from a wide variety of academic disciplines, was presented in a 'hybrid' format that enabled virtual attendance in addition to in-person attendance.

More than 300 attendees in-person, representing 41 different countries were present. For further information click the following link:

https://www.ae-

info.org/ae/Acad Main/Plenary Conferences/Building%20Bridges%202023%20Munich

Both members of the Barcelona Hub attended to the meeting in person.

1.5 Barcelona Hypatia Prize Award

This year has been the fourth edition of the European Hypatia Science Prize. It awarded €30,000 to an individual who has developed a trajectory of excellence, primarily in a European country, in the field of Science and Technology including Mathematics. With this call, a new triennial cycle begins, which will continue in the next 2 years, awarding an individual from the field of Life Sciences and Health (2024) and the field of Humanities and Social Sciences (2025).

The jury for the 2023 prize met in November and nominated a winner that will be public at the beginning of 2024.

1.6 Special project

In 2023, the AE-BKH has begun to develop a special project in collaboration with key partner institutions: Art and Science project.

1.7 Web communication and social media

Finally, the AE-BKH has created its own website and it's currently updated in Instagram, Facebook, LinkedIn and twitter. It has witnessed an especially strong growth in the audiences reached through its on-line communication tools and social media platforms.

2. OVERVIEW

2.1 Presentation

The present Annual Report provides an overview at the activities of the Barcelona Knowledge Hub of Academia Europaea (AE-BKH) during the year 2023.

2.2 Mission and Vision

Introduction and area of influence

Academia Europaea (AE) is a pan-European, non-governmental association acting as an Academy. Its members are scientists and scholars who collectively aim to promote education and research. Founded in 1988, it currently has approximately 4,800 Members, leading experts from a variety of different fields including the physical sciences, technology, biological sciences, medicine, mathematics, literature, humanities, social sciences, cognitive sciences, economics and law. The Barcelona Knowledge Hub (BKH) is the AE's branch office for the Mediterranean and Southern European region, including Turkey and Israel.

The main goal of AE-BKH is the promotion of activities of interest for the Members of AE in its area of influence, and for the scientific community in general, with special emphasis on multi-disciplinary activities that include transversal perspectives of the natural and exact sciences, the social sciences and the humanities. The vision of AE-BKH is to help consolidate a genuine European area of research, education and innovation.

This year all the activities organized by the AE-BKH have taken place in Barcelona but it is planned to organize some in other cities of the Mediterranean European region in the following years.

Current specific objectives of the AE-BKH include:

- Increasing the quantity and quality of its programming while maintaining sustainability
- Strengthening collaborations and partnerships with academic and research institutions in its area of influence
- Recognising and supporting excellent research conducted by individual scholars
- Improving the visibility and impact of its actions

Office and staff

The AE-BKH office is located on the premises of the Catalan Foundation for Research and Innovation (FCRI) in the heart of Barcelona. The Academic Director is Prof. Jaume Bertranpetit and Maite Sanchez is the Hub Manager.

3. ANNUAL PROGRAMMING IN 2023

3.1 AE-BKH WORK SESSION, PRESENTATION AND FIRST SEMINAR

AE-BKH work session (25th of April in the morning)

The president of the Europaea Academy, Marja Makarov, the general secretary, David Coates, the academic director, Jaume Bertranpetit and the director of the FCRI, Jordi Mas, met to establish the strategic lines: citizen participation, science-art interrelationships, and actions to increase visibility.



AE-BKH presentation of the AE-BKH (25th of April in the afternoon)

Presentation of the AE-BKH at the Royal Academy of Sciences and Arts of Barcelona (RACAB). Its new program of activities and structure was presented, which enhance the organization's science promotion and dissemination actions, bringing them closer to the public.

