

Beyond Wundt and James: A global origin story of experimental psychology

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RUNNING HEAD: Global origin story

Abstract

Canonized in psychological scholarship is a specific narrative about the origins of experimental psychology. Within this narrative, Wilhelm Wundt and William James are frequently presented as dual progenitors of the experimental method. A widespread presumption is that these methods radiated from the United States and Germany outwards to other regions. However, broader evidence, drawing from the medieval Arab world and from later instantiations of laboratory psychology in Japan, China, India, and Argentina, demonstrates that experimental methods in psychology were developed and adapted for a range of contexts and purposes in other world regions. In these regions, laboratory psychology methods were marshalled to successfully effect major social and structural reform. These works are almost entirely absent from the canon of scholars associated with the birth of experimental psychology, yet their impact, like that of James and Wundt, has endured for over a century. The paper analyzes how the prevailing narrative describing the genesis of experimental psychology has been an organizing factor in the field. Recognizing a broader genealogy recognizes the accomplishments of psychological pioneers around the world, articulates the range of impacts that experimental psychology can achieve, and expands the hypothesis space of experimental psychology.

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"By weighing, we know what is heavy and light. By measuring, we know what is long and short. All things are so, but the mind is particularly so".

Mencius, 327-289 B.C

In the preceding quote, Mencius, the Confucian “second sage,” raises the prescient possibility that the operations of the human mind are measurable. Centuries later, scholars set out to do exactly this. Though their efforts evolved from their philosophical beginnings, quantitative methods were formulated on the grounds that human psychology is lawful and accessible via experimentation. Today, this area of study is known as experimental psychology. Academic sources frequently present two key figures, Wilhelm Wundt and William James, as the progenitors of experimental psychology. Their complementary yet contrasting programs, Wundt’s structuralist laboratory science and James’s functionalist analysis, are heralded as the birth of the field. A closer historical reading, however, reveals a polycentric genealogy that extends beyond James and Wundt in space and time: antecedents in the medieval Islamic world and laboratories developed contemporaneously with those of James and Wundt across East and South Asia and Latin America collectively established experimental practices that rarely surface in the familiar canon introduced in textbooks and articles, but that were critical to scientific and societal advance. This paper reframes the history of experimental psychology within a broader global context and considers how a revised origin story can foster growth and innovation in the discipline.

A tale of two scholars: The foundational work of Wundt and James

Wilhelm Wundt opened his inaugural laboratory in Leipzig in 1879, a historical event that reportedly inaugurated psychology as an experimental science (Danziger, 1990). From his Leipzig laboratory established in 1879, Wundt pursued a structuralist program that aimed to identify the elemental constituents of mental life that focused on sensation and perception and the lawful relations among them. His principal method was trained introspection under controlled tasks, predicated on the assumption that carefully guided

self-reports could reveal psychological experience (Wundt, 1910). Contemporaneously, William James articulated a functionalist vision at Harvard that assumed an equally foundational place in the history of experimental psychology (James, 1890). In contrast to Wundt, James treated mind and behavior in terms of their adaptive purposes. Skeptical that introspective self-reports could capture complex mental processes without distortion, James, drawing on Darwinian ideas, queried what psychological processes do for the organism. Methodologically, this pushed inquiry toward explanations of use and consequence via naturalistic and comparative lines of evidence. Where Wundt sought the contents and structure of consciousness through laboratory introspection, James prioritized the functions and outcomes of mental processes in the service of questions about adaptation, purpose, and utility.

Taken together, Wundt and James established a Western narrative of experimental psychology by coupling laboratory infrastructure with a Western philosophical frame. Combined with their scientific innovations, the institutional prestige of their respective settings lent immediate and enduring credibility to their work. The rapid proliferation of their scholarship within German- and English-language venues allowed for broad circulation. They each trained influential scholars and had the resources and capability to produce and disseminate critical artifacts (lab photos, instruments, textbooks) that scholars quickly drew on, consolidating a storyline of how experimental psychology developed (Nanay, 2021).

