Otto Neurath was recently called 'the last Viennese polymath'. He had the rare gift of synthesis, of perceiving interconnections – not just in theory but in practice as well. Before 'interdisciplinarity' became a common term, Neurath argued that the web of cultural, conceptual, and cognitive complexities should not be reduced to single perspectives of a one-dimensional quality. Historian William M. Johnston asserted:

In scope of interests, Neurath knew no rival in this century. Who else conducted original research in physics, mathematics, logic, economics, sociology, ancient history, political theory, history of German literature, architecture, and graphics.

If we supplement this list with urbanism, planning theory, museology, linguistics, history of science, and philosophy, then even more support is lent to Johnston's claim that 'no other incarnated so boldly the Austrian talent for integrative thinking'.<sup>2</sup>

Yet, as Thomas Uebel has pointed out, the description of 'polymath' frequently applied to Neurath can give the impression of a dilettante. Some of his contemporaries seemed to imply this: Edgar Zilsel, when reviewing Neurath's book on 'Empirical Sociology' (1931), compared him to 'a passenger travelling in an aeroplane at an altitude of 3000 metres' above the 'unexplored jungle' of sociology; Gustav Bergmann, when first writing about the 'linguistic turn' in philosophy, referred to Neurath as an important member of the Vienna Circle 'whose manifold activities and encyclopedic, if not always profound, interests defy classification'. Uebel

<sup>&</sup>lt;sup>1</sup> Th. Hříbek, 'The Last Viennese Polymath', Metascience 29 (2020), pp. 385–90.

<sup>&</sup>lt;sup>2</sup> W. M. Johnston, *The Austrian Mind: An Intellectual and Social History 1848–1938* (Berkeley: University of California Press, 1972), p. 195.

<sup>&</sup>lt;sup>3</sup> E. Zilsel, 'Rezension: Otto Neurath, *Empirische Soziologie*', in Zilsel, *Wissenschaft und Weltanschauung: Aufsätze 1929–1933* (Wien: Böhlau, 1992), pp. 145–9, p. 149.

<sup>&</sup>lt;sup>4</sup> G. Bergmann, 'Logical Positivism', in V. Ferm (ed.), *A History of Philosophical Systems* (New York: Philosophical Library, 1950), pp. 471–82, p. 481 n3.

suggests instead that Neurath was an educator in the Enlightenment tradition, and that his activities were united by the aim 'to impart theoretical knowledge with a practical purpose, namely knowledge that allows people to gain clarity about their conditions of life and to change them on their own terms'.5

Neurath was an avowed generalist, considering an overview of connections between 'sciences' to be important from an early point in his career.<sup>6</sup> In Britain, he often referred to himself as a 'scientist', but it seems that he may not have fully grasped the subtly different connotations of the German and English terms for science. As Michael Gordin observes: 'The narrowness of science in English is distinctive. Other languages, such as French (science), German (Wissenschaft), or Russian (наука, nauka), use the term to encompass scholarship in a broad sense, including the social sciences and often also the humanities.'7 To be a scientist in Englishspeaking culture still implies the natural sciences, so Neurath is perhaps better described as a social scientist (although he remembered with affection making his own chemical experiments as a young teenager).8

Neurath is often portrayed as a larger-than-life figure: Marie Neurath's first impression was of 'a red-bearded giant' (the beard was long gone by the 1940s); Karl Popper's was of 'a big, tall, exuberant man with flashing eyes'; Neurath's student Moshe Ben-Gavriel recalled 'his fists like a sailor and wide clothes of a strangely boorish cut'; and *Time* magazine referred to him as 'hulking, booming Otto Neurath'.9 Neurath portrayed himself as an elephant in cartoon drawings in his correspondence 'because I am so capacious', perhaps not only referring to his physical stature but also to his

<sup>&</sup>lt;sup>5</sup> Th. Uebel, 'Otto Neurath: Leben und Werk', in Th. Binder et al. (ed.), International Bibliography of Austrian Philosophy (Amsterdam: Brill, 2005), pp. 7–51, p. 7. 'Aufklärer' is the term Uebel uses to describe Neurath. The practical–theoretical parallelism of Neurath was also emphasized in N. Cartwright, J. Cat, L. Fleck, and Th. Uebel, Otto Neurath: Philosophy between Science and Politics (Cambridge: Cambridge University Press, 1996); and recently by D. Howard, 'Otto Neurath: The Philosopher in the Cave', in Cat and Tuboly (eds.), Neurath Reconsidered, pp. 45-65.