Program:

- Prof. Jordi Isern, President of the Royal Academy of Sciences and Arts of Barcelona (RACAB)
- Prof. Jordi Mas, Executive Director of the Catalan Foundation for Research and Innovation
- Prof. Jaume Bertranpetit MAE, AE-BKH Academic director
- **Prof. Marja Makarow MAE**, President of the Academia Europaea
- Prof. Andreu Mas-Colell MAE, AE-BKH Steering Committee Member
- **Prof. Joan Gómez Pallarès**, General Director of the Research and University Department, Government of Catalonia



2nd of June: Northeastern University seminar at the RACAB under the agreement with the AE-BKH. Mònica Bello, Eduard Vallory, Jaume Bertranpetit and Milne Jo took part.

3.2 SCIENTIFIC DIALOGUES: FRONTIERS AND AGORA

4th of October: I Scientific Dialogue Frontiers

Understanding the brain: neurobiology or neuro computer sciences?

Mara Dierssen, Centre for Genome Regulation, Barcelona

Gustavo Deco, ICREA at UPF, Center of Brain and Cognition, Barcelona

Moderator: Chiara Santolín, UPF, Barcelona





Summary:

Starting with the work of Cajal more than 100 years ago, neuroscience has sought to understand how the cells of the brain give rise to cognitive functions. How far has neuroscience and more precisely neurobiology, progressed in this endeavour? On the other side, to learn how cognition is implemented in the brain, computational neuroscience has built computational models that can perform cognitive tasks and test such models with brain and behavioural experiments.

Neurobiology, psychology and computational neurosciences are different approaches to the study of the brain, even if the Human Brain Project (funded by the European Union) has mainly invested in computational aspects. Deciding where to allocate funding for brain research between neurobiology and computational neuroscience depends on various factors, including research goals, available expertise, technological advancements, and the specific questions being pursued. Where are we now? Is there a conflict or is there a balanced approach that supports collaboration between these fields?

8th of November: I Scientific Dialogue Agora

Podrem parar l'envelliment i la mort?

Salvador Macip, Open University of Catalonia (UOC) and University of Leicester, UK

Maria Begoña Román, Faculty de Philosophy, UB, Barcelona

Moderator: Cristina Sáez, Science and Health journalist





Summary:

La controvèrsia entre biologia i ètica sobre aturar l'envelliment i la mort és un tema que ha generat un intens debat a la societat i entre els experts en diverses disciplines. Existeixen arguments a favor i en contra de la recerca de la immortalitat o la prolongació indefinida de la vida.

Quines implicacions pràctiques, socials i ètiques de qualsevol avenç en la ciència hem de considerar? El debat continuarà evolucionant a mesura que la ciència avanci i la societat explori noves possibilitats.

22nd of November: Il Scientific Dialogue Frontiers

The bases of language: from tabula rasa to biological determinism

Cedric Boeckx, ICREA Research Professor at the Department of Linguistics, University of Barcelona **Ramon Ferrer-i-Cancho**, Professor of Computer Science at Universitat Politècnica de Catalunya · BarcelonaTech (UPC).

Moderator: Toni Badia, Pompeu Fabra University, Barcelona



Summary:

The transition from the concept of language as a "tabula rasa" to one influenced by "biological determinism" represents a significant shift in our understanding of language acquisition and development. These two perspectives offer different explanations for how humans acquire and use language, and they have been central to debates in linguistics, psychology, and biology. The "tabula rasa" perspective, often associated with philosophers like John Locke, suggests that the human mind is a blank slate at birth, and language acquisition is primarily a result of environmental factors and learning experiences. On the other side, the "biological determinism" perspective posits that humans have innate, biologically predetermined mechanisms for language acquisition.

In contemporary discussions, many researchers and theorists seek to reconcile these perspectives. Where are we in the debate? Has the incursion of computer sciences and physics changed the arena?

13th of December: Il Scientific Dialogue Agora

Intel·ligència artificial generativa: bases tecnològiques i implicacions socials

Enric Plaza, Artificial Intelligence Research Institute, CSIC, Bellaterra and fellow d'EurAl

Núria Vallés, Post-doctoral researcher Margarita Salas, UAB-UPC

Moderator: Toni Pou, Scientific journalist



Summary:

La intel·ligència artificial (IA) generativa, en les seves múltiples aplicacions com els 'grans models de llengua' del GPT, han captat l'atenció de l'opinió pública global. Aquestes aplicacions generatives són el resultat de les últimes tecnologies en xarxes neuronals aplicades a l'aprenentatge i transformació de texts, imatges, so, i vídeo. Aquesta última onada d'innovació en tecnologies d'IA ha despertat nombrosos debats i polèmiques sobre les conseqüències del seu ús.