Meanwhile, contemporaneous laboratories in Tokyo, Beijing, Calcutta, Argentina, Buenos Aires, and other cities, often published in local languages, in pedagogical or state outlets, were archived outside of the Anglophone world. As psychology grew and professionalized in the 20th century, Western departments set the metaphorical syllabus for the field, determining what knowledge was most accessible. What was deemed prestigious and proved accessible was most cited, and what was most cited was deemed most foundational. Over time, this dynamic hardened into a narrative that foregrounded two scholars, obscuring the role of other prominent visionaries around the world. The aim here is not to survey the entire global history of experimental psychology, but to spotlight a few pioneers who co-constructed the field of experimental psychology.

Medieval origins of experimental psychology in the Arab world

Centuries before Wundt and James, non-Western antecedents to experimental psychology are well documented. During the Islamic Golden Age, scholars produced work that foreshadowed a Western laboratory science of visual psychophysics. For example, Al-Kindi (Abū Yūsuf Ya‘qūb ibn Ishāq al-Kindī, c. 801–870), an Arab polymath at the Abbasid court in Baghdad, examined visual perception while drawing on the traditions of Euclid and Ptolemy. He used geometry to model perspective, shadows, refraction, and reflection (Adamson, 2024). Al-Kindi formalized perception in Euclidean terms and framed vision as a law-governed relation between objects and the perceiver (Lindberg, 1976). His emphasis on quantification and empirical inquiry has led some to describe him as a pioneer of the experimental method (Prioreschi, 2002).

The work of Al-Kindi informed experimental studies in visual perception by another polymath, Ḥasan Ibn al-Haytham (Abū ‘Alī al-Ḥasan ibn al-Ḥasan ibn al-Haytham, latinized as Alhazen, c. 965 – c. 1040). A medieval Arab scholar born in Basra and working in Cairo, Ibn al-Haytham published the *Book of Optics* (Kitāb al-Manāẓir), a seven-volume Arabic treatise on light and vision written circa 1011–1021 CE. In his works, Ibn al-Haytham rejected the Greek doctrine of extramission that light rays are emitted from the eyes and instead, posited an intromission theory in which light rays are emitted from the objects in view. His work combined geometrical analysis with controlled observation, explaining multiple perceptual phenomena, for example, refraction and reflection, burning mirrors, a camera obscura, and systematic visual errors. He established a methodological template now recognized as experimental optics within the domain of psychophysics. Notably, he was the first person in history to produce a detailed description of ocular anatomy upon which modern theories of visual perception are founded (Howard, 1996; Sabra, 1989).

Working alongside his contemporary, Ibn Sahl (Abū Sa‘d al-‘Alā’ ibn Sahl, c. 940–1000), al-Haytham conducted extensive work on psychophysical phenomena, including the laws of refraction. Ibn Sahl is credited for discovering refraction, even though it was much published centuries later by Dutch mathematician Willebrord Snellius and thus named “Snell’s law” (Rashed, 1990). Latin translations circulating from the late twelfth and thirteenth centuries (often under the name “Alhazen”) transmitted al-

Haytham's work to European scholars and influenced prominent psychologists such as Galileo, Descartes, Bacon and Kepler, shaping Western scientific approaches to visual perception (Ansari, 2018; Hatfield, 2024; Tbakhi & Amr, 2007).

The approaches undertaken by scholars of the Islamic Golden Age to study psychophysical phenomena aligned closely with modern experimental psychology. Documented practices such as hypothesis generation, manipulating stimuli, creating controlled conditions for observations, operationalizing variables, establishing prior conditions for causal inference, and inferring internal mechanisms from observable behavior were central to their endeavors (Daneshfard et al. 2016). As such, these and other figures from the 10th to 11th centuries are sometimes characterized as the progenitors of experimental methods that were applied to diverse disciplines, including the study of mind (Khaleefa, 1999). However, these are not isolated cases: a more complete topology shows that experimental psychology was built up globally, both prior to and contemporaneously with Wundt and James, by non-Western scholars who created methods, cultivated approaches, and instilled experimental psychology within local institutions, universities, schools, and civil-service systems. In the following, several global pioneers of experimental psychology and the widespread impact of their contributions are discussed. As noted previously, our aim is to highlight a small set of scholars who introduced experimental psychology in specific world regions; this is not intended to serve as a comprehensive inventory.

