

6 Openness and Closure

Spheres and Other Metaphors of Boundedness in Global History

Valeska Huber

As early as 1986, the German philosopher Hans Blumenberg pointed to the impossibility of forming a general philosophical notion of the world.¹ Since then, conceptualising the globe as a whole has proved to be a challenge in many disciplines.² Even terms and metaphors that are less ambitious and all-encompassing and that refer to specific global processes or aspects of globality are often inadequate. This is particularly true when it comes to capturing the tension between openness and closure that characterises many, if not all, global processes: Global phenomena – from migration and mobility to labour and capitalism – can only be understood with clear reference to unevenness and inequality and to processes of exclusion as well as inclusion. Yet the language of globality still prioritises openness and fluidity at the expense of metaphors pointing to limits and boundaries.

This terminological and conceptual conundrum is not surprising at a time when unequivocally positive narratives of growing global interconnectedness have begun to fray and a fixed sense of globality has been called into question.³ What Michael Geyer and Charles Bright referred to simply as a ‘condition of globality’ in the mid-1990s is now in need of further specification.⁴ As a result, the vocabulary that has helped global history come of age, ranging from connection to integration and from flows to circulation, is now considered

Research for this chapter has been funded by Deutsche Forschungsgemeinschaft (DFG) – project number 289213179.

¹ Hans Blumenberg, *Die Lesbarkeit der Welt* (Frankfurt am Main: Suhrkamp, 1986).

² Helge Jordheim and Erling Sandmo (eds.), *Conceptualizing the World: An Exploration across Disciplines* (New York: Berghahn Books, 2018). On competing narratives of globalisation, see Olaf Bach, *Die Erfindung der Globalisierung: Entstehung und Wandel eines zeitgeschichtlichen Grundbegriffs* (Frankfurt am Main: Campus, 2013); Sabine Selchow, *Negotiations of the ‘New World’: The Omnipresence of Global as a Political Phenomenon* (Bielefeld: Transcript, 2017).

³ On figures of thought, metaphors and conceptual histories of the global, see, for instance, Jo-Anne Pemberton, *Global Metaphors: Modernity and the Quest for One World* (London: Pluto Press, 2001). For the global as a ‘sui generis’ category, see Jens Bartelson, ‘From the International to the Global?’, in Andreas Gofas et al. (eds.), *The SAGE Handbook of the History, Philosophy and Sociology of International Relations* (Thousand Oaks: SAGE, 2018), 33–45.

⁴ Michael Geyer and Charles Bright, ‘World History in a Global Age’, *American Historical Review* 100, 4 (1995), 1034–60, here 1041.

problematic by many historians, whether or not they employ an explicitly global history perspective.⁵

At the same time, few would deny that our specific moment in time – conflict-laden and crisis-ridden as it may be – is also specifically ‘global’. Many of the core experiences of the present age – military conflict and the ensuing refugee movements, the Covid-19 pandemic, the climate crisis, the extinction of species and even the resurgence of populism and nationalism – are phenomena that cannot be understood within the framework of the nation-state, despite the fact that they are deeply divisive. As a result, we need figures of thought that can capture a globality that is profoundly marked by division and tension. This chapter seeks keywords and concepts that will enable us to grasp the contradictory and conflictive globality of the current moment and sharpen our analysis of equally contradictory and conflictive global pasts.

When addressing this recent unease with the vocabulary of global history, historians often resort to antonyms. They set disconnection against connection, disentanglement against entanglement, disintegration against integration or, on the most general level, deglobalisation against globalisation. This chapter searches for a figure of thought that can challenge the existing languages of the global more effectively than simply pairing each of the established terms with its opposite.

To this end, the chapter traces the history and analytic potential of a term that does not come with its opposite in tow but instead captures openness and closure in a single frame: the sphere. The Greek word *sphaira* and the Latin word *sphaera* have taken on a plethora of meanings over time, expanding from ‘globular body or figure’ to ‘(the) globe conceived as appropriate to a particular planet, hence (one’s or its) province or domain’.⁶ Within this semantic family, we find terms that relate to the Earth as a whole and its globular form – words like atmosphere, lithosphere, biosphere, geosphere and hydrosphere. Spheres can also refer to the ‘place, position, or station in society; an aggregate of persons of a certain rank or standing’.⁷ Beyond the Earth-based vocabulary, we

⁵ See Jeremy Adelman, ‘What Is Global History Now?’, *Aeon*, 2 March 2017, <https://aeon.co/es/says/is-global-history-still-possible-or-has-it-had-its-moment>; Stefanie Gänger, ‘Circulation: Reflections on Circularity, Entity, and Liquidity in the Language of Global History’, *Journal of Global History* 12, 3 (2017), 303–18; Sujit Sivasundaram, ‘Towards a Critical History of Connection: The Port of Colombo, the Geographical “Circuit”, and the Visual Politics of New Imperialism, 1880–1914’, *Comparative Studies in Society and History* 59, 2 (2017), 346–84; Dániel Margócsy, ‘A Long History of Breakdowns: A Historiographical Review’, *Social Studies of Science* 47, 3 (2017), 307–25; Jürgen Osterhammel and Stefanie Gänger, ‘Denkpause für Globalgeschichte’, *Merkur* 855 (2020), 79–86.

⁶ T. F. Hoad, *The Concise Oxford Dictionary of English Etymology* (Oxford: Oxford University Press, 2003), <http://dx.doi.org/10.1093/acref/9780192830982.001.0001>. See also Peter Sloterdijk, *Spheres*, 3 vols. (Los Angeles: Semiotext(e), 2011–16).

⁷ Oxford English Dictionary, quoted in Mary Beth Norton, *Separated by Their Sex: Women in Public and Private in the Colonial Atlantic World* (Ithaca: Cornell University Press, 2011), 6.

therefore encounter expressions ranging broadly from the spheres of the brain to spheres of political influence, spheres of law and public and private spheres.

What these expressions have in common is that they highlight the bounded or closed nature of global phenomena rather than implying openness and expansion. Closure, in the way it is used in this chapter, has the advantage of connecting geographical and geopolitical considerations with ideas of social differentiation and hierarchy. Social closure as an established sociological concept dates back to Max Weber.⁸ Yet, while global historians have reflected extensively on geographical entities, social boundary-making has been neglected. In its different figurations, the sphere often unites both geographical and social facets of closure.

Besides offering historians the potential to reflect more systematically on processes of closure, there is a further reason why spheres might provide a way out of the current terminological impasse in global history. As a figure of thought that draws attention to boundaries and limits, spheres can help to counter the prevailing view that globalisation leads to formlessness and fluidity, and instead show that global processes often take quite firm and exclusive forms marked by territorial, political and social boundaries and partitions. Even in regions marked by extensive communication networks, such as the ‘Muslim world’, for example, ideas often did not circulate freely. They reached urban populations more frequently than rural populations, men more frequently than women and speakers of majority languages sooner than speakers of minority languages.⁹ Admittedly, the boundaries thus created were not impermeable, but were marked by varying degrees of porosity, allowing some people and groups to cross while excluding others.

Instead of simply postulating what ought to be done or prescribing an entirely new language for global history, this chapter explores in an experimental and deliberately open-ended fashion how thinking about global spheres can be utilised fruitfully for the current practice of history writing. A first example is the radically inclusive yet claustrophobic vision of the globe as a closed sphere from which there is no escape. Building on earlier closed-world and one-world discourses, this thinking gained prominence after the Second World War in the face of the threat of nuclear destruction and environmental degradation. A second case concerns the idea of multiple global spheres that are at the same time limited to varying degrees. Here, the chapter takes its central examples from the realm of communication and language and discusses the public sphere as an exclusionary rather than inclusionary figure of thought.