Cal entendre d'on ve i què ofereix aquesta "IA generativa", les seves limitacions tant com les seves capacitats, així com la narrativa que l'acompanya. Cal examinar i discutir la situació actual sense les exageracions utòpiques i distòpiques que s'han propagat, per tal de poder valorar els efectes d'aquest tipus de tecnologia.

For further information: www.aebarcelona.eu

4. DISPUTATIO OF BARCELONA 2023

An annual activity of the Academia Europaea-Barcelona Knowledge Hub

"The Origins of Human violence"

AE-BKH held its *Disputatio of Barcelona* 2023 entitled, "The Origins of Human Violence," on Monday, November 13th, 2023, at the Barcelona City Council (Saló de Cròniques). It was chaired by Deputy Mayor Jordi Valls. The Franco-American cultural anthropologist Scott Atran, from the University of Michigan (USA), and the Argentinian paleoanthropologist, Marta Mirazón Lahr, from the University of Cambridge (United Kingdom), discoverer of the Nataruk site, in Kenya - with the first prehistoric bone remains with signs of violence between humans 10,000 years ago - debated the origin of the phenomenon from the interrelationship of evolutionary, genetic, environmental, social and neurobiological perspectives. *Oscar Vilarroya*, Director of Research at the Department of Psychiatry and Legal Medicine of the UAB and of the research group "Cognitive Neuroscience Research Unit" (URNC), of the same university, moderated the event.



A video recording of the debate is available on YouTube at: https://www.youtube.com/watch?v="VF_swTtcg

About the Disputatio of Barcelona series



The *Disputatio of Barcelona* is a series of annual debates in English organised by the Academia Europaea – Barcelona Knowledge Hub (AE-BKH) and held between two renowned experts (*disputantes*) holding different viewpoints on a common topic of social relevance. The series, inaugurated in 2013, was inspired by the original *Disputatio* held in Barcelona in 1263, a theological debate between Christian and Jewish intellectuals presided by King James I of Aragon Kingdom.

PRESS COVERAGE

LA VANGUARDIA

PAÍS: España PÁGINAS: 60 AVE: 25156 € ÁREA: 862 CM² - 76% FRECUENCIA: Diario
DIFUSIÓN: 58318
OTS: 360000
SECCIÓN: CONTRAPORTADA



21 Noviembre, 202



Marta M. Lahr, va desenterrar a Kènia les primeres restes humanes amb signes de violència

Tinc 58 anys, que de vegades sento com 90 i d'altres, com 20. Vaig néixer a l'Argentina, vaig créixer al Brasil
i em vaig doctorar i ensenyo a Cambridge. Fe? Soc biòloga evolutiva i de centreesquerra alarmada per la
polarita pid de le majorite Collabora. Polarita de la Propose CALENDI I FECHA de Concepilier
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"Som primats violents, però els únics capaços de reconciliar-se"



o vam tenir mai un avantpa sat pacifici felie? Temo que som violents de que som humans... Quetrist! erò ser humans també ens dona una capu

cuta que no te cap atre primat: na de recon liar-nos després d'haver-nos agredit. Pranz de Waal ja va explicar aquí que e ximpanzés planifiquen ximpanzicidis. Els ximpanzés planifiquen, és cert, assas: nar congéneres; però els bonobos, en car solucionen les seves disputes... ...De Waal va observar que amb regals i s

avantpassats fossin premeditadament vio lents com els ximpanzés. Vostè va excavar fossils de paleohuman que evide nciaven una matança planejada. La vaju descobrir per esqualitat perme tre

La vaig descobrir per casualitat, per què tre ballava amb fossils molt més antics que el d'allà a Turkana. I va ser casual trobar l'evi dència d'aquella matança de fa 10.000 anys Aquella matança mostra que sempre en hem matat i no va existir cap salvatge feliç? lels qui pensen que la violència és innata er ls humans i en contra dels qui, al contrari reuen que les matances planificades nomé s van produir més tard i només com a conse (uència de l'inici de l'agricultura i, amb questa de la propietat réguda.