The origins of experimental psychology in Japan

In East Asia, laboratory psychology took root contemporaneously with Wundt and James. In Japan, Yūjirō Motora (1858–1912) helped institutionalize experimental psychology at Tokyo Imperial University in the 1890s–1900s. Born to a Samurai family and trained in the United States under G. Stanley Hall, Motora returned to Japan to establish experimental psychology at Tokyo Imperial University. He pioneered new experimental methods and apparatus and, distinct from his mentors, Motora embedded laboratory methods in higher education and teacher training (McVeigh, 2017; Sato & Sato, 2005).

Motora mentored the first generation of Japanese experimentalists. Among Motora's students, Matatarō Matsumoto became a national ambassador for experimental psychology in Japan, founding both the *Japanese Journal of Psychology* and the Japanese Psychological Association and establishing laboratories at Kyoto and later in Tokyo (Suzuki et al. 2024). Although originally schooled in psychophysiology, Motora's scholarship greatly diversified the field beyond his training. In particular, he used tools from experimental psychology to conduct research in educational and developmental domains. He designed attention-training routines and a device to support pupils with concentration difficulties, producing early descriptions of symptom patterns consistent with what would now be recognized as ADHD-like presentations (Takeda et al. 2015). He re-envisioned variation in children's behavior in a manner that restored dignity, removed stigma, and created pathways for their success. For example, his approach reframed restlessness in the classroom as a psychological process responsive to training rather than as developmental failure, Motora's studies and practical exercises redirected teachers toward measurable, child-centered interventions. Collectively, these initiatives catalyzed reforms that were transformative for Japan's education system (Takeda et al. 2015).

Crucially, Motora connected Japanese cultural practice to psychological science through his study of Zen meditation in the 1890s. In particular, he studied Zen meditation in the 1890s, and that exposure shaped how he thought psychology should investigate and train higher mental functions, especially attention, will, and disciplined introspection. Motora's Zen practice (c. 1894) informed his stance that laboratory psychology should be complemented by methods attentive to cultivated mental states. In this way, his Zen experience had a tremendous influence on subsequent Japanese psychological theory and practice. His classroom attention-training regimens, used with schoolchildren and evaluated empirically, intersected with this program of deliberate mental cultivation.

In sum, the widespread use of laboratory methods pioneered by Motora fueled innovation in educational psychology practices that then created an enduring infrastructure of testing centers, guidance clinics, and child study institutes. Beyond reshaping classrooms, the societal benefits were substantial. By

professionalizing teacher training and normalizing evidence-based guidance, Motora's vision of experimental psychology and its application expanded early identification of learning and behavioral needs and improved pathways for students who would otherwise disengage from schooling (Oyama et al. 2002). Therefore, translating and localizing laboratory psychology into everyday school infrastructures yielded public goods, including more equitable access to support, better governance, and a new culture of addressing developmental disabilities.

The origins of experimental psychology in China

Cai Yuanpei is considered a central figure in introducing experimental psychology to China, a role rooted in his training with Wilhelm Wundt in Germany and amplified through his leadership at Peking University. From 1908 to 1911, Cai studied at the University of Leipzig under Wundt. Taking Wundt's courses, Cai absorbed the laboratory's empirical methods for investigating mental processes via introspection, a decisive break from the largely philosophical approaches that had previously shaped Chinese thought about the philosophy of mind (Cai, 2024).

Wundt's program emphasized controlled laboratory study aimed primarily at explaining internal mental processes. Cai, in contrast, treated experimental psychology as a lever for educational and civic reform. He redirected laboratory techniques toward questions of teaching, attention, and student development, tied psychological evidence to university governance, curriculum design, and teacher training, and framed psychology as a practical tool for building a modern citizenry (Gao, 2013). In place of an introspective science, he advanced a public-facing psychology embedded in institutions, classrooms, examinations, and eventually, the political infrastructure (Encyclopaedia Britannica, 2025).

Cai's work expanded on his knowledge of Western psychology by engaging with Eastern philosophy. His outlook and approach elegantly blended Western scientific method with Confucian ideals of self-cultivation. Drawing on Confucian concepts, he reconceived cultivation as a developmental process that could be observed, measured, and improved through evidence-based pedagogy, an East–West hybridization in which Western experimental rigor guided empirical standards while Confucian philosophy infused

purpose and ethics (Luo, 2021). Cai would later compose a treatise advocating for an indigenized experimental psychology in China that integrated Chinese philosophy and cultural practices into psychological scholarship (Yang, 1997).

A hallmark of Cai's reformism was his insistence that a modern research university must be inclusive and in particular, include women as full participants. Under his leadership, the prestigious Peking University first opened its doors to women in 1920 and moved toward coeducation, half a century before the universities such as Harvard and Yale opted for coeducation. This represented a political and structural redefinition of who could both produce and benefit from scientific knowledge. Peking University was the first university in China to admit women, making it a landmark event in the history of education in China. Cai was a pivotal presence in the New Culture movement, where feminism and liberal humanism supported women's intellectual visibility; expanded curricular pathways and examinations to recognize women's academic achievement; and linked coeducation to national modernization, arguing that cultivating women's scientific literacy and professional capacity was indispensable to China's civic and economic development (Cai, 2025). In this way, gender inclusion was a core mechanism by which experimental psychology, and its application to evidence-based pedagogy more broadly, transformed the university and the nation.

As President of Peking University, Cai put this vision into practice. In 1917, he supported the creation of China's first psychological laboratory and steered the psychology program toward an explicitly experimental orientation. With Cai's support, Chen Daqi led the early laboratory efforts, and Cai consistently argued that psychology, like physics and physiology, should achieve scientific standing through rigorous experimentation. Later, as the inaugural president of Academia Sinica, he helped found the Institute of Psychology in 1929, entrenching experimental psychology within the national research infrastructure. In each of his many contributions, Cai's hallmark contributions were to harness Western empirical methods in the service of Chinese educational aims and to broaden its social reach, diversifying and extending experimental psychology beyond the laboratory, just as Motora did in Japan. These approaches exerted extraordinary national influence in the world's most populous country at the time.

The origins of experimental psychology in India

At the University of Calcutta, Narendra Nath Sen Gupta was a pioneer of experimental psychology. Born and raised in India, Sen Gupta trained at Harvard under Hugo Münsterberg (where he also studied with Robert Yerkes and Edwin Holt), Sen Gupta returned to India in 1915 and became Chair of the newly formed Department of Experimental Psychology at the University of Calcutta. He built the curriculum, taught psychology and philosophy, and led laboratory research focused on depth perception, psychophysics, and attention (Dalal, 2011). Beyond the lab, he helped institutionalize the field nationally: he secured psychology's recognition as a separate division of the Indian Science Congress in 1923 (serving as its president in 1925), co-founded the Indian Psychological Association in 1924, and launched the *Indian Journal of Psychology* as its founding editor in 1925.

Enculturated and transdisciplinary, Sen Gupta's scholarship spanned experimental, social, and religious psychology. In Calcutta from 1916, his laboratory produced some of India's earliest empirical studies on depth perception, psychophysics, and attention, setting a local research agenda for experimental work (Dalal, 2011). His studies in perception and cognition foregrounded cultural context, illuminating how individuals perceive and interpret their environments in diverse ways. He then broadened the field with one of the first India-published texts in social psychology, *Introduction to Social Psychology* (Mukerjee & Sengupta, 1929), and later turned to individual differences and development in *Mental Growth and Decay* and to heredity–environment questions in *Heredity in Mental Traits* (Sengupta, 1940, 1942). In his final years, he outlined an empirical program on the psychology of religion, including a planned study of *sāadhanā*, signaling a sustained effort to conjoin experimental methods and Indian religious traditions. Through this engagement with culture, religion, and education, Sen Gupta reframed experimental psychology from a laboratory science into a lever for national modernization.