O. Neurath, 'On the Theory of Social Science' [1910], in Economic Writings, pp. 287-8.

W. Dane before and after Global English (1910).

<sup>&</sup>lt;sup>7</sup> M. Gordin, Scientific Babel: How Science Was Done before and after Global English (Chicago: University of Chicago Press, 2015), p. 3.

<sup>&</sup>lt;sup>8</sup> O. Neurath, From Hieroglyphics to Isotype: A Visual Autobiography (London: Hyphen Press, 2010),

<sup>&</sup>lt;sup>9</sup> M. Neurath, 'What I Remember' (ONN 371/L.16), p. 27; Popper and Ben-Gavriel in 'Memories of Otto Neurath', in Empiricism and Sociology, pp. 52, 11; Time, 1 August 1938, cited in G. Reisch, How the Cold War Transformed Philosophy of Science: To the Icy Slopes of Logic (Cambridge: Cambridge University Press, 2005), p. 36.

versatility. To Few observers tally this impression with the reflective scholar that Neurath also evidently was, with a profound knowledge of history, literature, science, and philosophy, and who valued time and space for 'meditation'. He was aware of these two sides to his character: 'A great many people do not like my attitude, this combination of vitality and scepticism', he remarked to L. Susan Stebbing. The epigram by Conrad Meyer, which Neurath himself quoted, seems pertinent here: 'I am not a wittily constructed work of fiction; I am a human being and full of contradiction.'

Two major priorities remained constant in Neurath's life and work and provide guiding themes for this book: education and planning, which for him were closely connected. Other aspects of his work could no doubt be emphasized in alternative accounts, but the approach in this book has been shaped by the interests of its authors: a historian of philosophy, specializing in logical empiricism (Tuboly); and a design historian, who came to Neurath through his work on visual education, and became intrigued by him from a biographical perspective (Burke). We have tried to weave biographical, historical, and philosophical strands together, although the book is mostly divided into thematic chapters.

Logical empiricists are not usually accorded biographies in a traditional sense, focusing on contextual factors and reconstructing their intellectual development against the background of an era. Yet, in recent years, popular attention has been directed at the life and intellectual significance of the leading figures in analytic philosophy, with monographs on Rudolf Carnap, Gottlob Frege, and Frank Ramsey, following earlier biographies of A. J. Ayer and Ludwig Wittgenstein. There have also been two studies of the Vienna Circle as a group.<sup>13</sup>

<sup>11</sup> Neurath to L. Susan Stebbing, 24 April 1939 (ONN 304).

From Huttens letzte Tage, cited in O. Neurath, 'International Planning for Freedom' [1942], in Empiricism and Sociology, pp. 422–40, p. 429.
 See B. Rogers, A. J. Ayer: A Life (New York: Grove Press, 1999); A. Carus, Carnap and Twentieth-

Century Thought: Explication as Enlightenment (Cambridge: Cambridge University Press, 2008); D. Jacquette, Frege: A Philosophical Biography (Cambridge: Cambridge University Press, 2019); Ch. Misak, Frank Ramsey: A Sheer Excess of Powers (Oxford: Oxford University Press, 2020); R. Monk, Ludwig Wittgenstein (London: Vintage, 1991); K. Sigmund, Exact Thinking in Demented Times: The Vienna Circle and the Epic Quest for the Foundations of Science (New York: Basic, 2017);

D. Edmonds, The Murder of Professor Schlick: The Rise and Fall of the Vienna Circle (Princeton: Princeton University Press, 2020).