L'humà nòmada sense tenir territori er tan agressiu com els que ja en tenien? Alguns col·legues creien que a bans de l'agri cultura i la propietat de la terra no êrem vio lents i que només amb les possessions van començar a planificar la violència i les civilit zacions, exèrcits, pàtries i religions...

Es cert que en els bipedes que van viure fin d 2 millions d'anys res no demostra que le hagués conflicte entre grups. I que van tro bar violencia, canibalisme... pero aquells for sils només són ara per ara trossets. Per què no valen per provar violència? Perquie... com sé que aquest tros de fossil a lla amb signes de violència no és un casalifa.

cas una matança planificada?

No és igual matar un cunyat en una pica

demica. I, a més, enterraven les victimes cementiris.

Vosté també creu que l'agricultura va una trista regressió per als humans?
Els fossils testifiquen que els primers aj

Vosté també cres que l'agricultura va sei una trista regressió per als humans?
Els fossils testifiquen que els primers agricultors van viure menys i molt pijor que els últims caçadors recol·lectors nomades; peré també que els nomades van deixar de ser-he per que la caça ja no donava per sobreviure tabbem.

Vam ser agricultors i pastors perqué, si no, ensmoriem de gama? I gairebé ens vam morir de gana quan van passar de la caça nômada a l'agricultura els fossils dels primers agricultors demostrer que estaven molt més mal alimentats i més

Dones per què van continuar cultivant? Perquè una vegada superat aquest prime estadi de necessitat, fam i malalità, vam mi llorar les tècniques agricoles i vam comença a generar i emungatzemar excedents i, aix a desenvolupar la cultura i a progressar.

Es va crear una jerarquis social; als qui ma naven els va anar millor que als que els obé en. El món del caçador normada era primiti però igualitari; el de l'agricultor pastor en jeràrqui e i desigual, però culte. Si no ten menjar emmagatzemat i qui el conrei per:

A Australia on this ha poc nomes in havu nomades no hi havia violència? Tremenda, i per això no crec que la violència organitzada aparegués amb l'agricultura, sinó mol tabans.

Des de fa 100.000 anys i moit abans ja érenviolents: ho som des que som humans, perè el que ens fa ser-ho també és la capacitat de reconsiliar, nos

De reconcilia-nos, se'n diu politica? En les societats tradicionals, encara es re conciliencasant-sei intercanviant béns. I te nim, amés, lacapacitat, que notenen el sxim panzés, de regular-nos per normes, educació mesa l'intensiscement fan profétibles

Predictibles també per agredir?

El simpanzé no es baralla per sidees; perè també aquestes idees ens permeten l'immens progrès de la convivência i la cooperació fins a Passoliment de ser ja 8.000 milions d'humans i el risc que posem en perilll'equilibri del planeta.

LUÍS AMIGUET

Interview to Scott Atran (radio 14th of November 2023)

 $\underline{https://www.ccma.cat/3cat/scott-atran-lextrema-dreta-es-comporta-com-els-jihadistes/audio/1188691/}$





5. "BUILDING BRIDGES 2023", THE 34th AE ANNUAL CONFERENCE

Highlights from Building Bridges 2023



The 34th Annual Conference of Academia Europaea (AE) and 13th of the Young Academy of Europe (YAE), took place in Munich as it was hosted by the AE Munich Hub on) on 9-11 October. The plenary program, featuring leading international scholars from a wide variety of academic disciplines, was presented in a 'hybrid' format that enabled virtual attendance in addition to in-person attendance.

More than 300 attendees in-person, representing 41 different countries were present. For further information on Building Bridges 2023 is available at: https://www.ae-info.org/ae/Acad Main/Plenary Conferences/Building%20Bridges%202023%20Munich.

Building Bridges is the name, since 2018, of the annual plenary conferences of Academia Europaea. These conferences aim to engage the interests of all thematic areas of the academy and are therefore broad in scope and of a highly interdisciplinary nature.