Departing from a narrowly Western template, Sen Gupta redirected psychological methods toward India's civic and educational priorities in both philosophy and in his scientific practice. His career captures the contemporaneous Indian effort to align scientific aspirations with nationalist aims. This led to an

integration of European ideas with Hindu philosophy to construct a localized psychological discipline that was both internationally credible and locally authentic (Laskin, 2013). In this way, Sen Gupta championed a ‘situated science’ of psychology that drew on ancient Hindu philosophy as scientific tracts and integrated these works with modern-day psychological experimentation. He also studied local societal concerns, applying his knowledge of psychology to particular social constructions, such as addressing the place of economically disadvantaged citizens within a highly classed and stratified society. This broad approach was consistent with the notion of ‘swaraj’, championed by Mahatma Gandhi, that encouraged intellectual and societal independence at a time when India remained a colony of the British Empire.

Across East and South Asia, Sen Gupta, Cai, and Motora independently converged on a shared mission to repurpose experimental psychology in the service of national modernization through educational reform, yet each did so in a distinct fashion. At Peking University, Cai coupled Western psychological science methods with Confucian ideals and advanced structural inclusion (notably coeducation) to align his Western scientific training with civic reform. In Tokyo, Motora embedded laboratory practice in teacher training and child-centered pedagogy, developing attention-training regimes and classroom tools that reoriented schools toward measurable learning processes in context. In Calcutta, Sen Gupta redirected psychological methods toward India’s civic and educational priorities, establishing a laboratory that produced some of the country’s earliest empirical studies on depth perception, psychophysics, and attention while foregrounding Hindu philosophy and other dimensions of cultural knowledge in his scholarship. Each pioneer and their academic descendants established journals, societies, and strategic partnerships that entrenched experimental psychology into the local environment. In different ways, each one translated laboratory psychology into institutional reforms that contributed to nation-building by infiltrating schools, clinical practices, and government institutions.

The origins of experimental psychology in Argentina

In Latin America, early experimental psychology laboratories were developed in the late 1800s and early 1900s contemporaneously with Wundt and James. However, these laboratories were integrated directly into

teacher training and school reform agendas rather than beginning as philosophical enterprises. Many of the early forays in experimental psychology began in Argentina, although at the turn of the 19th century (Giuliano, n.d.), laboratory-based experimental psychology was also beginning to take hold in Brazil, Chile, Paraguay, Uruguay and Mexico (Garcia, 2014).

In Argentina, Víctor Mercante used schools as incubators for experimental pedagogy, arguing that controlled observation and measurement (e.g., of attention, fatigue, and sensory thresholds) should guide classroom design, the pacing of lessons, and assessment. Working first in San Juan in the 1890s and later at a national scale, he tied laboratory work to teacher preparation, proposing schedules, seating, and curricula calibrated to the child's physiological and psychological dispositions (Dussel, 1993). In Buenos Aires, Horacio Piñero formalized this program institutionally: beginning with developing experimental apparatus in the late 1890s and founding the University of Buenos Aires (UBA) laboratory in 1901, he trained students to run reaction-time and threshold experiments and required practical reports that fed back into pedagogy and examinations, making the laboratory experience a compulsory component of teacher and medical education (Rodríguez Sturla & Ferro, 2019). José Ingenieros then built a bridge between the school and the state by integrating measurement and experimental methods into medical and criminological curricula, using psychophysiological testing to professionalize applied fields and normalize the idea that public institutions should be guided by psychological evidence (Ardila, 1970).

Across the cases from Argentina, the training of pioneers of experimental psychology was overwhelmingly domestic. With the exception of Piñero, who, after an M.D. from UBA in 1892, undertook further study in France, all the pioneers mentioned were trained and educated in Latin America. This contrasts with Cai, Matora, and Sen Gupta, who were all trained with Western pioneers of psychology. The distinction is consequential for the evolution of experimental psychology in Latin America, which was largely a homegrown discipline. A possible consequence of domestic training by pioneers of experimental psychology in Latin America may have been the creation of a discipline that was immediately and expediently connected to social and civic needs.

Why are global pioneers absent from the origin story of experimental psychology?

