



Science, Culture and National Identity in Francoist Spain, 1939–1959

Edited by
Marició Janué i Miret
Albert Presas i Puig

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Marició Janué i Miret
Department of Humanities
Universitat Pompeu Fabra
Barcelona, Spain

Albert Presas i Puig
Department of Humanities
Universitat Pompeu Fabra
Barcelona, Spain

ISBN 978-3-030-58645-4 ISBN 978-3-030-58646-1 (eBook)
<https://doi.org/10.1007/978-3-030-58646-1>

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NOTES ON CONTRIBUTORS

Andrés Antolín Hofrichter studied Modern and Contemporary History, Economic Policy and Philosophy at the Albert-Ludwigs-Universität in Freiburg. He was doctoral fellow of the Freiburg Institute for Advanced Studies and researcher at the Forschungsstelle für Sozial- und Wirtschaftsgeschichte of the University of Zurich and, more recently, at the Chair of European History of the nineteenth and twentieth centuries of the Ludwig-Maximilians-Universität of Munich, under the direction of collaborator of Xosé Manoel Núñez Seixas. His thesis, supervised by Jörn Leonhard, was published by De Gruyter Oldenbourg in 2018 under the title ‘Fremde Moderne. Wissenschaftspolitik, Geschichtswissenschaft und nationale Narrative unter dem Franco-Regime (1939–1964)’.

Mitchell G. Ash holds a PhD in History from Harvard University. He is Emeritus Univ.-Prof. in the Department of History at the University of Vienna. He was: Professor at the University of Mainz and the University of Iowa; Visiting Professor at the Institute for History of Science, University of Gottingen; Fellow Wissenschaftskolleg/Institute for Advanced Study, Berlin; Visiting Fellow in the Center for Studies in Contemporary History, Berlin-Potsdam; Visiting Fellow, Max Planck Institute for History of Science, Berlin; Visiting Scholar, Office for History of Science and Technology, University of California at Berkeley; Visiting Professor, European Studies Program, the Hebrew University of Jerusalem; Departmental guest, Program in History of Science, Princeton University; Full Member, Berlin-Brandenburg

Academy of Sciences and Humanities. Memberships: Gesellschaft für Wissenschaftsgeschichte (Society for History of Science and Humanities); History of Science Society (USA); Forum for Human Science in the History of Science Society; Österreichische Gesellschaft für Wissenschaftsgeschichte (Austrian Society for History of Science); Österreichische Gesellschaft für Exilforschung; Sigmund Freud-Privatstiftung, Vienna; Heckmann-Wetzel-Stiftung of the Berlin-Brandenburg Academy of Sciences and Humanities. Editorial Advisory Boards: *Isis* (Madison), 1990–1993; *Revista de Historia de la Psicología* (Valencia), 1984–; *Psychologie und Geschichte* (Heidelberg), 1988–1993; *Cuadernos Argentinos de Historia de la Psicología* (San Luis), 1994–; *Journal of the History of the Behavioral Sciences* (New York), 1997–; *History of Psychology* (Washington, D.C.), 1997–; *Wiener Zeitschrift für Geschichte der Neuzeit* (Vienna, Austria), 1997–; *Berichte zur Wissenschaftsgeschichte*, 2008–. General Editor (with William R. Woodward), *Cambridge Studies in the History of Psychology*, published by Cambridge University Press, 1989–2004. He has published fundamental works on topics such as the Sciences in History, Cultures of Knowledge, History of Eugenics in International Comparison, Scientific Change in Times of Political Upheaval, Science and the Public Sphere, Higher Education and the Sciences under Nazism and Afterward, Science and Knowledge Transfer in the Late Habsburg Monarchy; *Modern Historiography of the Sciences*.

Lorenzo Delgado Gómez-Escalonilla is currently a senior researcher at the National Research Council of Spain (CSIC, Spain). He has a doctorate in Contemporary History from Universidad Complutense de Madrid. He is a research fellow at the Centre d’Histoire des Relations Internationales Contemporaines, Université Paris I-Sorbonne and a researcher participant at the International Visitor Program of the United States. In recent years he has researched Spanish foreign policy in twentieth century, American public diplomacy, and the educational, scientific and military assistance of the United States towards Spain. Among his most recent publications: *Westerly Wind: The Fulbright Program in Spain* (2009); *US Public Diplomacy and Democratization in Spain: Selling Democracy?* (2015); *La apertura internacional de España: Entre el franquismo y la democracia (1953–1986)* (2016); ‘The Deployment of U.S. Military Assistance to Franco’s Spain: Limited Modernization and Strategic Dependence’ (2018); ‘El factor exterior en la consolidación y desarrollo de la dictadura’

(2018); *Teaching Modernization. Spanish and Latin American Educational Reform in the Cold War* (2019).

Ramón Tena-Fernández is a teacher and researcher specialized in the field of Social and Legal Sciences. He has worked in various organizations of the Universidad de Extremadura, such as the ‘Secretariat of Cultural Activities’ and the ‘Library, Archives and Information Science’. As a researcher he has worked in the Palace of the Congress of Deputies and in the Ministry of Education, where he has collaborated both in the ‘Area of Training and Experimentation’ and in the area of ‘Institutional Relations’ (National Institute for Educational Technologies and Teacher Training, INTEF). He is currently working in the Faculty of Teacher Training, where he focuses on the investigation of Francoist censorship. His results have been published in the following magazines: *Revista Chilena de Literatura*, *Revista de Occidente*, *Confluencia*, *Hispania* (AATSP), *Taller de letras* y *Bulletin of Spanish Studies*, all of them classified by CIRC with category A. Likewise, his foreign stays in the CNRS of France and the CIDTFF of Portugal are worth mentioning, since both of them provided him with a scientific background that has allowed him to participate in regional and European research projects, as well as being an online tutor for several official courses of the Ministry of Education.