⁸ Donald Tomaskovic-Devey and Dustin Avent-Holt, *Relational Inequalities: An Organizational Approach* (Oxford: Oxford University Press, 2019), 134–61.

⁹ Cemil Aydin, *The Idea of the Muslim World: A Global Intellectual History* (Cambridge, MA: Harvard University Press, 2017); Ilham Khuri-Makdisi, *The Eastern Mediterranean and the Making of Global Radicalism* (Berkeley: University of California Press, 2013).

Openness and Closure in Global History

Many global historians have been attracted to words that allude to openness and fluidity. Three commonly employed terms evoke openness as a central characteristic of global processes: ‘connection’, ‘circulation’ and ‘integration’. The most widely used of these is undoubtedly ‘connection’. However vaguely defined, connections are ubiquitous, from Christopher Bayly’s subtitle of *The Birth of the Modern World* (‘Global Connections and Comparisons’) to the ever-expanding field of connectivity studies, featuring topics ranging from human migration to the mobility of objects and ideas.¹⁰ Given the variety of phenomena related to connection and connectivity, some authors are careful to clarify that ‘connectivity is never seamless or entirely smooth and is always interrupted, often in unnoticed ways’.¹¹ Yet despite such efforts at differentiation, the word ‘connection’, or ‘connectivity’ for that matter, itself suggests openness rather than closure as a central driving force of global processes. The term has therefore turned into an easy target for the critics of global history.¹²

Linked to connection, the terms ‘circulation’ and ‘flow’ are part of more metaphorically expansive semantic fields and figure regularly in global history writing.¹³ In her critique of the languages of fluidity, Stefanie Gänger has discussed the specific role of openness and closure in this domain. There are many examples in which this language is prevalent: for instance, in reference to the circulation of goods, people and capital, or the circulation of information. Whereas circulation typically evokes closed systems such as the body or the Earth, it also implies effortless movement within such systems, without impediment and hindrance. What is more, the rhetoric of ‘everything flows’ can disguise social differentiation, hierarchisation and inequality as central markers of global processes.¹⁴

A more analytic concept that has frequently been placed at the core of a global history perspective is integration. Sebastian Conrad has argued that

¹⁰ C. A. Bayly, *The Birth of the Modern World 1780–1914: Global Connections and Comparisons* (Oxford: Blackwell, 2004); see also, for example, Emily S. Rosenberg (ed.), *A World Connecting, 1870–1945* (Cambridge, MA: Harvard University Press, 2012); Roland Wenzlhuemer, *Connecting the Nineteenth-Century World: The Telegraph and Globalization* (Cambridge: Cambridge University Press, 2012).

¹¹ Jan Nederveen Pieterse, *Connectivity and Global Studies* (Cambridge: Cambridge University Press, 2021), xvi; Roland Wenzlhuemer et al., ‘Forum Global Dis:connections’, *Journal of Modern European History* 21, 1 (2023), 2–33.

¹² David A. Bell, ‘This Is What Happens When Historians Overuse the Idea of Network’, *The New Republic* (26 October 2013); Paul A. Kramer, ‘How Did the World Become Global? Transnational History, Beyond Connection’, *Reviews in American History* 49, 1 (2021), 119–41.

¹³ Gänger, ‘Circulation’; Claude Markovits et al. (eds.), *Society and Circulation: Mobile People and Itinerant Cultures in South Asia, 1750–1950* (London: Anthem Press, 2006).

¹⁴ Monika Dommann, ‘Alles fließt: Soll die Geschichte nomadischer werden?’, *Geschichte und Gesellschaft* 42, 3 (2016), 516–34.

global history ‘ultimately rests’ on the notion of integration.¹⁵ Integration is applied to a variety of often interrelated fields, including political integration (in the case of expansive empires), economic integration (for instance into capitalist markets) and social integration (for example relating to an emerging global bourgeoisie). Integration differs qualitatively from connection in its reference to causality and explanation. It is also a concept that invites more nuanced usage than the relatively vague term ‘connection’. Yet while integration can be extended to include notions of hierarchy, forced incorporation and unevenness, it still hints at the centripetal and the inclusive. Despite its more analytic focus, integration therefore also implies processes of opening rather than closure as a central characteristic of global developments, and it carries the danger of relegating those who are not ‘integrated’ to the margins of historical narratives.

As these brief discussions reveal, terms such as ‘connection’, ‘circulation’ and ‘integration’ all come with their own challenges; what they share is their tilt towards the openness end of the spectrum. Even when they are carefully qualified and differentiated, their everyday associations prevent them from adequately representing the hierarchical, conflictual and uneven nature of many, if not all, global phenomena. It is often only through their negation – in terms such as ‘disconnection’ and ‘disintegration’ – that they are able to capture processes of closure. The inevitable effect of this is that developments associated with openness are perceived as more ‘global’ than those associated with closure.

This shortcoming of a vocabulary of closure in global history is indicative of a deeper problem. Despite early calls for scepticism – for instance, by Roland Robertson and Arif Dirlik – much of the initial globalisation literature of the 1990s followed a similar path of prioritising openness.¹⁶ More recently, sociologists like Hartmut Rosa and Andreas Reckwitz have accentuated the fluidity that has resulted from global developments, such as the accelerating change in media technologies, dissolving family structures and weakening social ties.¹⁷ Yet even if unintentionally, this depiction of the global as formless and fuzzy can serve to veil the rock-hard exclusions produced by many global processes.

¹⁵ Sebastian Conrad, *What Is Global History?* (Princeton: Princeton University Press, 2016), 129; see also 90–114.

¹⁶ Early on, authors such as Roland Robertson and Arif Dirlik pointed to the co-constitutiveness of integration and fragmentation in global processes: Arif Dirlik, ‘The Postcolonial Aura: Third World Criticism in the Age of Global Capitalism’, in Padmini Mongia (ed.), *Contemporary Postcolonial Theory: A Reader* (London: Hodder Arnold, 1996), 294–321; Roland Robertson, ‘Glocalization: Time-Space and Homogeneity-Heterogeneity’, in Mike Featherstone et al. (eds.), *Global Modernities* (London: SAGE, 1995), 25–44.

¹⁷ Andreas Reckwitz, *Society of Singularities* (Cambridge: Polity Press, 2020); Hartmut Rosa, *Social Acceleration: A New Theory of Modernity* (New York: Columbia University Press, 2015); Andreas Reckwitz and Hartmut Rosa, *Late Modernity in Crisis: Why We Need a Theory of Society* (Cambridge: Polity Press, 2023).

Regardless of long-standing debates, the dilemma of capturing globality while at the same time disclosing globality's always limited, bounded and exclusionary nature therefore remains unresolved. The first and most common response to this dilemma is to couple a word with its antonym, as noted earlier. The relationship between the two terms may either work sequentially, with phases of globalisation being followed by phases of deglobalisation, or synchronously, with processes of connection and disconnection occurring simultaneously. In both cases, however, the term and its negation are still understood as separate. However, the processes these opposites refer to are often closely intertwined, as phenomena such as global capitalism and its reliance on forced labour clearly reveal. Binaries tend to obscure the fact that openness for some leads to closure for others, and that both are equally related to globality.

Other attempts to move beyond this impasse have entailed searching for different metaphors and concepts altogether. Two metaphors of the global that have gained prominence in recent years are noteworthy in this context. In her 'ethnography of global connection', Anna Lowenhaupt Tsing uses the term 'friction' to address many of the aforementioned problems.¹⁸ For her, the global is not marked by smoothness and interchange but by resistance and dissent, pointing to the conflictual nature of globality. Tsing's approach has resonated widely throughout the social sciences, illustrating the need for a more nuanced metaphorical language of the global which includes processes of chafing and erasure.¹⁹

The metaphor of friction may go some way towards considering disruptions and interferences as essential facets of the global. In Tsing's view, the global appears characterised less by seamless flows and connections than by often violent processes of eradication and conflict. Yet referring to friction and similar metaphors still tends to depict global processes as fuzzy and undefined, and thus to disguise more solidified power structures and entrenched inequalities.

World-making has become another widely employed term to capture alternative visions in globalist thought and imagination. Duncan Bell has begun to discuss how concepts of world-making in fact point to the limits of worlds rather than to an all-encompassing vision.²⁰ Exploring internationalism after empire, Adom Getachew has analysed how anticolonial thinkers and politicians such as W. E. B. Du Bois, Kwame Nkrumah, Julius Nyerere and George

¹⁸ Anna Lowenhaupt Tsing, *Friction: An Ethnography of Global Connection* (Princeton: Princeton University Press, 2011).

¹⁹ See, for example, Antoinette Burton, *Africa in the Indian Imagination: Race and the Politics of Postcolonial Citation* (Durham: Duke University Press, 2016).

²⁰ Duncan Bell, 'Making and Taking Worlds', in Samuel Moyn and Andrew Sartori (eds.), *Global Intellectual History* (New York: Columbia University Press, 2013), 254–80; Nelson Goodman, *Ways of Worldmaking* (Hassocks: Harvester Press, 1978).

Padmore advocated for the creation of a new postcolonial world. She shows that for them, world-making was as central a project as nation-building, which is frequently emphasised in the scholarship on postcolonial orders.²¹ While the notion of world-making highlights diverse and competing understandings of globality and international orders, authors who use it as their key concept have only just begun to explore what the limits of these worlds were and how they can be understood analytically. Although they offer more satisfying conceptions of the global than the binary constructions mentioned earlier, concepts such as ‘friction’ and ‘world-making’ do not address in a sufficiently concrete manner questions of closure, boundaries and limits, or, more generally, the importance of rigid forms and structures in global processes.

Reflections on the globe as a sphere, or as composed of several distinct spheres, build on the literature around friction and world-making but probe conceptions of closure and boundary-making more explicitly. They allow historians to foreground in what manner worlds are limited, revealing how the experience of globality that Geyer and Bright took for granted is often exclusionary and based on race, class and gender inequalities and on unequal access to natural and other resources such as information or the freedom to move. When we use the figure of thought of the sphere, globality does not appear as formless and diffuse, but rather as marked by often fairly stark forms of inclusion and exclusion. This chapter goes on to show that, by using the concept of the sphere and adjacent expressions, historical actors were already thinking about globality as a phenomenon uniting openness and closure long before scholars began doing so.

Given the capaciousness of the term, it is not surprising that the German philosopher Peter Sloterdijk allowed his trilogy on spheres (consisting of three separate volumes on bubbles, globes and foams) to be sprawling and associative, ultimately filling more than 2,500 pages.²² His ‘spherology’ presents a wealth of material on how globes and other round objects of various kinds figure in world history. In this way, it allows for plentiful associations and vantage points.²³ If Sloterdijk’s abundance of material makes for fascinating (if time-consuming) reading, the gist of his argument is more difficult to pin down. Yet the image of the sphere – with its subfields of bubbles, globes and foams – is very fitting for a reflection on how to rethink global history, pointing to questions of global forms and their boundaries, as well as their more ephemeral or permanent features.²⁴

²¹ Adom Getachew, *Worldmaking after Empire: The Rise and Fall of Self-Determination* (Princeton: Princeton University Press, 2019).

²² Sloterdijk, *Spheres*.

²³ See Kari van Dijk, ‘The World as Sphere: Conceptualizing with Sloterdijk’, in Jordheim and Sandmo, *Conceptualizing the World*, 327–338.

²⁴ For reflections on the ephemeral nature of bubbles, see also Simon Schaffer, ‘A Science Whose Business is Bursting: Soap Bubbles as Commodities in Classical Physics’, in Lorraine Daston

Unlike comparison and scale, the sphere might not immediately spring to mind as a figure of thought that historians can use to respond to the current critique of global history. This apparent challenge is at the same time an opportunity: to explore in a more experimental way whether spheres might offer an alternative to the binary solutions that have been prominent so far. Rather than providing an exercise in theorising the global, this chapter contextualises spheres and their boundaries to highlight co-constitutive processes of opening and closing. The examples illustrate how, over the course of the twentieth century, various historical actors have perceived globality as closed and limited rather than open and expansive.

As an unusual figure of thought to denote the global, the sphere can serve to give conceptions of closure a firmer place in global history. Ranging from the shutting of geographic borders to processes of social stratification and the constraints and hierarchies of the international political system, from the restriction of opportunities to the limitation of access to resources and freedoms, closure has taken centre stage in many disciplines other than history.²⁵ Spheres and their boundedness can help us to move our thinking about boundary-making from the geographical terms often prevalent in global history to boundaries in the social realm.

More specifically, thinking about the global in terms of spheres leads us in two separate and distinct directions. First, the sphere can refer to the circumscribed nature of the globe as a whole and its finite resources. In this discourse, the sphere appears as an underlying figure of imagination that amalgamates visions of globality and humanity. This notion of the sphere most often surfaces in closed-world discourses, linking the interrelatedness of humanity as a whole with the limits of humanity's habitat: the Earth. Second, the term can refer to more narrowly circumscribed domains, such as political, economic, social and communicational spheres. In this understanding, spheres are global but at the same time exclusionary, often restricted to a particular region or to a specific segment of the global population. Whereas political spheres are demarcated by geographical boundaries, public spheres are often demarcated by social boundaries.

As the following explorations show, both versions of global spheres – the more inclusive world as sphere, and the more exclusive world of many spheres – run counter to conceptions of the global that stress formlessness and fluidity. They are oriented instead toward ideas of boundary-work and

(ed.), *Things That Talk: Object Lessons from Art and Science* (Cambridge, MA: MIT Press, 2004), 147–94.

²⁵ For sociology, see Tomaskovic-Devey and Avent-Holt, *Relational Inequalities*, ch. 6, 134–61. For international relations, see Lora Anne Viola, *The Closure of the International System: How Institutions Create Political Equalities and Hierarchies* (Cambridge: Cambridge University Press, 2020).

boundary-making.²⁶ Spheres can grow and shrink, expand and contract, but they are usually unambiguously demarcated. In tracing spherical ideas in globalist imaginations and testing the sphere as an alternative metaphor of the global, I turn to different examples that illustrate the inclusive as well as exclusive nature of spheres and explore how spheres might contribute to solving the dilemmas of global history.

Inclusion: The World as Sphere

The most obvious use of the term ‘sphere’ in global history relates to the sphericity of the globe as a whole. Where and at what point in history can the emergence of this radically inclusive sphericity – or, in less abstract terms, the idea of a finite and fragile world in which humans share a single destiny – be located? The idea of a shrinking globe (or time–space compression, to use Harvey’s well-worn phrase) came of age during the infrastructure and transport revolution of the late nineteenth and early twentieth centuries, continuing into the interwar period and the Second World War.²⁷ Closed-world discourses took centre stage in the decades after the war, when fears of environmental degradation, nuclear annihilation and rapid population growth converged in the emergence of international organisations and protest movements focused on the fragility of the globe.