Each year, scholarly materials (such as introductory psychology textbooks) are published and distributed that define the foundation of experimental psychology for millions of first-time learners. In these records, influential global pioneers of experimental psychology are typically entirely absent. To place this in a global context, when the scholars discussed above were at the meridian of their careers, the global population was estimated to be 1.65–1.7 billion (Worldometer, n.d.). At that time, China, India, Japan, and Latin America accounted for about half the world's population, while the U.S. and Germany together accounted for about 8%¹. This conveys a striking disparity between the population weight of Latin America, India, China, and Japan versus the U.S. and Germany in 1900. Including a broader canon of global histories would align representation of scholarship with the demographic realities of the period. It would also model how science so often evolves from multiple centers of innovation, not via a single lineage. In the following, three (non-exhaustive) factors for why Psychology's polycentric history is rarely acknowledged are discussed.

Dissemination pathways

The products of experimental psychology reviewed above from Japan, China, India, and Argentina were embedded in education ministries, normal schools, and civil-service reform, more so than in academic journals. Thus, their outputs contributed to national bulletins, government-sponsored series, and domestic association journals rather than the anglophone outlets sought by Western research universities that historians and textbook authors have relied upon. The kind of nascent research described above was often not published in Western journals, but in the scholars' own national and cultural contexts. As a result, dissemination pathways have likely limited access to this work in Western settings.

Linguistic selection in academic publications

¹ These estimates are approximate because historical estimates differ by source and by whether colonial possessions are counted under empires.

Language and indexing barriers may have reduced the visibility of this work, as it continues to do today.

Much of the East Asian and Latin American record appeared in Japanese, Chinese, and Spanish, and often in locally printed monographs, ministry reports, or regional journals with limited international indexing and delayed digitization. Key terms were also established in local lexicons, which complicate cross-cultural referencing; a method or term recognizable to insiders did not always appear under the same headings across cultural outlets. As a result, historians relying on searchable, English-dominant databases have likely encountered fewer of these sources, and textbooks have likely reflected the lack of availability of materials outside of the Western world in commonly used databases.

Prestige and academic positionality

A hierarchy of prestige within psychology has long cast school- and state-oriented experimentation as applied, and therefore peripheral to the laboratory tradition. This framing persists today in psychology. Although the boundary work undertaken by global pioneers required rigorous measurement, norming, and multi-site replication, because the aims included building civic infrastructure, mobilizing the public, and reforming educational systems, the work has often been treated as the provenance of other disciplines rather than experimental psychology alone. Moreover, research that adopts variants of experimental or quantitative methods is often de-legitimized and perceived to be a weaker form of scholarship (Grosz et al. 2020), a perspective held by psychological researchers (Povee & Roberts, 2014) as well as by editors of leading psychology journals (Kidd, 2002; also see Settles et al. 2021). The presence of an evidentiary hierarchy, that remains visible today in psychological scholarship, may have marginalized these foundational works based on their intended goals.

Academic positionality and power compound this effect: textbook authors, editors, and reviewers are disproportionately trained and employed in Western institutions, which shapes what is incorporated into textbooks and journals as central. It also impacts which sources are linguistically and archivally accessible, and which research questions are judged as theoretically valued (Connell, 2007; Haraway, 1988; Harding, 1992). Coupled with editorial gatekeeping in coveted Western journals and uneven archival access, this

hierarchy has driven center-to-periphery narratives that can marginalize non-Western forms of experimental psychology and elevate Western forms (Cheon et al. 2020; Rad et al. 2018). There is a stark irony here in that laboratories embedded in education and civil service were primary engines of methodological innovation in their regions, calibrating Western experimental methods to new populations, contexts, and testing sites (e.g. Jing & Fu, 2018; Zhang et al. 2012). In this sense, their omission unintentionally narrows the field's experimental and methodological toolbox.

The impact of psychology's origin story on the evolution of the field: A focus on methodology and culture

There have been multiple downstream impacts of a singular focus on the U.S. and Germany as the foundation for experimental psychology. First, the existing origin story underestimates psychology's foundational engagement with methodological pluralism. A Euro-American narrative emphasized methods and approaches that were geographically situated within and optimized for these regions. For example, experimental psychology has traditionally favored methodologies that align with natural-science models and logical positivism (Bridgman, 1927). Although logical positivism is attributed to the "Vienna Circle," William James's work resonated with this group and impacted the methodologies that emerged from it (Ferrari, 2017). Thereafter, a strictly quantitative orientation was further reinforced on both sides of the Atlantic: in Germany, Herbart's call to treat mental phenomena numerically, Fechner's formalization of psychophysics, and Wundt's laboratory institutionalization firmly anchored psychology in measurement serve as a few examples. At the same time, in the United States, the combined influence of late-nineteenth-century university politics, the prestige of the physical sciences, and emergent resistance against philosophy and popular spiritualism fortified a commitment to measurement-driven quantification (Nuttgens, 2023).

The impact of these events cast a long shadow that kept the field tethered to quantification. A century later, the prevailing view still holds that careful operationalization of constructs, tight experimental control, and standardized testing produce objectivity, generalizability, and neutrality (Breen & Darlaston-Jones, 2010). The primacy of positivist methods has concentrated epistemic authority in particular laboratory-centered quantitative approaches, despite evidence questioning this strong reliance (Youyou et al.

2023). This reliance has gradually constricted the hypothesis space, privileging problems, measures, and settings to which these approaches are historically most closely connected (Henrich et al., 2010).

In addition to methodological impact, the dominance of Euro-American approaches to experimentation was consequential for the treatment of culture in experimental psychology. A separation of fundamental psychological processes and culture were evident in William James' and Wilhelm Wundt's vision of psychology. In the case of James, this vision was shaped by American Protestant assumptions that drew criticism. In "*The Varieties of Religious Experience*", James elevated individual experience in connection with Protestant revivalism and in doing so, downplayed non-Christian traditions. Scholars have argued that this frame universalized a particular slice of religious life that was historically Protestant and culturally American (Prahlow, 2014). Wundt engaged with culture primarily through his volume, "*Völkerpsychologie*", which conveyed a systematic program for studying higher psychological processes through the collective products of human life, including language, myth, custom, and law. He distinguished this work from laboratory psychology, which he conveyed was best suited to foundational processes such as sensation and simple attention. "*Völkerpsychologie*" relied on forms of analysis other than laboratory experimentation, drawing on philology, ethnology, and the study of institutions to infer how mental life is shaped by shared symbols, practices, and histories (Boring, 1950).

Both James and Wundt, in different ways, acknowledged culture as important, but in a manner that bifurcated the discipline, reserving the laboratory for core processes while relegating cultural processes to a separate enterprise. A compartmentalized approach implicitly placed the laboratory as the seat of fundamental knowledge and cast culture as an auxiliary scientific domain. By contrast, figures such as Sen Gupta, Cao, Motora, and Piñero embedded culture and context into everyday research and research infrastructures because they had to. Yet their approach and their work has remained relatively invisible. Instead, a positivist tradition, coupled with a separation of measurement from culture, took hold and persisted, shaping contemporary research in disproportionate measure (Arnett, 2008; Henrich et al., 2010; Medin & Bang, 2014; Nielsen et al., 2017; Rad et al., 2018).

Leveraging the past to shape the future of experimental psychology

Over the past two decades, experimental psychology has begun to emphasize questions of culture, context, generalizability, and public impact, reconnecting the discipline with priorities that animated the work of global pioneers. This section situates this reconnection within a historiographic turn toward a polycentric origin story that restores the priorities of global pioneers and within an ethical turn toward decolonizing present-day practice.

In modern-day experimental psychology, a growing emphasis on the application of psychology to real-world contexts and problems has oriented the field towards an ecologically anchored and publicly impactful science (Berkman & Wilson, 2021; Henrich et al., 2010; Open Science Collaboration, 2015). Examples of resultant changes include an increased emphasis on multi-site replications such as Many Labs (Klein et al., 2014, 2018), field experiments with policy relevance (DellaVigna & Linos, 2020), experience-sampling and ecological momentary assessment (Csikszentmihalyi & Larson, 1987; Shiffman et al., 2008), classroom-embedded trials (Bryk et al., 2015), and research–practice partnerships that prioritize outcomes institutions can use (Chetty et al., 2014; Coburn et al., 2013). In parallel, implementation science has reframed schools, homes, and communities as primary sites of discovery rather than as ancillary to laboratory work (Fixsen et al., 2005; Proctor et al., 2011). Open-science practices have amplified these goals, facilitating resource-sharing across contexts (Ghai et al., 2024; Hu et al., 2025; Munafò et al., 2017; Nosek et al., 2018) and centering questions that are globally impactful beyond the Western world (Adetula et al., 2022). In short, today’s methods revitalize the craft that global scholars engineered more than a century ago (Brock, 2006).

As the field reaches outward and becomes less self-referential, embracing a polycentric origin is certainly a valuable corrigendum. However, more significantly, it also symbolizes a return to the work of pioneers who built shared resources, disseminated tools, and applied methods across varied settings in the pursuit of social impact and public transformation. This more accurate origin story dovetails with the

forward-looking, accessible, multidisciplinary, and consilient research agenda that we witness today. In envisioning a future for the field, how we convey history to newcomers who will sculpt this future thus matters: what we label “foundational” often defines the field for the uninitiated. Because foundational knowledge carries presumptive legitimacy and credibility (Stanley, 2007), a narrow view into history can constrict how early-career scholars chart their own paths to knowledge production. A foundational narrative that is broader in culture and richer in method is not only historically sound; it also extends the bounds of legitimacy, globalizes epistemic authority, and equips new scholars to view diverse sites, approaches, and priorities as central to psychology’s past and future.

Drawing on global pioneers would also move experimental psychology toward an enculturated science. These scholars treated culture as constitutive, sampling across contexts and building it into hypotheses, design, measurement, and inference from the start. Following in their wake entails integrating culture at the outset rather than appending it as an optional afterthought (Markus & Kitayama, 2010). Too often, contemporary experimental psychology advances universal claims on limited empirical foundations (Rad et al., 2018), a pattern that reflects a positivist tradition that treats the problem space as culturally separable from measurement (Henrich et al., 2010; Medin & Bang, 2014; Rad et al., 2018). Re-centering the historical narrative would both correct for the historical bifurcation of culture and quantitative measurement and provide a model that the field needs now: broader cultural representation; measures vetted for cross-cultural invariance before comparison; and inferences that are bounded by the sampling frame.

Lastly, rewriting the origin story of experimental psychology is critical to the mission of decolonization. Psychology has long sought to move from a colonized science to a decolonized science (Adames et al., 2014). Achieving this requires rethinking both the research we pursue and the histories we acknowledge and illuminate. Geopolitical, institutional, and epistemic colonialism, and the hierarchies they produced, shaped how scientific accounts were judged with reference to quality and rigor (Bhatia, 2017). Throughout the twentieth century, Euro-American texts functioned as the field’s primary record. Even after formal empires collapsed, the colonality of knowledge continued to privilege experimental psychological

scholarship that was Anglophone, laboratory-centered, and published in a narrow set of “high-status” venues. By contrast, rigorous experimentation in Argentina, India, Japan, and China occurred in teacher-training colleges, education ministries, and civil service, and was categorized as pedagogy or administration rather than as core psychology. In this way, broadening the narrative about the origins of experimental psychology excavates the discoveries of global pioneers who operated under colonized frameworks that obscured their work.

Conclusion

Mencius’ observation delivered a scientific provocation: to build a science of mind that is quantitative and measurable. This provocation anticipated in spirit what psychologists would formalize centuries later. Across centuries and continents, a convergence of aims to study and understand the human mind has led to a broadly distributed genealogy of experimental psychology. Acknowledging this distributed genealogy is not purely commemorative; it provides an opportunity to understand how psychology developed into its present form. It also demonstrates that experimental psychology was not born in the laboratory alone. It grew out of experimentation in schools, clinics, ministries, and civic institutions, where methods were translated, normed, and tested in the environments where people live and learn. Current efforts to build a contextualized science of mind are preceded by global pioneers who developed locally adapted experimental methodologies in the service of social and political transformation.

Widening the aperture on the origins of psychology broadens our view of what pioneering psychologists have accomplished around the world, thus informing our understanding of what is possible for the field. The work of global pioneers demonstrates how rigorous methods can drive educational redesign, foster civic engagement, improve clinical guidance, and catalyze political reform. At a time when the entire academic and scientific enterprise is being challenged to demonstrate its public utility, examining our global history and its remarkable contributions provides a metaphorical compass for how psychological science can deliver measurable public goods.

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