Marició Janué i Miret is Associate Professor at the Department of Humanities of the UPF. Her current research interests focus on Spanish-German cultural diplomacy in the period 1870–1959. On this context she co-authored and published *España y Alemania: Nuevas investigaciones sobre la historia de las relaciones culturales en el siglo XX* (Ayer 69 (Dossier), 2008) and authored ‘Imperialismus durch auswärtige Kulturpolitik: die Deutsch-Spanische Gesellschaft als ‘zwischenstaatlicher Verband unter dem Nationalsozialismus’ (German Studies Review XXXI, 1, 2008: 109–132); ‘Woe Betide Us If They Win!': National Socialist Treatment of the Spanish ‘Volunteer’ Workers (Contemporary European History, 23, 3, 2014: 329–357); ‘Relaciones culturales en el “nuevo orden”': La Alemania nazi y la España de Franco’ (Hispania LXXV, 251, 2015: 805–822); ‘The role of culture in German-Spanish relations during national socialism’ (in Fernando Clara; Claudia Ninhos (Ed.). Nazi Germany and Southern Europe, 1933–1945. *Science, Culture and Politics*. UK, Palgrave Macmillan, 2015: 84–104); ‘Hispanidad in the völkisch “New Order” in Europe’ (in Johannes Dalfinger and Dieter Pohl (Ed.). *A New Nationalist Europe under Hitler*:

Concepts of Europe and Transnational Networks in the National Socialist Sphere of Influence, 1933–1945. London and New York, Routledge, 2018: 93–111); and ‘Contributing to the cultural “New Order”’: How German intellectuals attributed a prominent place for the Spanish nation’ (in Maria Björkman, Patrik Lundell and Sven Widmalm (Ed.). *Intellectual Collaboration with the Third Reich: Treason or Reason?*, Routledge 2019: 214–229).

More extensive CV information in:

- <https://www.upf.edu/web/humanitats/entry/-/-/16442/adscricion/maria-concepcio-janue>
- <http://orcid.org/0000-0001-6797-3833>
- Research group ‘Nexus between science, culture, politics, religion and society’
- List of her publications and open access:

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[Academia.edu](#)

[Research Gate](#)

Jorge Luís Marzo is an art historian, doctor in Cultural, Translation and Gender Studies, audiovisual producer, professor at BAU College of Design in Barcelona, and member of GREDITS Research Group. He is member of several editorial boards and scientific evaluation committees. He has developed numerous national and international research projects, in exhibiting, audiovisual and editorial formats, often in relation to image policies. The most recent ones are as follows: *After Post-Truth* (Artnodes, 2019); *La competencia de lo falso. Una historia del fake* (Cátedra, 2018); *La década de 1990. Rewind&Forward. Hacia una competencia pública del arte* (MACBA, 2018); *Espectros* (Virreina, 2017); *FAKE. No es verdad, no es mentira* (IVAM, 2016); *Interface Politics* (BAU, 2016, 2018); *Valor! 10 debates sobre la construcción del valor en la ciudad* (Virreina, 2016, with Joana Masó); *Arte en España (1939–2015). Ideas, prácticas, políticas* (Cátedra, 2015, with Patricia Mayayo); *No es lo más natural. Escritos y trabajos de Octavi Comerón* (BAU, 2014, with Joana Masó and Tere Badia); *No tocar, por favor* (ARTIUM, 2013); *MACBA: la derecha, la izquierda y los ricos* (SUB, 2013); *Videocracia. Ficción y política* (SOY CAMARA, 2013, with Fito Rodríguez).

Web: www.soymenos.net

ORCID: <https://orcid.org/0000-0003-1238-8703>

Fernando García Naharro is a postdoctoral researcher at the Romanisches Seminar (Institut für Sprache, Literatur und Medien, Europa-Universität Flensburg) (Germany) currently working on the DFG-Project ‘Buchmessen als Räume kultureller und ökonomischer Verhandlung’. With a training in Anthropology and Sociology and a PhD in Contemporary History (Universidad Complutense de Madrid), his main research interests include History of the Book and Media, History of Publishing, Science and Technology Studies and Semiotics. He has done several research internships in England (University of Leeds), California (University of California Davis) and Catalonia (Universidad Autónoma de Barcelona). His dissertation, titled *The role of science: Scientific and technical literature under Franco (1939–1966)* (UCM, 2017), was a history of science and technology publishing in Spain, with a special emphasis on the collective production and reception of scientific publications in a dictatorial context.

Antonio Niño is Professor at the Department of Contemporary History of the Complutense University of Madrid since 2005. His first research topic was the history of French Hispanism. Subsequently, he has followed other lines of research such as the Hispano-American movement of the first third of the twentieth century, contemporary Spanish foreign policy and especially the relations of Spain with France, Latin America and the USA, and the cultural dimension of international relations. He has recently directed projects and published works on public diplomacy, propaganda and control of public opinion in the twentieth century. He is a visiting professor to give courses and seminars in 12 American and European universities. He has been coordinator of the master’s and the doctorate Program in Contemporary History, taught jointly by seven universities, director of the journal *Cuadernos de Historia Contemporánea*, and member of the scientific board of numerous scientific journals and university publishers.

José M. Pacheco is Professor of Applied Mathematics (retired, honorary) at the Universidad de Las Palmas de Gran Canaria. He has worked in the field of mathematical modelling in Ecology and the Atmospheric Sciences. Since 2005 his field of interest has switched to historical topics, first on Spanish Mathematics in the nineteenth century, and then to the relationship between Mathematics and Spanish history of

the twentieth century. He has publications in *Archive for the Exact Sciences*, *Science in Context*, and *Boletim da Sociedade Matemática de Portugal*, as well as contribution to national and international meetings in the field. Since 2014 he is a member of the Real Academia Canaria de Ciencias (Royal Academy of Sciences of the Canary Islands) and is a regular contributor to its journal *Folia Canariensis Academiae Scientiarum*.

Sara Prades Plaza holds a degree in History with final-year prize and European PhD in Contemporary History from Valencia University. She has been granted at CSIC and in the Contemporary History Department at Universitat de València. She has done research, and stays at, from the LSE (UK), under the direction of Paul Preston, in l'EHESS (France), supervised by Jordi Canal, and at the Universidad de Navarra. In her research she has dealt with the construction of the Spanish national identity in the early decades of the Franco regime, focusing on the historical speech of nacionalcatolicismo, so she received the VIII Research Prize for Young Historians of the Asociación de Historia Contemporánea. She has published papers in monographs, congresses and impact journals, among which are *Historia Contemporánea*, *Ayer*, *Historia y Política*, *Bulletin d'Histoire Contemporaine de l'Espagne* and *Historiografías*. Currently, she is a professor at the Universitat Jaume I of Castelló.

Albert Presas i Puig holds a PhD from the Technische Universität Berlin. He is Associate professor at UPF, where he lectures on History of Science. He was research fellow at the Max Planck Institute for the History of Science in Berlin. His research interests focus on science, culture and power; science in the European periphery; Science and Francoism; and the history of nuclear energy. He has an extensive publishing curriculum and a long-standing experience in research and project coordination. In the last five years, he has been involved in research projects funded by different Spanish and European institutions. He is actually the coordinator of the Horizon 2020 project 'History of Nuclear Energy and Society' (www.HoNESt2020.eu). Selected publications: (with Espluga Trenc, J., A. Prades, B. Medina, M. Rubio-Varas y J. De la Torre) 'Las dimensiones sociales de la percepción de la energía nuclear. Un análisis del caso español (1960–2015)' (*Revista Internacional de Sociología* 75 (4), 2017) p. 265–286; 'Nuclear energy in Spain and its impact on Physics Research', in M.d.Mar Rubio-Varas and Joseba De

la Torre. *The Economic History of Nuclear Energy in Spain* (Palgrave Macmillan, 2017), pp. 97–107; (Ed.) *A Comparative Study of European Nuclear Energy Programs* (Max-Planck-Institut Wissenschaftsgeschichte, Berlin, 201); ‘*Technoscientific Synergies between Germany and Spain in the Twentieth Century: Continuity amid Radical Change*’ (*Technology and Culture*. 51, 1, 2010), pp. 80–98.; (with Baracca, A.; Renn, J.; et al) (Ed.) *Nuclear proliferation: Historical appraisal and present problems* (Max Plank Institut fur Wissenschaftsgeschichte, 2009); ‘Science after Versailles and Paris: The scientific relations between Germany and Spain in 20th. Century’, in Martin Kohlrausch (Ed.). *Technological Innovation and Transnational Exchange of Knowledge (Journal of Modern European History*, 2008, 2), pp. 218–236; (Ed.), *Who is Making Science? Scientists as Makers of Science Policy* (Max Plank Institut fur Wissenschaftsgeschichte, 2008); ‘La inmediata posguerra y la relación científica y técnica con Alemania’, in Ana Romero y María Jesús Santemas (Ed.). *Un siglo de política científica en España* (Madrid, Fundación BBVA, 2008) EDITORIAL?, pp. 173–210; “‘Germania docet’: On a lecture trip to Spain: The scientific relations between Germany and Spain during the Entente boycott (1919–1926)’ (*Annals of Science*, 65, 2008: 529–546); ‘Deutsche Wissenschaftler und Spezialisten in Spanien im 20. Jahrhundert: Kontinuität und Umbrüche’, in Rüdiger von Bruch, (Ed.). *Wissenschaft, Politik und Gesellschaft. Deutschland im internationalen Zusammenhang* (Stuttgart: Franz Steiner, 2007); “‘Germania docet’: The scientific relations between Germany and Spain during from 1919 until 1926’, in Von Bruch, R., (Ed.), *Wissenschaft, Politik und Gesellschaft. Deutschland im internationalen Zusammenhang im späten 19. und im 20. Jahrhundert* (Deutsche Forschungsgemeinschaft, Stuttgart, 2005); ‘La correspondencia entre José M. Otero Navascués y Karl Wirtz, un episodio de las relaciones internacionales de la Junta de Energía Nuclear’, in Sánchez Ron, J.M., (Ed.), *Cien años de Física Cuántica*, Arbor, Vol 167, No 659–660 (2000), pp. 527–601

Antoni Roca-Rosell currently lectures at the Universitat Politècnica de Catalunya—Barcelona Tech (UPC). He holds a degree in Physics from the University of Barcelona (1975) and a PhD from the Autonomous University of Madrid (1990). In 1996, he co-founded the Centre for the History of Technology of the UPC, which publishes the international journal *Quaderns d’Història de l’Enginyeria* since 1996. In 1991,

he was one of the founders of the Catalan Society for the History of Science and Technology (SCHCT), being its president from 1993 to 2009. In 2010, he was elected corresponding member of the International Academy of History of Science. In 2014, he was elected member of the Institut d'Estudis Catalans. His field of research is the history of science and technology in Catalonia and Spain, including the history of engineering and technical education between the XVIII and XX centuries. The background of his research is the comparative perspective and the analysis of the processes of diffusion and appropriation of scientific ideas and technical knowledge to better understand the social impact of science and technology in local and national contexts.

Carolina Rodríguez-López is a tenured professor in the department of modern history and contemporary history at the Complutense University of Madrid (Spain). She has been a visiting scholar at Harvard University and at California State University DH (USA) and a guest researcher at the ZZF (Potsdam, Germany).

Her lines of research include the history of universities and university campuses, academic exile, historiography, tourism, emotions and the history of urban reconstructions after warlike processes.

She is the director of CIAN-Revista de Historia de las Universidades. She is the director of the Complutense Interpretation Center of the University City of Madrid.

Recent publications:

- (2019): *Paisajes de guerra. Huellas, reconstrucción, patrimonio (1939–años 2000)*. Stéphane Michonneau, Carolina Rodríguez-López y Fernando Vela Cossío (eds.). Madrid, Casa de Velázquez-Ediciones Complutense. ISBN: 978-84-909-6228-2.
- (2018): *Hacia el centenario. La Ciudad Universitaria de Madrid a sus 90 años*. Carolina Rodríguez-López y Jara Muñoz Hernández (eds.). Madrid. Ediciones Complutense. ISBN: 978-84-669-3582-1
- (2012): *Reconsidering a Lost Intellectual Project: Exiles' Reflections on Cultural Differences*. Carolina Rodríguez-López y José M. Faraldo (eds.). Cambridge Scholars Publishing. ISBN: 1-4438-3649-4.

Vanessa Tessada Sepúlveda holds a degree in History from the University of Chile and a PhD in History from the University of Valladolid, and is

currently as assistant professor at the Autonomous University of Chile. Her lines of research are marked by studies of gender and political and transnational history, pointing to the processes of construction of international spaces of female politicization. Her studies focus on the dictatorial periods of Chile, Spain and Argentina.

Nicolás Sesma is Lecturer (Maître de conférences) in Spanish Civilization at the University of Grenoble Alpes (France) and Researcher at the Casa de Velázquez (Madrid, Spain). His first degree is in History from the University of Zaragoza (Spain), and he holds a PhD in History and Civilization from the European University Institute (Florence, Italy) in 2009 with a thesis about the Institute of Political Studies (Miguel Artola Prize, 2010). He has been researcher at the Residencia de Estudiantes (2001–2003) and the Ortega y Gasset Foundation (2003), visiting researcher at the University of Madison Wisconsin (2006) and postdoctoral researcher at the University of Columbia in New York (2010–2012). In 2004, he was granted with the Prize for Young Researchers from the Spanish Contemporary History Association.

José Soto-Vázquez (PhD in Hispanic Philology) is a professor of Didactics of Language and Literature in the Universidad de Extremadura (Uex). He is the main investigator of the LIJ group and co-directs the magazine *Tejuelo*, included in Esci; Scopus; Erih plus; MLA; DOAJ. He is the author of several books and research chapters in national and international publishers such as Academy of Hispanism, Visor, University of Castilla la Mancha, Dykinson, Schauhoer Verlag or Shaker Verlag. He coordinates the collection ‘The Peak of the Stork’, which has been translated into six languages and from which more than 20,000 volumes have been published in Germany, France and Spain. He directs the collection ‘El Pirata’ (Editora Regional de Extremadura), with texts written by Ada Salas or Álvaro Valverde. His work has appeared in journals included in JCR and Scopus: *Paedagogica histórica*; *Revista Española de Pedagogía*; *Ocnos*; *Anuario de Estudios Filológicos*; *Información, cultura y sociedad*; *o Investigaciones bibliotecológicas*. He has participated in regional research projects (Reading Habits, 2017), national research projects (Children’s Literature, 2012) as well as European (Cultural Routes, 2015).

Gabriela Viadero Carral is a Spanish academic, specialist in nationalism and national identity. She holds a bachelor’s degree in Humanities and in Journalism, an MPhil in Contemporary History of Spain and a PhD in

Political Science from Universidad Complutense de Madrid, under the supervision of Professor José Álvarez Junco. She has published several academic and informative articles about the relationship among cinema, nation-building and identity in important journals such as *Revista de Occidente* and is the author of the book *Cinema Serving the Nation* (2016), edited by Marcial Pons Publishing House and awarded with Muñoz Suay 2017 Prize for the best History and Cinema research of the year. In this work, she studied the Spanish imagined community in the feature films produced in Spain between 1939 and 1975 (Francoist regime). In 2017, she was a visiting fellow in the government department of the London School of Economics and Politics, under the supervision of John Hutchinson, expert in nationalism. At present she is dedicated to study the narrative structure of the myths and its relationship with nationalist discourses.

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PART I

Theory and Methodology



Introduction: The Usefulness of Science and Culture as ‘Nationalization’ Tools in the Early Franco Regime

Marició Janué i Miret and Albert Presas i Puig

This edited volume examines the role of science and culture as tools for building a national identity during the early Franco regime.¹ By the “early Franco’s regime”, we refer to the years from 1939, with the military regime firmly established after the end of the Spanish Civil War (1936–1939), until 1959, when an economic ‘Stabilization Plan’ implied the abandonment of autarkic economic policies and the returning to a more open economic system.² At the level of international politics, this first phase of Franco’s dictatorship is integrated into two clearly

¹This volume is part of the framework of the research project titled ‘Science, culture, and nation in Spain: from the 1898 “disaster” to the end of Franco’s Dictatorship’ FFI-HAR 2016-75559 (AEI/FEDER,UE), which has also made its funding possible. The results were discussed in the Nexus–UPF research group (<https://www.upf.edu/web/nexus>).

²Riquer (2010).

M. Janué i Miret (✉) • A. Presas i Puig (✉)
Department of Humanities, Universitat Pompeu Fabra, Barcelona, Spain
e-mail: maria.janue@upf.edu; albert.presas@upf.edu

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Switzerland AG 2021

M. Janué i Miret, A. Presas i Puig (eds.), *Science, Culture and National Identity in Francoist Spain, 1939–1959*,
https://doi.org/10.1007/978-3-030-58646-1_1

differentiated periods: the Second World War (1939–1945), and the consolidation of the Cold War after 1945. However, in relation to Spain, both periods have in common their isolation imposed by Western powers, which was gradually abandoned in the 1950s. This volume, thus, deals with the role that science and culture played in the early Franco regime in the process of definition and implementation of the ideas and policies of *nationalization* in Spain.

While the studies on Franco's regime have emphasized nationalism as one of its most distinctive features, the analysis specifically focused on the nationalization efforts of the regime is limited. The concept of nationalization we are looking at is the complex process of transmitting meanings about the character and relevance of the Spanish nation, namely, ideas, representations, and practices of homogenization linked to the supposedly basic constitutive elements of national identity.³ This book focuses on the discursive and symbolic dimensions of nationalization through science and culture, rather than on the material efforts, which have already received some attention.⁴ In this sense, although we recognize the relevance of material efforts and infrastructures for nationalizing purposes, this volume scrutinizes the role of science and culture in discourses aimed at creating and reaffirming the idea of the Spanish nation. Apart from some very meritorious works on Spanish science and culture,⁵ and studies devoted to the development of the idea of the nation,⁶ the relationship between the two issues has barely been raised.⁷ However, there is enough evidence that science and culture played a role as instruments of nationalization policies and that this is one of the most significant, unexplored aspects of Franco's nationalism.

This edited volume focuses on the aforementioned relationship by exploring four main questions: (1) how the Spanish state used the development in science and culture for the legitimation of the Spanish nation; (2) the ability of science and culture to mobilize state resources in the name of the nation for their own interests; (3) to what extent cultural and

³ Quiroga (2013).

⁴ Pro (2019).

⁵ Sánchez-Ron (2008), Romero de Pablos and Santesmases (2008), Gómez and Canales (2009), Gracia and Ruiz Carnicer (2001).

⁶ Álvarez Junco (2001), Quiroga and Archillés (2013), Moreno Almendral (2014), Michonneau and Núñez Seixas (2014), Alares López (2017).

⁷ An exception, Santana de la Cruz (2009); for engineering Camprubí (2014), for historiography, Prades (2014) and Antolín Hofrichter (2018).

scientific output was determined or affected by the current conceptions of the nation; and (4) what was the influence of the representations and symbols of the nation on the role of scientists and the way they understood their disciplines, as well as their own role.

The contributions in this book are based on the premise that the constitution of the contemporary nation state and the development of science and culture policies are closely interrelated.⁸ The contemporary nation state considers knowledge and science as an engine of wealth generation and social development, which, in turn, will determine the relationship among those with political power and society. Already in the twentieth century, the previous trend towards the organization of science in the sense of building scientific policies at the national as well as the international level was confirmed. Thus, the analysis of cultural diplomacy is an ideal means of exploring the links between cultural and scientific fields and their relationship to international political changes and transformations.⁹ All this will facilitate the promotion of science in its social and political contexts, as well as its instrumentalization, to reinforce the desired idea of nation state. The question of the significance of science and culture for the national identity has become one of the most important topics on the research agenda of the history and sociology of science.¹⁰

Spain, despite the impasses, breakouts, and peculiarities of its history, will not fail to accompany this historical cadence.¹¹ There were initiatives of organization of science, underpinned by different social movements and traditions, all of them participating in the debate on the role of culture and science in shaping the Spanish nation, which aspired to be present in the international policy or intended to be recast under its livelihood. For this reason, it is essential to understand the evolution and interaction of both processes, the role of science and knowledge, and the conceptions about the nation at a fundamental stage of its development and in the light of different political situations.

The development of ideas of nation in the framework of the construction of contemporary nation states has been the subject of study by specialists on nationalism issues for a couple of decades.¹² However, the

⁸ Inkster (2009).

⁹ Niño (2009), Gienow-Hecht and Donfried (2010). For Spain, Delgado Gómez-Escalonilla (1992) and (2014).

¹⁰ Metzler (2000), Kojevnikov (2004).

¹¹ Sanz Menéndez (1997).

¹² Smith (1999).

importance and contribution of the science and culture to their significance have hardly been considered.¹³ At the same time, although the relationship between science and political power has been the subject of numerous studies, its role in consolidating the nation state has not yet been seriously taken into account. The present volume is well aware of the advantages of understanding the close relationship between science and culture, on the one hand, and the state and the nation, on the other, as a dense network of political, social, cultural, and material relations, in a complex interaction that flows multidirectionally.¹⁴

Already existing approaches putting science and culture in the focus of historical research on nation-building ideas warn of the risk of hasty acceptance of categories and use of terms such as *science* and *nation* as given, homogeneous, and static. Science and nation do not always appear as univocal concepts at all times and circumstances.¹⁵ It is, therefore, necessary to consider science and nation as a web of references, and to analyse the social relationships and processes in which they are generated and established. Since the end of the nineteenth century, science and technology have not only described the world but have even built it through their applications, technologies, and goals. Hence, it can be considered that the ‘construction of nature’ and ‘nation-building’ took place simultaneously.¹⁶ In this line, we understand the generation of science and knowledge linked to the great themes of history in general, and they should therefore be considered by historiography in the analysis of nation-building processes.¹⁷ This requires a cultural perspective on the conditions of production and the power and influence of knowledge, such as the one we propose here for the case of Spain.

In 1904, Max Weber argued that scientific knowledge based on the controllable and reproducible method and on free and universal communication, the principle of rationality of which would extend to the whole world, was opposed to the idea of nation, which he associated with diametrically opposed characteristics.¹⁸ The nation would be governed by emotional identifications and cultural factors, an approach that has been

¹³ Exceptions are, among others, Fohrmann (1991), Cañizares-Esguerra (2001), Jessen and Vogel (2002), Krige and Wang (2015).

¹⁴ Hühler (2001).

¹⁵ Pestre (1997).

¹⁶ Haraway (1991).

¹⁷ López Piñero (1992).

¹⁸ Weber (1973).

shared by much of the literature. Just as science, especially modern science, is understood as universal, the nation is conceived as being particular.¹⁹ The investigation of the relationship between these two issues, usually considered separately, responds to the assumption of the innovative research on the idea of nation carried out during the 1990s.²⁰ Moving away from a positivist interpretation of national historical development, and incorporating sociohistorical studies in the formation of nations in nineteenth-century Europe,²¹ those then-new approaches, showed the symbolic character of the nation's construction, based on a society that would rest on a socially constructed idea and tradition. In this way, not only has the same concept of nation been developed but a large number of research topics have also been generated. The nation has come to be seen as a culturally constructed association whose relations will be reaffirmed, staged, stimulated, and symbolized, with its institutionalization in the national state. From this perspective, the analysis of the contribution of science and culture to the construction of the idea of nation and the legitimation of the state, but also how the state favoured the development of science and culture, acquires a special interest. This analysis will benefit from new approaches to cultural history which consider science and nation as cultural phenomena situated in European contemporaneity, related to a specific anti-traditionalism and with utopian moments of national improvement and fullness.²² Scientific work and cultural development depend on institutional arrangements, social relations, cultural traditions, and legitimation processes that are never completely isolated, or fully autonomous.²³

Recent historiography confirms the contribution of science to the formation of a 'national culture'.²⁴ The relationship between nationalist and scientific politics has been considered from the early twentieth century onwards.²⁵ Work on the popularization of scientific knowledge is relevant, showing its links to nationalist aspirations based on patriotic-nationalist rhetoric, both in the dissemination of knowledge and in the creation of the idea of national progress linked to science.²⁶ Other studies focus on

¹⁹Hauge (1996).

²⁰Gellner (1983), Anderson (1991), Hobsbawm and Ranger (1992).

²¹Breuilly (1985).

²²Jordanova (1998).

²³Golinski (2008).

²⁴Raphael (1996), Metzler (2000), Brückweh et al. (2012).

²⁵Vom Bruch (1986).

²⁶Bensaude-Vincent (1997).

the institutional framework of science, as the relationship between universities and nationalist science.²⁷ In the realization of the idea, both of the nation and of the universal scientific progress in the person of the scientist and the cultural creator, the State will stylize its researchers as heroes or myths, collaborating in the formation of national identities. Thus, German and French studies focus on the analysis of the involvement of scientists in nationalist propaganda around the First World War.²⁸ Furthermore, studies dedicated to Nobel laureates have regarded them as a ranking to illustrate scientific capabilities and the potential of different nations.²⁹ In the Spanish case, an example would be the role of scientists as ambassadors of Francoism during the international isolation.³⁰ The progressive professionalization of scientific research as a modernizing force in the creation of the nation demands to consider the functionality of the latter to establish and legitimize the agenda of the scientist.³¹ However, many of the existing studies do not aim to analyse the complexity of the relations among science, state, and conceptions of the nation, but between nationalism and its concretion. At the same time, only very few studies have been devoted to the relationship between science and nation from the perspective of the new cultural history.³² Following this perspective, the proposal of this book is to replace the asymmetry of the classical model, according to which the nation state interferes in scientific practice, but not the other way around, with an approach, both analytical and heuristic, to the symmetrical interrelationship between state and science. According to this paradigm, we analyse the relationship between the state and science and culture considering both as organized resource management groups in an interactive pattern similar to a network: science and culture are no longer independent of policymakers. Rather, they are part of general policies, obtaining from them financial support and new goals for scientific agendas, while their results and output provide legitimation to the State political structure. In this vein, one of the contributors to this volume, Mitchell G. Ash, characterizes science as a social subsystem that provides resources to other social subsystems.³³ In return, science appropriates or consumes

²⁷ Porciani (2000).

²⁸ Prochasson and Rasmussen (1996), Mommsen (1995), Fell (2000).

²⁹ Crawford (1992), Friedman (2001).

³⁰ Presas i Puig (2005), Antolín Hofrichter (2018).

³¹ Malet (2009).

³² Jordanova (1998).

³³ Ash (2002) and his contribution in this book.

resources from other subsystems of society. Ash analyses science and its relationship with the State as set of resources interacting with each other. We must not understand the systems that support science and culture separately from scientific policy, but as an integral part of politics, providing the latter with the necessary resources for its legitimacy. In turn, national scientific and cultural systems reflect the different variants of nation-building.

As various authors have argued, regimes without political freedom have also been aware of the role of culture and science as the backbone of their ideas of ‘nation’ or ‘fatherland’/‘motherland’.³⁴ This is a historically relevant phenomenon in which Franco’s Spain was no exception. With respect to the relationship between science and nation under Franco’s regime, recent research highlights the existence of the link between ‘symbolic order’ and ‘scientific policy’.³⁵ Although the parameters, the context, and the actors and their objectives were obviously specific, during the Franco dictatorship, the role of culture and science in the new formation of the state was debated.³⁶

At the same time, although the absence of a genuine debate on science and culture during the Franco regime has traditionally been emphasized, recent studies have demonstrated the need to consider cultural and scientific development and its relationship to the idea of nation for a global understanding of Spanish history at this stage as well. Thus, the publications that have appeared in recent years on the Centro Superior de Investigaciones Científicas (CSIC)/Higher Center for Scientific Research, created in 1939—to which several contributions of the volume pay attention—have insisted on the need to consider not only the elements of rupture with the previous stage but also the continuities.³⁷ In this line, it has been highlighted that some of the main individual actors of the CSIC had been former scholars of the Junta de Ampliación de Estudios e Investigaciones Científicas (JAE)/Board for the Extension of Scientific Studies and Research founded in 1907—although the political-ideological bases of both institutions have been very different. The same can be said

³⁴ Kojevnikov (2004), Rodríguez López (Ed.) (2016), Saraiva (2016), Janué Miret (2019).

³⁵ Antolín Hofrichter (2018), Campubí (2014).

³⁶ Sanz Menéndez (1997), Herran and Roqué (2012).

³⁷ Among others Puig-Samper, M.A. (Ed.), (2007). A critic in Nieto-Galan (2008).

in reference to the Instituto de Estudios Políticos (IEP)/Institute for Political Studies, also created in 1939 and also considered in the volume.³⁸

This volume assumes the idea of science and culture that integrates the natural and experimental sciences, as well as the social and human sciences and the arts, considering that all of them share the generation of knowledge and its dissemination. Although we do not intend to comprehensively address all possible areas of the relationship between science, culture, and the arts on the one hand, and the idea of nationalization on the other during the first phase of Franco's regime, as a whole, the volume aims to discuss the fundamental aspects for its understanding. The aspects we address can be summarized in the following eight components:

1. The agents in the fields of science and culture, as well as in the State, who played a part as promoters of strategies and subsidizers of science and culture.
2. The institutions that acted as channels for disseminating narratives about the nation, which we can therefore call 'national institutions': academic, scientific, cultural, and artistic, whether official, semi-public, or private.
3. The interrelationship between the following three spheres: (a) agents of scientific and cultural production—scientists, academics, intellectuals, and artists; (b) scientific and cultural institutions, as well as the State itself; and (c) finally, the (self-)identifications of the formers as national representatives in different contexts, positioning themselves in the forefront of the nationalist-scientific patriotism to forge a scientific community for the nation.
4. The attempts to create a 'national science', both in the sense of promoting certain distinctive specialties and in cultivating a specific model of practising science, that is, the cultivation of national scientific landscapes from the state–nation and the science–culture relationships (CSIC, scientific academies, and institutions).
5. The multidimensional relationship between agents, transmitting institutions, state actors and receptors—'consumers' of national narratives—emerging from the different fields of science, culture, and arts, that is, the generation of a scientific interpretation of the nation (e.g. contribution from historical disciplines and social sciences).

³⁸ Sesma Landrín (2011).

6. The interrelation between the following three levels: (a) political and social transformations, (b) modifications in the narratives about the nation and the concept of the Spanish nation, and (c) changes in scientific and cultural policies.
7. The interchange of material and symbolic resources between political interests and scientific and cultural interests. In this sense, we intend to evaluate the language and symbols borrowed from science and culture to be used as instruments of transmission of national narratives, whether they allude to a supposed pre-existing Spanish national identity or they seek to create such an identity.
8. The links between the efforts to nationalize science and culture on the one hand and to internationalize them on the other, as well as the role of cultural and scientific transfer and exchange, not only as material resources but also as sources of prestige and political power. At this point, it should be considered that the promotion of science and culture was often carried out both at national and international levels by the same institutions. Thus, the fact that the State chose to empower some institutions more than others provides valuable information for the purposes of its project of nationalization. At this level of international relations, we consider the role of scientific and cultural diplomacy, a great driver of identification between science and culture and national images.

We have structured the treatment of the aforementioned issues in the book in five sections. The first one is devoted to the common theoretical and methodological bases that all contributions share, with special stress on the meanings attributed to science, culture, nation, and relations between them. The chapters which make up the second section address significant points in the scientific and cultural policies in Franco's 'New State', including their institutional, ideological, and symbolic elements, as well as a perspective on the evolution of the relationship between Catalan substate nationalism—a relevant phenomenon in twentieth-century Spanish history—and science. Women, and their roles in various areas of the regime's scientific and cultural system, constitute the leading thread of the third section. In relation to this point, it is necessary to keep in mind the mutual relationship between the construction of gender by the nation and the role of gender in shaping national imaginaries, also during Franco's

regime.³⁹ Despite official discourses of the regime's contempt for women's dedication to science and academia—and in general their presence in public sphere—incipient research has highlighted that there were women involved in cultural and scientific activities.⁴⁰ Therefore, we are convinced that for a proper exploration of the subject matter of this book, we need to address the still largely ignored role that women played in these areas and their relationship to the prevailing conception of nation and nationalization. Case studies on participation in the nationalization of different scientific disciplines and areas of the arts constitute the fourth section of the book. The volume closes with a fifth section, dedicated to exploring some perspectives on internationalization of culture, science, and technology in Franco's regime, thus offering the tools for a comparison with other Western countries during the Cold War consolidation phase.

In total, there are seventeen contributions that make up the five parts of the book. To the first part, dedicated to the theoretical foundations, belongs this introductory chapter, where we pursue to present the historiographical objectives of the book, its theoretical foundations, the state of the question on the most relevant aspects linked to our topic, and the nature of the contributions it contains. In addition, a contribution by Mitchell G. Ash completes this theoretical part of the book. His chapter considers the interaction processes established between science, the idea of nation, and culture, all of them concepts considered as moving targets. He affirms that the meanings of the terms science, nation (or national identity), and culture have fundamentally changed over time and have varied from one place to another in similar periods of time. In the medium term, national identity and nation itself have become increasingly complicated and ambivalent concepts in an increasingly globalized world. Science and erudition, as well as culture, have also changed radically since the beginning of the nineteenth century. Ash defends the idea that it is impossible to treat any of these three entities as something separate from the others. In his opinion, science is not only results of research or methods but also institutions. For this reason, sciences can also become centres of power. Ash sustains that the relationships between sciences and political power are not as one-sided as is often suggested or assumed. Attending to these interactions, periods of political power predominance, especially in dictatorships, have not always automatically produced pseudoscience. He

³⁹ Blasco Herranz (2014).

⁴⁰ Alcalá and Magallón (2008), Canales (2012), Romero de Pablos (2017).

further argues that from the historical perspective, we must speak of ideological connotations (assignments) of the sciences as discursive resources, or of scientific investigations carried out under different political priorities. In the nineteenth century, at least, and in many European countries in the early twentieth century, natural scientists, humanists, and public intellectuals were educated largely in the same elite high schools and values, and therefore should be considered members of a common culture. Members of all kinds of disciplines produced and propagated *national science*. For Ash, this is an important reason why the supposed fundamental difference between the natural and human sciences may not have been as significant for this particular history as is often assumed. Ash also discusses the term national sciences. He maintains that science is national, international, and transnational, often simultaneously. In this line, he warns that putting the term nation at the centre entails danger, either from a perspective of a single nation with too narrow a focus or from comparisons of a country's scientific policy with that of another, rather than considering the possibility of a transnational circulation of countries, ideas, and people. He concludes that a one-nation approach, which often simply reproduces existing institutional frameworks funded by the state without reflecting on them, cannot do justice to these complexities.

The second part of the book, which focuses on the scientific and cultural policies in Franco's 'New State', includes four contributions respectively devoted to aspects of historiography, symbolical architecture, epistemic communities and science makers, and the role of science and technology in Catalan substate nationalism. Andrés Antolín Hofrichter approaches the history of science under early Francoism, by focusing on its cultural expressions. He examines the narratives, symbols and rituals that surrounded the main institution founded by the new regime in order to promote and politically control scientific research: the Higher Council for Scientific Research (CSIC). Relying on studies on the symbolic dimension of institutions, he understands the High Council as an attempt to institutionally represent the capacity for 'science' of a Catholic nation and, above all, its elite. Antolín argues that the organizational framework of the High Council served to symbolize an allegedly restored 'Christian unity' of science and a specifically Spanish scientific path within the history of modern science. He analyses the organological language and symbology, and the religious-spiritual components used in publications and ceremonies. Following Antolín, they helped shaping a conception of 'science' that referred to a pre-industrial and pre-enlightened era—all this despite the