Conceptualising the globe as a closed sphere has of course a longer history predating the twentieth century.²⁸ The sphere was used in geography starting in the fifth century BC and found its way into many cosmologies.²⁹ The ‘discovery’ of the Americas further boosted spherical thinking. Yet the idea of clearly demarcated celestial and terrestrial spheres was also present in various contexts beyond European expansionism, from the Middle Ages onwards.³⁰ Even if a more fully illustrated history of spheres in various cultures lies beyond the

²⁶ Thomas F. Gieryn, ‘Boundary-Work and the Demarcation of Science from Non-Science: Strains and Interests in Professional Ideologies of Scientists’, *American Sociological Review* 48, 6 (1983), 781–95; Andreas Wimmer, *Ethnic Boundary Making: Institutions, Power, Networks* (Oxford: Oxford University Press, 2013).

²⁷ David Harvey, *The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change* (Cambridge, MA: Blackwell, 1990).

²⁸ Simon Ferdinand et al. (eds.), *Other Globes: Past and Peripheral Imaginations of Globalization* (London: Palgrave Macmillan, 2019); Sumathi Ramaswamy, *Territorial Lessons: The Conquest of the World as a Globe* (Chicago: University of Chicago Press, 2017).

²⁹ See the exhibition at the Bibliothèque Nationale de France: *Le Monde en sphères*, 16 April–21 July 2019, and the connected virtual exhibition <http://expositions.bnf.fr/monde-en-spheres/>; Jan Mokre and Peter E. Allmayer-Beck (eds.), *Das Globenmuseum der Österreichischen Nationalbibliothek* (Vienna: Bibliophile Edition, 2005); F. Jamil Ragep, ‘Astronomy’, in Kate Fleet et al. (eds.), *Encyclopedia of Islam Three* (Brill Online), http://dx.doi.org/10.1163/1573-3912_ei3_COM_22652.

³⁰ Pina Totaro and Luisa Valente (eds.), *Sphaera: Forma immagine e metafora tra Medioevo ed età moderna* (Florence: Olschki, 2012).

scope of this chapter, it is important to note the plurality of views and conceptions in specific contexts and cultures.

Beyond physical spheres, it was the emergence of a specifically planetary consciousness that linked geographical conceptions with the idea of humanity as a whole.³¹ As a figure of thought, the sphere captured the idea that the entire globe could potentially be settled by humans and that humanity was inextricably interlinked. The image of the globe as a sphere thus intimately connected geographical and social thinking. In the closed-world discourses of the twentieth century, humanity emerged as intimately conjoined on an increasingly crowded and imperilled planet. Even if these discourses did not always employ the term ‘sphere’ explicitly, they related to an idea formulated by Immanuel Kant: ‘the spherical surface of the earth unites all the places on its surface; for if its surface were an unbounded plane, men could be so dispersed on it that they would not come into any community with one another, and community would not then be a necessary result of their existence on the earth’.³² In this vision, humanity – however narrowly Kant himself defined it – appeared fundamentally tied together.³³

Moving to the twentieth century, perceptions of closure assumed a central role. The period around 1900 has often been interpreted as a time of exploration and radical openness that made new infrastructural opportunities available to many.³⁴ Yet even if some historical actors displayed unbridled optimism about the new communication infrastructures, the late nineteenth and early twentieth centuries should not be understood purely as a moment of expansion and growth. In this period, violent European expansionism was accompanied by perceptions of closure rather than openness. What is often depicted as an age of boundless opportunities for global entrepreneurs was also a time of growing insecurity, in which efforts were made to shield certain parts of the globe from others and to protect imperial enterprises from their growing vulnerability.

What is more, while opportunities were increasing for some, they were disappearing for others. The new sense of openness – for instance, in the ‘circulation of ideas’ that many global intellectual historians have been drawn to in recent years – was accompanied by processes of social closure and increasing inequality.³⁵ The forced sedentarisation of nomadic populations

³¹ Mary Louise Pratt, *Imperial Eyes: Travel Writing and Transculturation* (London: Routledge, 1994), 15–37: ‘Science, Planetary Consciousness, Interiors’.

³² Immanuel Kant, *The Metaphysics of Morals*, transl. Lara Denis (Cambridge: Cambridge University Press, 2017), 263.

³³ For a growing literature on the concept of humanity, see Siep Stuurman, *The Invention of Humanity: Equality and Cultural Difference in World History* (Cambridge, MA: Harvard University Press, 2017).

³⁴ See, as part of a larger literature, Rosenberg, *A World Connecting*.

³⁵ Pandemics and reactions to them are an obvious case in point; see Valeska Huber, ‘The Unification of the Globe by Disease? The International Sanitary Conferences on Cholera,

is emblematic of larger processes of openness and closure in this period: nomadic groups became less mobile and more tightly controlled as the world was partitioned into fields of political and economic influence. Openness and closure were thus intimately intertwined at a time when the world seemed to be growing smaller for some but was becoming less accessible for others.³⁶

In the interwar period, closed-world discourses flourished.³⁷ Echoing the words of Immanuel Kant, Raymond Pearl, a biologist at Johns Hopkins University, clearly expressed the idea of the globe as human habitat in 1927: 'All populations of organisms live in universes with definite limits. The absolute size of the universe might be small, as in the case of the test-tube . . . or it may be as large as earth, most of which could conceivably be inhabited, on a pinch, by man.'³⁸ What Pearl called a universe might also be called a sphere. His notion connected planetary thinking with reflections on humanity as an interconnected whole sharing a common destiny.

The conception of the globe and its population as dependent on each other for their very survival gained new force and urgency in the decades after the Second World War. In the second half of the twentieth century, this gave way to a claustrophobic sense of forced inclusion. Preoccupations with the threat of nuclear destruction and concerns about environmental degradation in the Anthropocene produced a sense of close interconnectedness in an inescapably bounded and limited world. Two examples illustrate this important shift in perceptions that occurred in the period. The space age provided images that allowed human beings to see the Earth from the outside. Photographs such as those in the iconic Blue Marble series produced by the 1972 Apollo 17 mission conveyed the fragility and 'sphericity' of the globe in the truest sense of the word to a wider public.³⁹ Beyond the space age and its new iconography,

1851–1894', *Historical Journal* 49, 2 (2006), 453–76; Huber, 'Pandemics and the Politics of Difference: Rewriting the History of Internationalism through Nineteenth-Century Cholera', *Journal of Global History* 15, 2 (2020), 394–407.

³⁶ As an example, see Priya Satia, *Empire of Guns: The Violent Making of the Industrial Revolution* (Stanford: Stanford University Press, 2019).

³⁷ Alison Bashford, *Global Population: History, Geopolitics, and Life on Earth* (New York: Columbia University Press, 2014), 6: 'The closed-world idea did not belong to German imperial, Weimar, and fascist *Geopolitiker* alone, however. It was widely shared by anglophone Malthusians, economists, geographers, and the first generation of demographers.'

³⁸ Raymond Pearl, 'The Biology of Population Growth', in Margaret Sanger (ed.), *Population Conference Proceedings* (London: Edward Arnold, 1927), 22, quoted in Alison Bashford, 'Nation, Empire, Globe: The Spaces of Population Debate in the Interwar Years', *Comparative Studies in Society and History* 49, 1 (2007), 170–201, here 170.

³⁹ Denis E. Cosgrove, 'Contested Global Visions: One-World, Whole-Earth, and the Apollo Space Photographs', *Annals of the Association of American Geographers* 84, 2 (1994), 270–94; Denis E. Cosgrove, *Apollo's Cartographic Genealogy of the Earth in the Western Imagination* (Baltimore: Johns Hopkins University Press, 2001); Benjamin Lazier, 'Earthrise: or, The Globalization of the World Picture', *American Historical Review* 116, 3 (2011), 602–30; Solvejg Nitzke and Nicolas Pethes (eds.), *Imagining Earth: Concepts of Wholeness in Cultural Constructions of Our Home Planet* (Bielefeld: Transcript, 2017); Robert K. Poole,

numbers conveyed the idea of an inescapable global sphere just as urgently as images. The increase in the Earth's population from about 1.6 billion to more than 6 billion over the course of the previous century exacerbated perceptions of the globe as fragile and in need of protection.⁴⁰ A controversial 1968 bestseller by Paul Ehrlich coined the term 'population bomb', relating to a range of interventionist measures in different parts of the world.⁴¹ The global 'tipping point' was a central metaphor of this work, with Paul Ehrlich asking in a characteristically technocratic manner: 'What is the optimum number of human beings that the earth can support?'⁴²

Many authors from the 1960s expressed the distinct sense that just as the world was growing smaller with the creation of new infrastructures and modes of communication, the Earth was also becoming more fragile and threatened.⁴³ Diverse voices joined in this closed-world discourse of a claustrophobic and finite globe and the future of human life on it. Their works show how the globe and its inhabitants can be analysed within a single, unified framework and thereby illustrate how the sphere can be deployed as a figure of thought. Three examples from a broad sample may be sufficient here to provide an overview of the different perspectives prevalent during this time. In a 1964 publication entitled *One World or None?*, Ossip K. Flechtheim, a professor of political science in West Berlin from 1952 to 1974, reflected on the growth of global population and the fundamental threat he believed it posed to humankind. Referring to the Holocaust and the Second World War, he stressed humanity's tragic recent history and the even greater catastrophe that might lie ahead, for the first time imperilling all of humankind.⁴⁴

In *The Oneness of Mankind*, published one year after Flechtheim's book, Indian economist Radhakamal Mukerjee also shifted easily from reflection on

Earthrise: How Man First Saw the Earth (New Haven: Yale University Press, 2008); Holly Henry and Amanda Taylor, 'Rethinking Apollo: Envisioning Environmentalism in Space', *Sociological Review Monograph* 57, 1 (2009), 190–203.

⁴⁰ Bashford, *Global Population*; Marc Frey, 'Neo-Malthusianism and Development: Shifting Interpretations of a Contested Paradigm', *Journal of Global History* 6, 1 (2011), 75–97; Heinrich Hartmann, '"No Technical Solution": Historische Kontexte einer Moralökonomie der Weltbevölkerung seit den 1950er Jahren', in Isabella Löhr and Andrea Rehling (eds.), *Global Commons im 20. Jahrhundert: Entwürfe für eine globale Welt* (Munich: De Gruyter Oldenbourg, 2014), 33–52; Sara Weydner, 'Reproductive Rights and Reproductive Control', *Geschichte und Gesellschaft* 44, 1 (2018), 135–61.

⁴¹ Paul Ehrlich, *The Population Bomb* (New York: Ballantine Books, 1968); Matthew Connelly, *Fatal Misconception: The Struggle to Control World Population* (Cambridge, MA: Belknap Press, 2008).

⁴² Quoted in Sabine Höhler, 'The Law of Growth: How Ecology Accounted for World Population in the 20th Century', *Distinktion: Journal of Social Theory* 8, 1 (2007), 45–64, at 56.

⁴³ Sabine Höhler, *Spaceship Earth in the Environmental Age 1960–1990* (London: Pickering and Chatto, 2015).

⁴⁴ Ossip K. Flechtheim, *Eine Welt oder keine? Beiträge zur Politik, Politologie und Philosophie* (Hamburg: Europäische Verlagsanstalt, 1964).

the physical world to thinking about humanity in its more metaphysical sense. Calling the twentieth century ‘the age of mankind’ and pointing out how science, technology and economic integration had rendered the Earth ever smaller and more closely knit, he focused on universalism, humanism, solidarity and oneness: ‘both rich and poor nations belong to the brotherhood of the human race in the small, intractable planet which they by concerted enterprise have to make into a habitable home for each of them to live with decency, dignity and freedom’.⁴⁵ Mukerjee tightly coupled the future of the planet with conceptions of humanity and life on Earth.

American development economist Barbara Ward took up the same idea of a crowded and inescapable planet that occupied Mukerjee. In 1966 she coined the phrase ‘Spaceship Earth’.⁴⁶ In her later work *Only One Earth* (1972), she illustrated how environmental activism was connected with thinking in terms of a united humanity: ‘the careful husbandry of the Earth is the sine qua non for the survival of the human species, and for the creation of decent ways of life for all the people of the world’.⁴⁷ Even if these three visions of radical inclusion did not account clearly for who actually made up humanity in any more than the most abstract terms and also risked obfuscating social distinctions for the sake of stressing the unity of humankind, they all shared the urgent sense of a claustrophobic spherical nature of the globe from which there was no escape.

In the 1970s and 1980s, when the Club of Rome and the Brundtland Commission were more overtly discussing the limits of the world’s resources and related questions of global justice, there were many further examples of how and where one-world and one-humanity thinking coalesced.⁴⁸ Postcolonial leaders such as Indira Gandhi expressed in powerful terms how nature and the use of natural resources needed to be rethought as global

⁴⁵ Radhakamal Mukerjee, *The Oneness of Mankind* (London: Macmillan, 1965), ix. See his participation in earlier population debates mentioned earlier: Radhakamal Mukerjee, ‘The Criterion of Optimum Population’, *American Journal of Sociology* 38, 5 (1933), 688–98.

⁴⁶ Barbara Ward, *Spaceship Earth* (New York: Columbia University Press, 1966), later taken up by R. Buckminster Fuller, *Operating Manual for Spaceship Earth* (New York: Simon & Schuster, 1969).

⁴⁷ Barbara Ward and Rene Dubos, *Only One Earth: The Care and Maintenance of a Small Planet* (New York: W. W. Norton, 1972).

⁴⁸ See David Kuchenbuch, ‘“Eine Welt”: Globales Interdependenzbewusstsein und die Moralisierung des Alltags in den 1970er und 1980er Jahren’, *Geschichte und Gesellschaft* 38, 1 (2012), 158–84; David Kuchenbuch, *Welt-Bildner: Arno Peters, Richard Buckminster Fuller und die Medien des Globalismus, 1940–2000* (Vienna: Böhlau, 2021); David Kuchenbuch, *Globalismen: Geschichte und Gegenwart des globalen Bewusstseins* (Hamburg: Hamburger Edition, 2023); Donella H. Meadows et al., *The Limits of Growth: A Report for The Club of Rome’s Project on the Predicament of Mankind* (New York: Universe Books, 1972); Matthias Schmelzer, *The Hegemony of Growth: The OECD and the Making of the Economic Growth Paradigm* (Cambridge: Cambridge University Press, 2016); Matthias Schmelzer, *Degrowth/Postwachstum zur Einführung* (Hamburg: Junius, 2019).

commons belonging to all of humanity.⁴⁹ If the global sphere could be described as claustrophobic and as a site of fierce battles over the distribution of resources, the sense of one world also produced new perspectives on global justice and solidarity.