On this occasion, both the Academic Director, Jaume Bertranpetit and the Hub Manager, Maite Sánchez, attended the conference. Professor Bertranpetit had an oral talk explaining the activities of the HUB.



The Academia Europaea-Barcelona Knowledge Hub has hosted the AE annual plenary conference on four different occasions (in 2014, 2018, 2019 and 2021, respectively).

6. HYPATIA PRIZE

6.1 AWARD CEREMONY, BARCELONA HYPATIA EUROPEAN SCIENCE PRIZE, 4TH EDITION

On March 4th, 2024, the **Barcelona Hypatia European Science Prize Ceremony** in its fourth edition (**Science and Technology, including Mathematics**) will take place.

It will be presided by **Jaume Collboni**, Mayor of Barcelona and it will be also featured by AE President **Marja Makarov**.

The five members comprising the selection jury were: **Jaume Bertranpetit,** Jury President, **Ana Achúcarro, Ernest Giralt, Paolo Papale** and **Caterina Biscari.** They met in November 2023 and took a decision that will be public in January 2024.

6.2 CALL FOR NOMINATIONS, 5TH EDITION, LIFE AND HEALTH SCIENCES, AND SELECTION BY THE INTERNATIONAL JURY

The **Call for Nominations** for the 5th Edition of the **Barcelona Hypatia European Science Prize**, in the area of **Life and Health Sciences**, will open in May 2024. The Hypatia Prize, in the amount of 30,000 euros, recognises an outstanding researcher who has achieved a career of excellence at the highest international level in Europe and has made a significant contribution toward different fields of knowledge, as well as a positive impact on society.



7. SPECIAL PROJECT DURING 2024

7.1 ART AND SCIENCE PROJECT

A new important strategic line of the AE-BKH encompasses the interrelationships between Art and Science, aimed at exploring and developing synergies between these areas as complementary ways of understanding and interpreting the world. The AE-BKH seeks to enrich the dialogue that has begun between artists and scientists in its area of influence and to dynamize relations.

The AE-BKH aspires to make this line of action innovative, creative, and interdisciplinary, appealing to all stakeholders involved.

8. WEB COMMUNICATION AND SOCIAL MEDIA

The Barcelona Knowledge Hub of the Academia Europaea (AE-BKH) devotes special attention to its web communication, social media and digital content, as this area serves a double purpose: first, it enables the AE-BKH to promote and share news of its activities in a timely and visually striking way; and second, it permits the AE-BKH to create an international academic community of both AE Members and non-Members in a way that bears in mind their geographic dispersion.

The AE-BKH has created its own website: https://aebarcelona.eu/en/ where all the information is updated. The Catalan version will be available at the end of March,2024.

8.1 SOCIAL MEDIA

FACEBOOK PROFILE

The AE-BKH manages the Facebook account <u>Barcelona Knowledge Hub</u>, <u>@ae.bkh</u>
It posts information regarding all AE-BKH activities and events. By the end of 2023, the account had a total of 1k **followers**.

X PROFILE

The AE-BKH manages one Twitter account: <u>Barcelona Knowledge Hub</u> (@ae_barcelona) and it has **993 followers**.

INSTAGRAM PROFILE

The AE-BKH manages since 2023 its own account: <u>Barcelona Knowledge Hub</u> and has 76 followers.

LINKEDIN PROFILE

The AE-BKH manages since September 2023 the Linkedin account: Barcelona knowledge Hub and has 26 followers.

9. PARTNERS OF THE AE-BKH

Since the Barcelona Knowledge Hub of the Academia Europaea (AE-BKH) was first launched 2013, the **Government of Catalonia** and the **Barcelona City Council** have acted as the main sponsors and promoters of the AE-BKH, in order to consolidate Barcelona as a hub of science and innovation in southern Europe and the Mediterranean region. Their continued support, along with the collaboration of the **Catalan Foundation for Research and Innovation** (FCRI), provides the AE-BKH with the stability needed to under- take new activities and to plan for future growth and expansion.



Partners:





With the support of:

