

EXPERTISE IN AND AROUND ORGANIZATIONS

The Changing Constitution and
Ecology of Expertise

Edited by Kasper T. Elmholdt, Ruthanne Huising
and Elina I. Mäkinen

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RESEARCH IN THE
SOCIOLOGY OF ORGANIZATIONS

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EXPERTISE IN AND AROUND ORGANIZATIONS

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RESEARCH IN THE SOCIOLOGY OF
ORGANIZATIONS, VOLUME 97

**EXPERTISE IN AND
AROUND ORGANIZATIONS:
THE CHANGING
CONSTITUTION AND
ECOLOGY OF EXPERTISE**

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INVESTOR IN PEOPLE

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FOREWORD: RESEARCH IN THE SOCIOLOGY OF ORGANIZATIONS

Research in the Sociology of Organizations (RSO) publishes cutting-edge empirical research and theoretical papers that seek to enhance our understanding of organizations and organizing as pervasive and fundamental aspects of society and economy. We seek provocative papers that push the frontiers of current conversations, that help to revive old ones, or that incubate and develop new perspectives. Given its successes in this regard, RSO has become an impactful and indispensable fount of knowledge for scholars interested in organizational phenomena and theories. RSO is indexed and ranks highly in Scopus/SCImago as well as in the *Academic Journal Guide* published by the Chartered Association of Business schools.

As one of the most vibrant areas in the social sciences, the sociology of organizations engages a plurality of empirical and theoretical approaches to enhance our understanding of the varied imperatives and challenges that these organizations and their organizers face. Of course, there is a diversity of formal and informal organizations – from for-profit entities to nonprofits, state and public agencies, social enterprises, communal forms of organizing, non-governmental associations, trade associations, publicly traded, family owned and managed, private firms – the list goes on! Organizations, moreover, can vary dramatically in size from small entrepreneurial ventures to large multinational conglomerates to international governing bodies such as the United Nations.

Empirical topics addressed by RSO include the formation, survival, and growth of organizations; collaboration and competition between organizations; the accumulation and management of resources and legitimacy; and how organizations or organizing efforts cope with a multitude of internal and external challenges and pressures. Particular interest is growing in the complexities of contemporary organizations as they cope with changing social expectations and as they seek to address societal problems related to corporate social responsibility, inequality, corruption and wrongdoing, and the challenge of new technologies. As a result, levels of analysis reach from the individual to the organization, industry, community and field, and even the nation-state or world society. Much research is multilevel and embraces both qualitative and quantitative forms of data.

Diverse theory is employed or constructed to enhance our understanding of these topics. While anchored in the discipline of sociology and the field of management, RSO also welcomes theoretical engagement that draws on other disciplinary conversations – such as those in political science or economics, as well as work from diverse philosophical traditions. RSO scholarship has helped push forward a plethora of theoretical conversations on institutions and institutional change, networks, practice, culture, power, inequality, social movements,

categories, routines, organization design and change, configurational dynamics, and many other topics.

Each volume of RSO tends to be thematically focused on a particular empirical phenomenon (e.g., creative industries, multinational corporations, and entrepreneurship) or theoretical conversation (e.g., institutional logics, actors and agency, and microfoundations). The series publishes papers by junior as well as leading international scholars and embraces diversity on all dimensions. If you are scholar interested in organizations or organizing, I hope you find RSO to be an invaluable resource as you develop your work.

Professor Michael Lounsbury
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THE CHANGING CONSTITUTION AND ECOLOGY OF EXPERTISE

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INTRODUCTION

Expertise is a force that quietly shapes and reshapes the institutional and organizational contexts that house and leverage it. It winds its way through and around seats of power, piles of money, and pockets of violence – authorized and illicit – within societies. Traditionally, expertise has been understood as “a historically specific type of performance aimed at linking scientific knowledge with matters of public concern” (Eyal & Medvetz, 2023, p. 5). Expertise, in the sense of technical knowledge and specialized skills, was central to early theories of bureaucracy and management (Taylor, 1912; Weber, 1922), as well as in theories of the division of labor (Durkheim, 1893; Smith, 1776). Use of the term expertise in public discourse grew in the 1960s. This coincided with the increased production of specialized knowledge, the expansion of the technocratic management of the state, and the complexity and specialization of modern economies and corporations (Eyal, 2013). The centrality of expertise in the operation and governance of society is underscored and reinforced by contemporary challenges to it (Eyal, 2019).

Professions made expertise manifest in the past century and, thus, the terms profession and expert became interchangeable. Abbott (1988, p. 323) studied professions because of his broader interest in how “societies structure expertise” and identified professions as “the main way of institutionalizing expertise in

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industrialized societies.” Through an abstract, propriety knowledge system and related technical practices professions convince clients, the public, and the state that their definition and treatment are most appropriate to the problems at hand and thus they should control any interventions. While *The System of Professions* is often interpreted as a treatise on credentialled or certified professions (lawyers, physicians, accountants), Abbott argued jurisdiction is “established in the processes of actual professional work” via the capacity of knowledge systems to control problem definition within a given era and society (Abbott, 1988, p. 33). Abbott, and as many have since, examined the division of expert labor, observing competition among groups for the recognition – in very few cases the monopoly – to apply their expertise within a domain of social problems.

Professions, through their expertise, work to inject scientific knowledge and interpretation into the design and operation of large swaths of society. Beyond inter-professional competition, historically, one could argue that professions faced few other challenges. For a good part of the 20th century, professions in the Anglosphere worked in standalone practices, eluding managerial control, or in professional bureaucracies that buffered their practices from managerial interference (Barley & Tolbert, 1991). When working in groups or alone, professions self-governed within and across organizations. At the same time, clients, patients, and customers had limited rights, charters, advocates, and information that allowed them to question the work of these experts (Hughes, 1958). Acts of inference through which professions generated diagnoses, judgments, and advice were shielded from the observation and questioning of organizations, managers, and clients. The autonomy of professions to diagnose and treat could suggest trust in their expertise. Yet the relative dependence, and limited recourse of those who sought their advice suggest it may be more a matter of faith in the project of modernity (Giddens, 1990).

However, both trust in expertise and faith in modernity may be waning. Changes in the context in which expertise operates, the constitution and basis of circulating expertise, and the adjudication (deciding who qualifies as an expert) and evaluation (assessing the credibility and quality) of expertise are significant (Huising, 2023). Scientific knowledge and the abstract expertise of professions are losing standing in matters of public concern (Weingart, 2023). Although organizations and institutions have evolved to depend on myriad experts, collective trust in the conventional abstract, rationalist approaches is in decline (Eyal, 2019; Eyal & Medvetz, 2023). Inference and interventions may no longer be authorized and deferred to on the basis of their rationalist or scientific origins.

These changes have opened up realms of social problems to a plurality of incommensurable yet competing forms of expertise and to what was historically absent: the observation, questioning, and critique of expertise itself. The boundary between those historically considered experts and others is dissolving, as participation in inference and interventions is extended independent of the informational and analytical bases of inference and interventions (Collins & Evans, 2002). Alternative logics of openness and participation in matters typically deferred to those with specialized knowledge and training is where the politically left and right commune. Efforts to enhance participatory democracy, decolonize

institutions, “open” science, and decarbonize economies have contributed to this shifting ground as much as efforts to reinstate religious authority, challenge the “deep state,” undermine universities, and reinforce patriarchy. Experiential knowledge, do-it-yourself trial and error, religious conventions, cultural heritage, and celebrity status have emerged as a base of expertise (e.g., [Epstein, 1995](#); [Sheehan, 2022](#)). These alternative claims of expertise and performances are supported and diffused via diverse communication technologies, in particular social media platforms, that saturate the transactions of daily life ([Arnoldi, 2023](#); [Preda, 2023](#)). Expertise claims and performances are further complicated by the emergence and expansion of AI agents that provide output on almost any topic. Citizens, patients, and clients have the means to search for and reach whom they determine to be the appropriate expert on any given issue.

FROM THE SYSTEM OF PROFESSIONS TO THE ECOLOGICAL OF EXPERTISE

Retreating from the assumption that expertise is institutionalized in professions raises the question of “how forms of expertise can acquire value as public interventions” ([Eyal & Buchholz, 2010](#), p. 120; [Eyal & Levy, 2013](#), p. 225). In this way, expertise is understood more broadly as the potential to have an effect ([Eyal, 2013](#)). However, expertise as the capacity to have effect may be independent from expertise as recognized as having value. That is, virologists have the expertise to make vaccines that protect us from viruses, yet some people refuse to recognize that expertise. In contrast, astrologist’s forecasts have no predictive power, yet some people believe astrologists impart expertise. We live in a time where what constitutes and counts as expertise is fractured.

Conceptualizing expertise as a capacity for intervention or effect that competes within a complex ecology for recognition unleashes a significant new research agenda. Abbott’s idea of an ecology of actors (read broadly to include technology, networks, and other systems), competing to control the interpretation and treatment of a domain of problems remains wholly relevant to answering this question. Rather than reading Abbott through the lens of professions, it can be more productively read through the lens of expertise ([Huising, 2023](#), p. 454).

Expertise shapes – it is self-consciously interested in shaping – the ways in which we interpret, classify, and understand particular phenomenon and then take action in relation to the phenomenon.¹ This raises questions about how forms of expertise generate a context of demand and the implications for public interventions. Likewise, the supply of expertise – its basis, representations, and claims – requires examination. The “well-woven web of arguments, procedures, measurements, and institutions, all supporting each other” ([Eyal, 2019](#), p. 86), intermediaries ([Turner, 2023](#); [Waardenburg et al., 2022](#)), collective action ([Epstein, 2023](#)), and technologies ([Collins, 2018](#); [Pasquale, 2023](#)) provide crucial bases for interventions. Through what mechanisms and infrastructures do forms of expertise become accepted as appropriate in relation to social problems and needs? Further, we need to understand the adjudication processes through which interventions

are deemed expert. If expertise is no longer claimed in alignment with modernist logics, how are claims and outcomes of expertise evaluated and legitimated? How have the roles of audiences and publics changed? To capture the expanding constitution, the changing basis of circulating expertise, and the new processes through which expertise acquires value, we must expand our research agenda.

REALIST AND RELATIVIST PERSPECTIVES ON EXPERTISE

The expanded research agenda should not degrade the conversation into one in which everything is coded as expertise, and everyone becomes an expert (Collins, 2014). We need both realist and relativist studies of expertise as together they build a comprehensive understanding of how expertise is generated, applied, and recognized, and the reciprocal dynamics among these processes. By realist we mean a verified capacity to have effect developed through specialized knowledge and techniques (Abbott, 1988) acquired through deep training in a community of specialists (Collins & Evans, 2007). This includes substantive expertise (Barley, 1996) and contributory and interactional expertise (Collins & Evans, 2007). The term relativist can be understood in two ways. In the first (relativist one), expertise is understood as constructed through social processes and thus its generation, application, and recognition are vulnerable to social dynamics. This first definition relates roughly to the second wave of science studies (Collins & Evans, 2002) in which “real” expertise was shown to be subject to social forces and dependent on social consensus about the legitimacy of specific claims of expertise. In the second (relativist two), expertise is understood to be a claimed and recognized capacity that does not depend on a single social consensus. Various, incommensurable claims of expertise may be recognized as legitimate simultaneously by different communities. This definition relates roughly to the third wave of science studies (Collins & Evans, 2002) in which participation in expert domains is increasingly extended to actors who claim a range of identities, experiences, and positions as sources of expertise.

Realist and relativist “one” understandings of expertise have much in common, although this is not generally recognized, as expertise is *generated*, *applied*, and *recognized* through communities that develop processes of verification and social consensus. In contrast, relativist “two” understandings of expertise focus on the *recognition* of expertise as participation in social interventions has been extended to include anyone who claims expertise (Collins & Evans, 2019). As alternative capacities – including folk knowledge, life experience, and religious tomes – are elevated and verifiable capacities to understand physical processes are accelerated, efforts to analyze expertise as a claimed or verifiable capacity and to examine the processes through which such capacities achieve or do not achieve social consensus are important.

The COVID-19 pandemic illuminated these points. From a realist standpoint, scientific experts – such as epidemiologists, virologists, and public health officials – who relied on specialized, verifiable knowledge had the capacity to intervene (e.g., prescribing social distancing, personal protective equipment, developing vaccines,

and prescribing vaccines). Yet, a global comparison of the functioning and advice of these experts showed how their prescribed interventions were shaped by institutional, political, and economic forces. Medical and scientific advice was shown to be contingent and mutable – although with limited variation – and thus socially constructed (relativist one standpoint). Small differences in medical and scientific advice were leveraged by anti-science communities to cast doubt on the legitimacy on the advice and more generally rational, scientific approaches to dealing with viruses. At the same time, a range of actors – drawing on position, identity, or experience – claimed to have relevant expertise for dealing with a virus (relativist two standpoint). A president, skeptical of the value of social distancing and wearing masks, suggested that ultraviolet light or injecting disinfectants should be tried. A range of alternative-health practitioners prescribed essential oils, apple cider vinegar, and other household treatments. Those who experienced the virus also prescribed their treatments. This range of interventions was recognized by many as superior and preferred to medical and scientific interventions; thus, they were recognized as forms of expertise.

Unpacking both relativist and realist ontologies of expertise depends on a relational or interactional³ conception of expertise; however, “differences arise when defining interactional” and relational (Preda, 2023, pp. 35–36). Realist and relativist one conceptions of expertise understand expertise to be generated and applied relationally or interactionally. Expertise is created, learned, acknowledged, and made manifest interactionally through communities of practice (including professions and occupations) (e.g., Collins, 2014, pp. 64–65). This capacity is relationally constituted within a domain of activity. Relativist two conceptions of expertise understand expertise to be recognized and authorized via interactions with audiences of clients, patients, the public, and decision-makers. Unfortunately, a relational ontology is often conflated with relativist analyses of expertise and a substantivist ontology is conflated with a realist analysis of expertise. To examine the expansion of forms of expertise and the ecology of expertise, we depend on a relational ontology to understand how relativist and realist constitutions of expertise evolve and interweave (Pakarinen & Huising, 2025).

EXPERTISE IN AND AROUND ORGANIZATIONS

The volume is divided into two sections focusing on the changing constitution of expertise and the expanding ecology of expertise. The papers explore how understandings of expertise are evolving beyond rationalist, scientific forms of knowing and beyond professions. The epistemological, performative, and political bases of expertise are opened up. In doing so, the papers consider the changing political and technological contexts in which expertise is performed to make interventions, as well as changing notions of expert performance and intervention. Together the papers motivate new and important avenues of research.

The first section in the volume expands conceptualizations of expertise beyond domain expertise to offer new forms of expertise that undergird and facilitate domain expertise. Aesthetic expertise (Pakarinen & Baldessarelli, 2025),

decomposition expertise (Mäkinen, 2025), process expertise (Treem & Barley, 2025), institutional expertise (Ortiz Casillas, 2025), alignment expertise (Preda, 2025), and groundwork (Lindberg & Raviola, 2025) are forms of expertise that work in tandem with rationalist, scientific expertise to leverage them into an intervention. Similarly, organizations generate new forms of expertise in the context of emerging technologies. Technologies may lead to new forms or configurations of de/centralized expertise (Ungureanu, 2025) and shape how expertise is acquired and how it evolves (Cohen & Bui, 2025).

The second section begins with a provocative review that reveals how ecologies of expertise – past and present – are shaped by and shape processes of inequality (Occhiuto, 2025). It goes on to examine how the ecology of expertise has expanded to include intermediaries (Benjamin-Pollak & Karunakaran, 2025), allies (Berr, 2025), lay people (Ritwick & Koljonen, 2025), classification systems (Monteiro, 2025), algorithms (Heimstädt & Heimstädt, 2025), and clients (Elmholdt, Leynadier & Bourgoïn, 2025). This expanding ecology illustrates the various forms of expertise and actors that refract and generate what counts as a “legitimate basis for intervention” (Eyal & Buchholz, 2010, p. 128). Such an ecology highlights the multiple, often competing forms of expertise that operate in organizations and the public, challenging the scientifically and technically constituted expertise. Below we work across these volume sections and papers to synthesize their collective contributions to the enlarged, emerging research program.

BEYOND DOMAIN EXPERTISE: OBSCURED, UNDERVALUED, AND EMERGENT FORMS OF EXPERTISE

Traditionally, expertise is understood as *domain expertise* – specialized knowledge and techniques based on a canon of abstract knowledge – that ties a basis of knowing to a space of effect (Abbott, 1988). Collins and Evans (2007) call this contributory expertise: the knowledge and skills acquired through prolonged interactions with specialists in a domain that contribute to a domain of practice. Rising through the ranks – novice, advanced beginner, competence, proficiency, and finally expert – one learns abstract, practical, moral, and social notions about how to practice within and eventually contribute to a domain (c.f. Dreyfus & Dreyfus, 2005). Most studies of expertise, as well as studies of occupations and professions, draw on this notion of expertise. Labor markets, educational institutions, and organizational charts are largely organized around domain expertise. Domain or contributory expertise is thus the dominant form of expertise, understood explicitly or implicitly as the “real” expertise against which another knowledge is contrasted and understood.

Identifying new forms of expertise that are useful for conceptualizing expertise beyond domains is to walk a fine line. It entails examining and naming obscured, devalued, or emergent ways of knowing and practicing within or across domains. It avoids replicating polemic distrust in and displacement of specialized systemized ways of knowing about a domain. Elucidating new forms of expertise across

domains that resist reduction to social constructions is unabashedly part of the realist agenda. As the papers in the first section show, mitigating the complex problems related to domains, organizations, institutions, and new technologies will depend on governing through detailed, historically grounded knowledge of socio-technical systems (Bratton, 2021). At the same time, the relativist agenda appears as domain expertise is the ultimate point of reference for “alternative” articulations of expertise. To navigate this, it is crucial to recognize and categorize the diverse forms of expertise that, while often overlooked, play a vital role in complementing and enhancing domain-specific knowledge. We organize the forms of expertise presented in this collection as obscured, undervalued, and emergent. *Obscured* forms of expertise are those that cultivate, support, and extend the practice of domain expertise in ways that are often not explicitly articulated or consciously recognized by experts within the domain. Tacit components of knowing (Polanyi, 1962), knowledge that cannot be made explicit, and intuition (Bessis, 2024; Villani, 2015) are partially obscured forms of expertise in the sense that domain experts know they rely on them, but their role is rarely acknowledged. In the first section of the volume, Pakarinen and Baldessarelli introduce *aesthetic expertise*, expertise “that resides in cultivated sensory judgments that experts employ to work with and through materiality” (Pakarinen & Baldessarelli, 2025, p. 25) and Mäkinen introduces *decomposition expertise*, expertise that enables a practitioner “to break down the products of their work into individual components, assess each part, and evaluate how the components come together to form the whole” (Mäkinen, 2025, p. 46).

Pakarinen and Baldessarelli distinguish sensory sources of knowledge from tacit and embodied sources of knowledge, taking the materiality that informs, surrounds, and sustains all domains of expertise seriously. Aesthetic expertise is generated, applied, and recognized through sensory experiences. It is an elusive form of expertise that may be easy to displace or dismiss. To be methodological, to be rational, is often understood to be guided by systems of thought and practice. This perspective obscures the role of sensory experience and the materiality of expertise. Aesthetic expertise recognizes how knowledge is developed through close engagement with materials; thus, aesthetic expertise, in contrast to tacit knowledge, highlight how expertise is developed and applied as individuals engage with materials through their senses (hearing, sight, touch, smell, and taste).

Mäkinen extends the concept of professional vision (Goodwin, 1994) – how members of a profession “see and discursively articulate phenomena in their perceptual field” (Mäkinen, 2025, p. 45) – by examining how vision can be trained to deconstruct and question the practice of the profession. Observation and analysis of journal club meetings, a typical training practice in academic science, shows how early-career scientists come to see and critically evaluate the process of creating scientific knowledge (others and their own) by taking apart published scientific articles. Through this regular, collective practice, young scientists learn to identify ambiguous knowledge claims, critically deliberate on supporting visualizations and analytical tools, and then turn this critical gaze on their own research process and projects. Decomposition expertise – also recognizable to social scientists – is developed proactively, allowing emerging researchers to develop the capacity to interrogate analytical strategies, knowledge claims, and knowledge

representations. This previously unarticulated expertise feeds back into and alters the practice and production of domain expertise by creating critical taste and standards regarding knowledge production and claims.

Undervalued forms of expertise are those that, despite and possibly because of their necessary and continuous performance, are treated as subordinate to and less than domain expertise. These forms of expertise are complements to domain expertise, working in parallel to and across domain expertise. Treem and Barley, building on earlier work (Treem & Barley, 2016, 2018), considers the troubling status of *process expertise* and experts in organizations that persist in valuing domain expertise. Ortiz Casillas, writing in the context of public administration, introduces *institutional expertise* as an alternative to domain expertise and perhaps the foremost expertise of public administration. Both process and institutional expertise are invisible forms of expertise whose effect is consistently devalued in relation to domain expertise.

Process expertise is used to manage “information and communication both within and across domains but does not, in itself, represent those domains’ practices” (Treem & Barley, 2025, p. 69). This paper considers the troubling status of process expertise and experts in organizations. Despite the continued importance of information and massive growth of rich information in organizations, the ability to select, compress, and represent relevant information in serve of organizational problems remains underappreciated. Treem and Barley consider three ways – assimilation, brokerage, and commodification – through which process experts may work in relation to domain expertise and experts to alter the identity, visibility, and accessibility of their work. The paper motivates the need for more research and organizational awareness of the important, yet underappreciated role of process experts in organizations.

Understandings of the form and function of expertise in public administration (the departments and agencies tasked with planning, implementing, and evaluating public policy and regulations), revolve around the joint legacy of Weber (1978) and Wilson (1887). Ortiz Casillas argues that Weber’s view of expertise as something best produced, organized, and applied through bureaucracy, together with Wilson’s insistence that expertise should transform politically derived problems into apolitical, technocratic solutions, has generated an uneasy relationship between expertise and politics. This legacy has resulted in significant examination of the presence, absence, and implications of politics for expertise and expertise for politics. However, this focus has detracted from examining the expertise needed to “keep the lights” on in governments around the world. Beyond apolitical and professional expertise, Ortiz Casillas introduces the concept of institutional expertise: specialized knowledge of and skills developed within and about the interlocking institutions that make up the state. Most members of the public administration fulfill policymaking and administering roles that depend first and foremost on their skills working in a complex institutional system and knowing that system helps them generate, apply, and recognize expertise. This paper outlines a research agenda intended to take public administration beyond the continuous tension between expertise and politics and to examine institutional expertise as a fundamental resource in the operation and governance of societies.