Neurath to Helen Coppen, cited in M. Henning, 'Isotypes and Elephants: Picture Language as Visual Writing in the Work and Correspondence of Otto Neurath', in S. Harrow (ed.), *The Art of The Text* (Cardiff: University of Wales Press, 2012), pp. 95–114, p. 103.

The reason for the focus of the present study on Otto Neurath's last years in Britain is that these are under-represented in existing treatments of Neurath. For example, Rainer Hegselmann's early examination of Neurath as a 'social reformer' contains only one short page about the English years. Neurath's son, the sociologist Paul Neurath, wrote a substantial text on his father's 'life and work', but only a very slim portion (5 of almost 100 pages) is devoted to his final years. The most extensive biography (in English) by Lola Fleck – published in a joint volume with Nancy Cartwright, Jordi Cat, and Thomas Uebel – devotes a similarly small portion to the period 1940–5. <sup>14</sup> A significant exception is Günther Sandner's comprehensive, 'political' biography of Neurath, which contains a larger section on his British years, providing information and analysis that have been helpful to the present study. <sup>15</sup>

Neurath's third wife, Marie Neurath (neé Reidemeister), provided essential information about Neurath's final years (and his final day) in *Empiricism and Sociology*, the first collection of Neurath's writings in English translation, which she co-edited. Although her recollections are brief, they are naturally valuable as a memoir by the person who was closest to him, and who was his long-time collaborator in the graphic work of Isotype. The other memoirs of Otto Neurath that she collected for that volume add up to a rich picture of the man. <sup>16</sup>

Most descriptions of Neurath's final years seem to agree on the basic narrative that, in exile in Britain, he concentrated on visual education at the Isotype Institute, withdrawing from philosophy. On closer examination, this soon proves unsatisfactory: prior to arrival in England, Neurath's principal way of making a living had also been his work in visual education (both in Vienna and The Hague); and in Oxford he

pp. 85–8.

G. Sandner, Otto Neurath: Eine politische Biographie (Wien: Zsolnay, 2014), pp. 262–96; see also G. Sandner, 'The German Climate and Its Opposite: Otto Neurath in England, 1940–1945', in A. Grenville and A. Reiter (eds.), Political Exile and Exile Politics in Britain after 1933 (Amsterdam/ New York: Rodopi, 2011), pp. 67–85.

M. Neurath, 'Memories of Otto Neurath', in Empiricism and Sociology, pp. 68–75, 79–80. See also her 'professional' memoir in M. Neurath and R. Kinross, The Transformer: Principles of Making Isotype Charts (London: Hyphen Press, 2009). On the partnership of Otto and Marie Neurath, see Ch. Burke and G. Sandner, 'Marie Reidemeister and Otto Neurath: Interwoven Lives and Work', European Journal of Life Writing 11 (2022), pp. 103–29.

<sup>&</sup>lt;sup>14</sup> R. Hegselmann, 'Otto Neurath: Empiristischer Aufklärer und Sozialreformer', in *Otto Neurath: Wissenschaftliche Weltauffassung, Sozialismus und Logischer Empirismus* (Frankfurt am Main: Suhrkamp, 1979), pp. 7–78, p. 52; P. Neurath, 'Otto Neurath (1882–1945): Leben und Werk', in P. Neurath and E. Nemeth (eds.), *Otto Neurath oder die Einheit von Wissenschaft und Gesellschaft* (Wien-Köln-Weimar: Böhlau, 1994), pp. 13–96, pp. 90–5; Cartwright et al., *Otto Neurath*, pp. 85–8.

continued to work as co-editor (and on his own monograph) for the *International Encyclopedia of Unified Science*. Although Neurath lived for barely five years after being released from internment, these years were packed full of optimistic activity, which reflected ideas that can now be seen as ahead of their time.

The matter of exile is also complex. Helene Maimann noted a differentiation between the term 'exile' as 'a designation of political banishment' from 'emigration' that 'was also forced, but for non-political reasons'; also taking account of a distinction 'between the Jewish mass emigration on the one hand and the numerically small number of political and literary, artistic and journalistic exiles on the other'. To the latter, the German adjective vertrieben (displaced/expelled) has gained currency. 18 Each individual case has its peculiarities, and Neurath is no exception: he was forced to leave Vienna by political pressure from Austrofascists, and then fled the German invasion of the Netherlands, so it seems clear that he was a political exile, although his Jewish ancestry became a reason, too. Neurath's Jewishness should perhaps not be overemphasized, given that he almost never identified himself as such, but it cannot be denied that his experience was bound up with the fate of the Jews in Europe, marked by issues of identity, assimilation, and persecution. In particular, Neurath's case exemplifies the Jewish intellectual dilemma of balancing a sense of belonging and acceptance with the freedom to think and work. The Scholastic tradition of disputation seems to have been alive in Neurath: 'I think I am rather noisy, and mostly interested in creating doubts, weakening the strong positions of some absolutism.'19

Robert S. Wistrich described the Jews of Austria-Hungary as 'the one supra-national people in a multi-national State'. Neurath's enthusiastic socialism in Vienna was a sign of his internationalism (most of the leading figures in Austro-Marxism were Jewish), and his yearning for a 'universal language' can be seen in the context of the longer, Jewish diaspora. Neurath seemed to consider himself more Viennese than Austrian, writing to British colleagues: 'Now we have three real homelands: Vienna, Holland

<sup>&</sup>lt;sup>17</sup> H. Maimann, *Politik im Wartesaal: Österreichische Exilpolitik in Grossbritannien 1938–1945* (Vienna: Hermann Böhlaus Nachf., 1975), p. 1.

<sup>&</sup>lt;sup>18</sup> F. Stadler (ed.), Vertriebene Vernunft: Emigration und Exil österreichischer Wissenschaft (Viennal Munich: Jugend und Volk, 1987/8).

<sup>&</sup>lt;sup>19</sup> Neurath to Ina Carnap, 24 September 1945, in Cat and Tuboly (eds.), *Neurath Reconsidered*, p. 670.

<sup>&</sup>lt;sup>20</sup> R. S. Wistrich, Socialism and the Jews: The Dilemmas of Assimilation in Germany and Austria-Hungary (East Brunswick: Associated University Presses, 1982), p. 195.

and England; Vienna, where we have been in a position to do something for education, presented a kind of island from more than one viewpoint.<sup>21</sup> He must have missed things from his life there, but he did not succumb to nostalgia for imperial Vienna, as Stefan Zweig did, for example.<sup>22</sup> Although Neurath was technically an exile, he refused to let this define him, and he was determined to remain positive and forward-looking. (He resented it when Bertrand Russell called him an exile; see Chapter 6.) He was predisposed to like Britain but also grateful for the refuge it offered him.

It may be a truism by now that the flight of artists and intellectuals from Nazi-occupied Europe served to enrich the cultures of the UK and the USA, where many of the exiles found safe haven. Unlike fellow members of the Vienna Circle - Gustav Bergmann, Rudolf Carnap, Herbert Feigl, Philipp Frank - Otto Neurath did not settle in the USA and establish himself in academia as a sage of analytic philosophy. In his introduction to the valuable edition of Carnap's diaries, Christian Damböck writes: 'Carnap stands for a professionalization of philosophy that is characteristic of the analytical philosophical tradition as a whole. Although philosophy loses its role in the public sphere, it does not cease to be relevant to practice." In this sense, again, Neurath emerges as an exception: he was never a professional philosopher, and once chastised Heinrich Neider for devoting himself to study 'something as dirty' as 'pure philosophy'.24 If Neurath recognized philosophy as a discipline at all, it could only justify itself by an effect on 'the public sphere'. Elisabeth Nemeth has reflected that 'Otto Neurath's work is, and remains, an unwieldy matter for

Neurath to Peggy Volkov, 26 November 1943 (IC 1/6); Neurath to Mr Coppock, 2 September 1943 (IC 1/2). To another colleague, he wrote: 'There is no such country as Austria', perhaps not only referring to its subsumption by the Third Reich (Neurath to Justin Schove, 24 April 1943; IC 1/6). In a pseudonymous essay for the German-language British newspaper Die Zeitung, Neurath wrote: 'Already before the First World War, some individual authors invented the 'Austrian people' by analogy to the "German people". In many circles, this expression was used as an ironic insult: "Are you really an Austrian person?" [Bist du halt ein österreichischer Mensch?]' Neurath (as Franz Schlosser), 'Österreichs menschliches Klima', Die Zeitung 4 (399), 27 October 1944.

Neurath scrawled numerous critical comments in his copy of Zweig's memoir *The World of Yesterday*: see F. Stadler and A. Larcati (eds.), *Otto Neurath liest Stefan Zweigs 'Die Welt von Gestern': Zwei Intellektuelle der Wiener Moderne im Exil* (Vienna: LIT Verlag, 2021). Neurath reminisced in correspondence with Karl Mannheim: 'oh my dear, what a pleasure, to remember the black coffee with a crown of wipped [sie] cream on the top' but only 'under the pretext' of explaining in his 'visual autobiography' how Viennese cafés offered him stimulating, illustrated periodicals. (Neurath to Mannheim, 2 July 1945; IC 1/41.)

<sup>&</sup>lt;sup>23</sup> Ch. Damböck, 'Einleitung', in Carnap, *Tagebücher. Band 1, 1908–1919* (Hamburg: Meiner, 2022), pp. 9–59, p. 9.

H. Neider, 'Memories of Otto Neurath', in *Empiricism and Sociology*, pp. 45–9, p. 46.

philosophers – at least when they take seriously what Neurath said explicitly, namely that he did not want what he said about scientific knowledge to be understood as philosophy'. For these reasons (and due to his early death), his role in the development of analytic philosophy was unjustly overlooked for many years. Another figure associated with the Vienna Circle also ended up in England: Ludwig Wittgenstein. He did become a professional philosopher (albeit grudgingly) at Cambridge University, and he has come to occupy a central place in the philosophical canon.

When expressing their sympathy to Marie Neurath on her husband's death, Rudolf and Ina Carnap wrote: 'The last years have not been easy for the two of you, and we always admired how courageously you took it. Not a single time has Neurath mentioned hardship in the life in England. He only wrote about finding new friends, reconstructing his work, enjoying life with you.'26 Despite Neurath's stoicism, they suspected that exile was difficult for him, as it was for many. Marie Neurath did not concede this: 'You have a very wrong impression if you think that just the last years were difficult for him. They were in fact the most successful of his life, and he stressed again and again, how much he felt at home in this country. He had very good friends here, and an extraordinary response.'27 Allowing for the circumstances of grief in which she wrote this, her rather surprising claims warrant further investigation, especially as she had a reputation for plain speaking and was not prone to exaggeration.

In what way were Neurath's British years his 'most successful', and why did England feel like home for him instead of a place of unwilling exile? How did the 'extraordinary response' that Marie Neurath mentioned manifest itself? Was Neurath honoured mainly as a producer of pictorial information, or as a planning consultant; or was there any philosophical resonance to his ideas in Britain? Did he perhaps become something of a public intellectual, as his old friend and philosophical comrade Philipp Frank did in the United States?

The biographical element of this book aims to describe in detail how Neurath came to Britain, how he adapted to his new life, and what

<sup>&</sup>lt;sup>25</sup> E. Nemeth, 'Otto Neurath's Vision of Science between Utopia and Encyclopedia', in E. Nemeth and F. Stadler (eds.), *Encyclopedia and Utopia: The Life and Work of Otto Neurath (1882–1945)* (Dordrecht: Kluwer, 1996), pp. 7–14, p. 7.

Ina and Rudolf Carnap to Marie Neurath, 2 January 1946, in Neurath Reconsidered, p. 683.
 Marie Neurath to Ina and Rudolf Carnap, 14 January 1946, in Neurath Reconsidered, p. 685.

In her unpublished memoir 'What I Remember', which has been an essential source for this book, Marie Neurath noted that an acquaintance described her to a mutual friend as 'clear as water and as good as bread' (p. 85). M. Neurath, 'What I Remember. Told and Written Down for Henk Mulder', translated by R. Kinross, 1982–4 (ONN 371/L.16).

activities he was able to pursue, either as new initiatives or reconnecting with his previous work. Neurath's ideas, in fact, found fertile ground, prepared by general trends of the 1930s. A large part of the British intelligentsia became concerned with the issue of planning, related to the promise of socialism and communism. The importance of planning as a theme for Neurath led to his participation in debates involving such prominent figures as J. D. Bernal, G. D. H. Cole, J. B. S. Haldane, Lancelot Hogben, Harold Laski, and C. H. Waddington. The crosscultural currents of twentieth-century intellectual history are reflected in this book through the lens of Neurath's contribution. This presents an informative case of 'exile studies'. Among notable, Central European scholars who also established themselves in Britain were sociologist Karl Mannheim, economist Friedrich Hayek, the Polanyi brothers Karl and Michael, philosopher Karl Popper, and art historians Ernst Gombrich and Fritz Saxl. Neurath was in touch with some of them in England, particularly with Hayek and Mannheim concerning matters of planning and education. In a sense, some of the arguments and opinions from German-speaking contexts followed them to Britain, where they all adapted to writing in English (some more fluently than Neurath). Unlike his younger Viennese contemporaries, Popper and Hayek, Neurath was not able to infiltrate the British establishment to the same extent, and it may be that his character would have precluded this even if he had lived into the decades after World War II.

Vital source material for examining Neurath's engagement and reception in Britain is provided by his prodigious correspondence. Fortunately, much of this is accessible in archives, and will be frequently cited throughout.<sup>29</sup> From his correspondence (perhaps more than his writings), one gets the impression of a multifaceted and sharp-minded, yet amusing and humane personality, who had a particular talent for friendship. This voice is brought to the fore as much as possible, revealing Neurath's views on all manner of things – even apparently trivial matters were worthy of attention, in his view. Neurath was a great admirer of Montaigne and the way the French essayist wrote about the details of everyday life – 'nothing too low for him':

<sup>&</sup>lt;sup>29</sup> The 'personal' correspondence of Neurath is held in the Otto and Marie Neurath Nachlass at the Austrian National Library; the 'scientific' correspondence and other papers in the Vienna Circle Archive in the Noord-Hollands Archief, Haarlem; and the papers relating to Isotype work (including some personal correspondence) are in the Otto and Marie Neurath Isotype Collection, University of Reading (UK).

9

I read Montaigne as a boy, first understanding only a little, then more and more. I made my notes etc. An old German translation by Bode, many volumes. Then we reached the shores [of England] without anything ... now I have three different translations, two I already read through with my notes, comparing them afterwards and then I added his travelling diaries.... I feel now much more accustomed with him than before.<sup>30</sup>

Reassembling a library was a priority for Neurath in Britain, having left so much behind, and it was an important way of re-establishing an intellectual *Heimat*. Many of the books he acquired there are now kept at the Vienna Circle Institute in Vienna, and some of them provide valuable records of his thoughts in the form of copious pencil notes that he made in their pages.

Neurath's years in England were marked by an intriguing philosophical shift. At first glance, the accepted view that he withdrew from philosophy seems plausible: he published only a handful of essays and one (to say the least) critically received monograph on Foundations of the Social Sciences. While this would be satisfactory for most writers during a period of five years (including eight months imprisonment and allowing for the difficulties of publishing in a different culture), it did not add a great deal to Neurath's prolific publication record. Yet, as he always had, Neurath also imparted his knowledge by tirelessly giving talks and lectures: he taught for two terms at Oxford University but also spoke at other colleges and universities, and to many kinds of cultural associations. Some of his talks and lectures are preserved in the archives and so provide the opportunity for insight into his late intellectual development. Notably, Neurath became less radical and militant in his final years and tried to modify the vocabulary and problem-horizon of logical empiricism to fit the British scene. This was an unexpected move by someone who had previously behaved like a bull in the china shop of philosophy, not mindful of the opinions or feelings of others if he saw the red rag of metaphysics.<sup>31</sup> Mollified to some extent by his new situation in an old democracy, he argued persistently that logical empiricism was organically adaptable to the sociocultural milieu of British life.