This short survey of spherical thinking demonstrates how in the second half of the twentieth century many actors moved from a vague sense of threat to outright fears for survival, clearly pointing to closure rather than openness as the dominant feeling associated with global processes. What is more, for authors such as Flechtheim, Mukerjee and Ward, ‘the world’ increasingly meant not all *places* everywhere but all *people* everywhere, evoking crowdedness and inescapability and thus amalgamating geographical and social thinking. Even if the sphere might have been a spatial metaphor to start with, the examples highlighted here show how global histories that centre on the sphericity of the Earth can shift our analytic perspectives and research designs from space and the geographic scales that have long dominated global history to humanity and human populations.⁵⁰

Exclusion: One World, Many Spheres

Do we really inhabit one world, or just our own limited spheres of the world? And how are the boundaries of these spheres defined, guarded and – at least potentially – broken? During the Covid-19 pandemic, conceptions of hermetically sealed spaces experienced a strange and unexpected renaissance, endowing us with a new arsenal of expressions that includes ‘bubbles’ and ‘inner circles’. New Zealand’s slogan ‘stay in your bubble’ was taken up by other countries and used in public health campaigns worldwide, encouraging people to limit their interactions to clearly restricted spheres. At the same time, new digital communication technologies united individuals across large distances, yet again, often within clearly delineated and pre-selected spheres. Both the accelerating development of new media practices and the slogans mentioned herein echo Sloterdijk’s distinction of spherical thinking into globes, bubbles and foams.

Lived experiences of closure, as in the case of the Covid-19 pandemic, are mirrored in the broader use of the word ‘sphere’ in the social sciences. The terminology of spheres is often used (along with synonyms such as ‘universe’

⁴⁹ Both quoted in Elizabeth DeLoughrey and George B. Handley, ‘Introduction: Toward an Aesthetics of the Earth’, in Elizabeth DeLoughrey and George B. Handley (eds.), *Postcolonial Ecologies: Literatures of the Environment* (Oxford: Oxford University Press, 2011), 3–39, here 16.

⁵⁰ At the same time, the question of how to bring a critical history of the Anthroposphere and a history of humanity into closer dialogue is still largely unresolved: Bruno Latour, *Down to Earth: Politics in the New Climatic Regime* (Cambridge: Polity Press, 2018); Alison Bashford, Emily M. Kern, and Adam Bobbette (eds.), *New Earth Histories: Geo-Cosmologies and the Making of the Modern World* (Chicago: University of Chicago Press, 2023).

or simply ‘world’) to denote clearly demarcated geographical spheres of influence or specific social configurations – for instance, gender spheres, or public and private spheres. In many cases, these differently bounded spheres overlap. The social sciences often use the term ‘spheres’ in reference to exclusionary bubbles, which can stretch around the world but still leave out many. In contrast to the closed-world discourses surveyed earlier, which tend to omit social differentiation, thinking in terms of spheres in the plural highlights exclusion and boundary-making. When exploring how the language of spheres is used in global history writing, it is therefore important to consider multi-spherical approaches alongside closed-world thinking.

Most notably, the term ‘spheres of influence’ became prevalent in the late nineteenth century, a moment some global historians have described as one of extraordinary expansion and openness. While this sense of openness was often accompanied by a sense of planetary closure as depicted earlier, the partitioning of the world into clearly defined spheres of influence is a further factor that reveals this period as deeply divisive, but no less global for that matter. Since then, the concept of spheres of influence – sometimes separate, sometimes overlapping – has become a convenient analytic device in fields such as political science, economics and law.⁵¹

When thinking about spheres, geopolitical spheres of influence might still be the first point of reference. The field of international relations has also displayed a renewed interest in spheres of influence.⁵² Missionary or colonial spheres of influence intentionally created separations and boundaries. Legal treaties and doctrines such as the Treaty of Tordesillas or the Monroe Doctrine clearly marked out and defined spheres of influence. Other more loosely defined concepts such as the Sinosphere, the Buddhosphere and the Islamosphere point to a central dilemma of spherical thinking: are spheres of influence distinctly delineated, or do they fray and dissolve around the edges? How can we define where one sphere of influence ends and the other begins?

Rather than dwelling on the geopolitical use of spheres of influence, the remainder of this chapter highlights another, more explicitly social, concept that includes the term ‘sphere’. Located at the intersection of political theory and communication studies, public spheres represent a further common usage of spheres that has made its way into the vocabulary of the social sciences and humanities. In most cases, it is used in reference to Jürgen Habermas’s

⁵¹ For the ‘sphere of law’, see, for instance, Michael Walzer, *Spheres of Justice: A Defence of Pluralism and Equality* (Oxford: Blackwell, 1983); Lauren Benton, ‘Beyond Anachronism: Histories of International Law and Global Legal Politics’, *Journal of the History of International Law* 21, 1 (2019), 7–40.

⁵² Susanna Hast, *Spheres of Influence in International Relations: History, Theory and Politics* (London: Routledge, 2016); Van Jackson, ‘Understanding Spheres of Influence in International Politics’, *European Journal of International Security* 5, 3 (2019), 1–19.

conception of the public sphere from the 1960s.⁵³ According to Habermas, public spheres are stages for the exchange of rational arguments marked by a certain degree of institutionalisation, distinguishing them from the more flexibly used term of ‘publics’.

More recently, debates on multiple public spheres have also entered global history. Scholars have sought to answer the question of how public spheres (or less firmly institutionalised publics) could expand beyond nation-states by exploring infrastructures and media but also markets and attention economies.⁵⁴ Current debates in communication studies concerning fragmented publics, filter bubbles and echo chambers further highlight the need to look beyond the more normative conceptualisations of public spheres to focus on the boundaries and limits of communication.⁵⁵ Global communication history is an area of research that can be rethought within the framework of spheres, drawing attention to accessibility and inaccessibility as central parameters of analysis.⁵⁶ Much like the more abstract term ‘integration’, the concept of public spheres might imply openness at first sight. Yet access to public spheres is limited by a number of factors, making them fertile ground for probing how openness and closure can be linked more effectively.

No public sphere has ever covered the entire planet. Instead, spheres are always exclusive and exclusionary affairs, allowing access and entry to some but not to others. This is most obvious in relation to the geographies of specific public spheres. Yet, in an age of communication technologies spanning the globe, their exclusionary nature is often rooted not so much in geographical limitation as in social differentiation.⁵⁷ The investigation of public spheres and

⁵³ Although the term ‘public sphere’ in relation to Jürgen Habermas’s work was only circulated widely after the delayed translation of the book into English in 1989, it had already appeared in an encyclopedia article of 1964: Jürgen Habermas, ‘The Public Sphere: An Encyclopedia Article (1964)’, transl. by Sara Lennox and Frank Lennox, *New German Critique* 3 (1974), 49–55; Martin Seeliger and Sebastian Seignani (eds.), *Ein neuer Strukturwandel der Öffentlichkeit?* (Baden-Baden: Nomos, 2021); Jostein Gripsrud et al. (eds.), *The Public Sphere*, 4 vols. (London: SAGE, 2010).

⁵⁴ Valeska Huber and Jürgen Osterhammel (eds.), *Global Publics: Their Power and Their Limits, 1870–1990* (Oxford: Oxford University Press, 2020); Emma Hunter and Leslie James, ‘Introduction: Colonial Public Spheres and the Worlds of Print’, *Itinerario* 44, 2 (2020), 227–42.

⁵⁵ See, for instance, Subhayan Mukerjee, ‘Rethinking Audience Fragmentation Using a Theory of News Reading Publics. Online India as a Case Study’, *International Journal of Press/Politics*, 19 January 2022, <https://doi.org/10.1177%2F19401612211072700>; Ludovic Terren and Rosa Borge-Bravo, ‘Echo Chambers on Social Media: A Systematic Review of the Literature’, *Communication and Media Technologies* 9 (2021), 99–118.

⁵⁶ As an analytic category, ‘access’ has not yet been explored in detail. As a starting point, see Jeremy Rifkin, *The Age of Access: The New Culture of Hypercapitalism: Where All of Life Is a Paid for Experience* (New York: Putnam, 2000).

⁵⁷ For the most prominent critique of Habermas: see Nancy Fraser, ‘Rethinking the Public Sphere: A Contribution to the Critique of Democracy as It Really Is’, in Craig Calhoun (ed.), *Habermas and the Public Sphere* (Cambridge, MA: MIT Press, 1993), 109–42.

their geographical and social reach can therefore help uncover the making and breaking of social boundaries through communicative practices.

The most obvious parameters limiting access to public spheres are the familiar structures of race, class and gender. Recent scholarship has employed global social classes as a lens through which to view inclusion and exclusion in the development of separate spheres, with public spheres frequently mapping onto social structures.⁵⁸ This has been fuelled by new research on global classes and their networks, most notably the global bourgeoisie – a class that might have been global while at the same time sporting clear limitations of access.⁵⁹ Global gender histories might be even more interesting for exploring the limits and boundaries of public spheres. Since the dichotomy between public and private spheres is traditionally reflected in a dichotomy between male and female roles and activities, the shifting boundaries of global public spheres are especially evident in relation to gender. In many societies, gender roles have long been cemented in ‘separate spheres’ ideologies.⁶⁰ Over the course of the last century, however, emancipating concepts such as the ‘new woman’ or the ‘modern girl’ surfaced around the world.⁶¹ These concepts correlated with new patterns of consumption and built on the promise that women could challenge ‘traditional’ gender roles and burst into public spheres that were formerly reserved for men. Yet this liberating process also led to the emergence of new female global public spheres that were reserved for a select group – for instance, upper-middle-class women. So instead of collapsing boundaries, they ended up creating new ones.

While the project of tracing the idea of the ‘new woman’ around the world was originally based quite heavily on research on consumption and marketing, scholars working on the role of newspapers and women’s magazines in the

⁵⁸ Hannah Arendt, *The Human Condition* (Chicago: University of Chicago Press, 1958), part II, 22–78. Transnational civil society might be another ‘sphere’ worth investigating in this context. See Emma Hunter, ‘“Our Common Humanity”: Print, Power, and the Colonial Press in Interwar Tanganyika and French Cameroun’, *Journal of Global History* 7, 2 (2012), 279–301; Srilatha Batilwala and L. David Brown, ‘Shaping the Global Human Project: The Nature and Impact of Transnational Civil Activism’, in Srilatha Batilwala and L. David Brown (eds.), *Transnational Civil Society: An Introduction* (Bloomfield: Kumarian Press, 2006), 204–27; Peter Uwe Hohendahl and Russell A. Berman, *Öffentlichkeit – Geschichte eines kritischen Begriffs* (Stuttgart: Metzler, 2000).

⁵⁹ Christof Dejung et al. (eds.), *The Global Bourgeoisie: The Rise of the Middle Classes in the Age of Empire* (Princeton: Princeton University Press, 2019); Jürgen Osterhammel, ‘Hierarchies and Connections: Aspects of a Global Social History’, in Sebastian Conrad and Jürgen Osterhammel (eds.), *An Emerging Modern World 1750–1870* (Cambridge, MA: Harvard University Press, 2018), 661–888.

⁶⁰ Linda Kerber, ‘Separate Spheres, Female Worlds, Woman’s Place: The Rhetoric of Women’s History’, *Journal of American History* 75, 1 (1988), 9–39. For public and private spheres, see Joan B. Landes (ed.), *Feminism, the Public and the Private* (Oxford: Oxford University Press, 1998).

⁶¹ Alys Eve Weinbaum et al. (eds.), *The Modern Girl Around the World: Consumption, Modernity, and Globalization* (Durham: Duke University Press, 2008).

development of female public spheres have demonstrated that new communication media played a key role in the formation of global public spheres.⁶² Su Lin Lewis has shown how the use of categories such as the ‘new woman’ and the ‘modern girl’ in the Asian port cities of Singapore and Rangoon not only depended on new patterns of consumption – for instance, the adoption of new styles of fashion and cuisines and behaviour – but also on the circulation of print media and access to common languages.⁶³ Lewis’s research on the development of global female public spheres highlights the sharply drawn boundaries between male and female forms of political engagement and social practice even within these globalised contexts. Female spheres can be global but still remain restricted and exclusive. The ‘new woman’ and ‘modern girl’ are thus prime examples of how openness and closure are intertwined.

Research on global public spheres has focused not only on how access is determined by categories of race, class and gender, but also on the role of access to technologies and media in a broader sense. Beyond those classic categories of exclusion, these include ‘technologies of the intellect’, such as language and literacy, but also factors such as the ability to handle new technologies or age as an excluding factor.⁶⁴ The question of ‘who is in and who is out?’ therefore becomes even more salient if we move beyond an analysis of consumption or of conventional media histories.

Participation in global female public spheres, for instance, depended on particular skills, most notably literacy, which has become a condition for entry to many public spheres. More generally speaking, the word ‘public’ itself has often been coupled with qualifying adjectives such as ‘educated’ public, ‘informed’ public and ‘reading’ public, pointing to the crucial boundary between a global literate public and populations that could not read or write – historically, the larger part of the global population. In the nineteenth century, mass schooling became an important objective of many modernising states, yet the majority of the global female population over fifteen years of age was still not literate and therefore remained firmly excluded from public spheres defined by print. In the twentieth century, comprehensive literacy campaigns were conducted in countries including the Soviet Union, Turkey and Cuba. International organisations, above all UNESCO, have aimed to increase literacy and provide ‘education for all’. Many of these campaigns have been

⁶² Michel Hockx et al. (eds.), *Women and the Periodical Press in China's Long Twentieth Century: A Space of Their Own?* (Cambridge: Cambridge University Press, 2018); Derek R. Peterson et al. (eds.), *African Print Cultures: Newspapers and Their Publics in the Twentieth Century* (Ann Arbor: University of Michigan Press, 2016).

⁶³ Su Lin Lewis, ‘Asian Women and Global Publics: Interaction, Information, and the City, c. 1900–1940’, in Huber and Osterhammel, *Global Publics*, 145–74.

⁶⁴ For the admittedly problematic expression ‘technologies of the intellect’, see Jack Goody, *The Power of the Written Tradition* (Washington DC: Smithsonian Institution, 2000), 132–51.

targeted at women. At the same time, female literacy rates still remain far below those of their male counterparts.

Global yet exclusive public spheres were also circumscribed by language barriers. Often, membership rested on knowledge of ecumenical languages such as English.⁶⁵ Yet global English also faced linguistic competitors. Chinese, Arabic and Persian language communities illustrate how global public spheres are expanding, while simultaneously remaining exclusive to those who share a common language. This point is driven home by the frequent reference to language spheres such as the Anglosphere or the Sinosphere as ‘worlds’ – for instance, in H. G. Wells’s expression ‘the English-speaking world’, but also the ‘Francophone world’ and the ‘Persianate world’.⁶⁶

As these brief examples show, when historical actors or historians say ‘world’, they are often referring to a clearly demarcated global sphere. Highlighting the boundedness and social differentiation that comes with conceptions of ‘world’ or ‘globe’ might sound obvious. And it might go without saying that historical actors navigate specific and clearly circumscribed spheres rather than the planet as a whole. Yet, historians frequently reproduce the selective worldviews of their historical actors or bring their own limited frame of reference to the field rather than challenging these perspectives. At the same time, a global history perspective should ideally have the potential to spell out these limitations and boundaries and make them more visible, rather than obscuring or hiding them.

Boundaries and Limits in the Language of Global History

Instead of advocating a new language of spheres (akin to Arjun Appadurai’s language of ‘scapes’, which has rightly been criticised as being overly schematic), the aim of this chapter is to explore how the sphere as a figure of thought permits historians to rethink openness and closure in global history.⁶⁷ Of

⁶⁵ Diana Lemberg, “‘The Universal Language of the Future’: Decolonization, Development, and the American Embrace of Global English, 1945–1965”, *Modern Intellectual History* 15, 2 (2018), 561–92; Valeska Huber, ‘An International Language for All: Basic English and the Limits of a Global Communication Experiment’, in David Brydan and Jessica Reinisch (eds.), *Internationalists in European History: Rethinking the Twentieth Century* (London: Bloomsbury, 2021), 51–67.

⁶⁶ H. G. Wells, *World Brain* (London: Methuen, 1938); Nile Green (ed.), *The Persianate World: The Frontiers of a Eurasian Lingua Franca* (Oakland: University of California Press, 2019); Michelle Beauchair (ed.), *The Francophone World: Cultural Issues and Perspectives* (Frankfurt am Main: Peter Lang, 2007); Silke Mende, *Ordnung durch Sprache. Francophonie zwischen Nationalstaat, Imperium und internationaler Politik, 1860–1960* (Berlin: De Gruyter Oldenbourg, 2020); connecting linguistic and geopolitical spheres: Georg Glasze, *Politische Räume: Die diskursive Konstitution eines ‘geokulturellen Raums’ – die Frankophonie* (Bielefeld: Transcript, 2013).

⁶⁷ Arjun Appadurai, ‘Disjuncture and Difference in the Global Cultural Economy’, *Theory, Culture and Society* 7, 2–3 (1990), 295–310.

course, the sphere is not an overall remedy: focusing on boundaries too rigorously might in fact hide the internal structures and networks that fill the sphere. At the same time, the various ways in which historical actors referred to global spheres reviewed earlier – the globe as sphere, spheres of influence, private and public spheres – offer alternative conceptualisations of the world and its limitations. They draw attention to boundaries and boundary-making and to difference and differentiation, complementing the familiar vocabulary of connection and circulation.⁶⁸

Rather than prescribing a new language, this chapter points to several occasions where the sphere emerges as a global concept, allowing us to show how openness and closure are intertwined in contemporary reflections on globality. Through visiting instances of radical inclusion and radical exclusion, it helps to contextualise (rather than theorise) the global. Most importantly, this chapter has hinted at an ambivalence regarding the nature of boundaries and their permeability in global history. Spheres are necessarily bounded, even if these boundaries may be more solid or more ephemeral and therefore can vary in their porosity. This holds true both for the globe as a sphere characterised by radical inclusivity and for the more exclusive multiple global spheres delimited by class, gender, media systems and skills that are described in the last part of this chapter.

In this experimental think piece, I have been particularly interested in exploring the boundaries that define these spheres. A sphere is more permanent than a bubble, which can easily burst. But is a sphere impenetrable and hermetically sealed, as in the depictions of a closed world? Or is it porous and permeable, at least for some? Can one belong to several spheres, and can one leave them at will? And how are the limits of different spheres set and guarded? When thinking about spheres, we have to pay attention to the qualities of the membranes in which they are enclosed. Such reflections on the nature of boundaries invite contemplations on stability and fragility, porosity and impermeability, rather than resorting to a language of fluidity and formlessness as central features of globality. Boundaries can dissolve and solidify as a result of global phenomena such as pandemics or wars. Consequently, thinking about global spheres calls for a more systematic exploration of boundaries and limits, borders and frontiers, as a central semantic field of global history.

Of course, there is a sprawling literature on two-dimensional borderlands in global history.⁶⁹ This literature has gone a long way towards exploring

⁶⁸ Jeffrey C. Alexander and Paul Colomy (eds.), *Differentiation Theory and Social Change: Comparative and Historical Perspectives* (New York: Columbia University Press, 1990).

⁶⁹ From Peter Sahlins, *Boundaries: The Making of France and Spain in the Pyrenees* (Berkeley: University of California Press, 1989) to Sören Urbansky, *Beyond the Steppe Frontier: A History of the Sino-Russian Border* (Princeton: Princeton University Press, 2020). Other work has stressed the sorting processes taking place in border situations, such as my own work on the

processes of openness and closure in the literal sense. Yet a large part of this literature refers to geographical boundaries such as the borders of nation-states, continents and seascapes. These works are therefore, not surprisingly, mainly concerned with spatial conceptions of the global.

In contrast to such two-dimensional conceptions, spheres are more frequently bounded by divisions that have nothing to do with geography. Such divisions can take the forms of glass ceilings, cell membranes and elastic skins. In this sense, spheres are related as much to the sociological literature on social closure as they are to geographical conceptions of spatial expansion and retraction. Connecting the spatial and the social in global history more closely and drawing attention to the social depth of global processes therefore adds an important third dimension. Spheres can lead us to reflect more openly on the question of the universe or cosmos inhabited by a historical actor and the limits thereof – geographically, but above all socially and communicatively. Closure emerges as a flexible category: processes of closure can be territorial, but they can also relate to phenomena of social differentiation. The three-dimensional nature of spheres and their boundaries therefore points towards new and more inclusive ways of thinking about global borders and limits.

There are many examples of non-geographical boundary-work that will come to mind beyond those emphasised in this chapter. Recently, historians have been drawn to the porosities between the spheres of humans and the worlds of animals.⁷⁰ Others have conceptualised borders as semi-permeable membranes, for instance in relation to mobility and migration, where creating opportunities for some means limiting them for others. A typology of boundaries beyond the geographical allows historians to reach out to neighbouring disciplines but also to more distant fields of research, such as the biosciences, information technology and linguistics.⁷¹

Thinking about spheres and related metaphors broadens our view beyond binaries such as connection and disconnection or integration and disintegration and calls for a more explicit examination of how ideas of the global in themselves can lead to exclusive and exclusionary notions. This chapter moves beyond equating the global with openness, connection and integration and instead addresses the role of closure, boundaries and limits in global history

Suez Canal as connection and boundary: Valeska Huber, *Channelling Mobilities: Migration and Globalization in the Suez Canal Region and Beyond 1869–1914* (Cambridge: Cambridge University Press, 2013); and Steffen Mau, *Sortiermaschinen: Die Neuerfindung der Grenze im 21. Jahrhundert* (Munich: C. H. Beck, 2021). For an overview, see Suzanne Conklin Akbari et al., 'AHR Conversations: Walls, Borders, and Boundaries in World History', *American Historical Review* 122, 5 (2017), 1501–53.

⁷⁰ Among others Sujit Sivasundaram, 'The Human, the Animal and the Prehistory of COVID-19', *Past and Present* 249, 1 (2020), 295–316.

⁷¹ See for instance Samantha Frost, *Biocultural Creatures: Toward a New Theory of the Human* (Durham: Duke University Press, 2016) on the boundaries of cells and their permeability.

in a wider sense, placing inequality and differentiation at the centre. In this manner, it returns from a softer and more metaphorical language to a harder language emphasising structures and constraints, ideally without losing the interlopers and trespassers that have long fascinated global historians. In this way, the slightly unwieldy concept of spheres allows for two shifts which can prove central to global history in the long run. First, it challenges practitioners of global history to reveal how openness and closure are amalgamated in specific global processes, moving beyond the metaphorical, symbolic and somewhat indeterminate language that has characterised attempts to rethink global processes beyond connection and integration. And, second, it emphatically calls for a move from geographical units (and their deconstruction) to the analysis of social units in order to reveal global inequalities and hierarchies more clearly than is often the case.