The sharp and (to some eyes) dogmatic theses of logical empiricism were softened in Neurath's hands to become pluralist proposals about

<sup>&</sup>lt;sup>30</sup> Neurath to Hanns Vischer, 15 September 1943 (IC 1/6); and Neurath to Waldemar Kaempffert, 10 November 1944 (IC 1/46).

Feigl referred to 'Neurath's elephantine behaviorism in the China shop of Semantics', modifying the metaphor with reference to Neurath's well-known elephant signature. Herbert Feigl to Rudolf Carnap, 9 February 1945 (ASP RC 102-09-11).

planning and education: instead of the syntactical aridity of Carnap's philosophy, Neurath's approach to terminology emphasized the cultural role of language in science and everyday life; the 'physicalism' of the Vienna Circle was re-emphasized as a sociopolitical view to address and empower the masses; and he restated the conventionalist-holist philosophy of logical empiricism as a socially engaged form of public thinking, with affinities to that of Susan Stebbing and Bertrand Russell. Neurath's approach diverged from the direction that logical empiricism took in the USA during and after World War II, as the American idealist philosopher Daniel Sommer Robinson recognized shortly after his death:

Although this type of scientific philosophy is definitely abstract and formal, great credit must be given to the late Dr. Otto Neurath, editor of the *Encyclopedia*, for his invention of a visual grammar containing around two thousand isotypes, or pictograph symbols which have made statistics come to life. This suggests that logical positivism by no means confines itself to the physical and mathematical sciences. For the Aristotelian definition of man as *animal rationale* it substitutes *animal symbolicum*, and applies this concept to culture as a whole, including in its purview myth and religion, and art and history, as well as language and science.<sup>32</sup>

This is an uncommonly early, integrative assessment, no doubt informed by Neurath's many successful Isotype projects in America during the 1930s, culminating in his book *Modern Man in the Making* (1939; see Chapter 2). His work on the 'international picture language' of Isotype is not often admitted into the realm of philosophy in more than cursory terms, although appreciation of his contribution to graphic communication predated his rehabilitation as a philosopher or economist.<sup>33</sup> Neurath's role as a pioneer of statistical graphics is now well recognized and continues to inspire new tasks of data visualization in the digital age.<sup>34</sup>

Thomas Uebel suggests that a 'motive of pragmatically oriented reflexivity permeates the whole of Neurath's work and still lends him continued relevance today'. The present book is written sharing this conviction that Neurath's ideas are becoming increasingly topical. 'Like Neurath the philosopher,' Uebel further asserts, 'Neurath the economist can lay claim

33 See the exhibition catalogue *Graphic Communication Through Isotype* (Department of Typography & Graphic Communication, University of Reading 1975; 2nd ed., 1981).

<sup>&</sup>lt;sup>32</sup> D. S. Robinson, 'A Philosophy for the Atomic Age', Proceedings and Addresses of the American Philosophical Association 19 (1946), pp. 377-403, p. 380.

<sup>&</sup>lt;sup>34</sup> See G. Waldner (ed.), Die Konturen der Welt: Geschichte und Gegenwart visueller Bildung nach Otto Neurath (Vienna: Mandelbaum, 2021); and Ch. Burke and G. Sandner, History and Legacy of Isotype (London: Bloomsbury, 2024).

to the title of neglected pioneer.'<sup>35</sup> This neglect has been largely redressed by leading scholars of the Vienna Circle, such as Uebel, Elisabeth Nemeth, Friedrich Stadler, among others. Neurath's alternative 'economics in kind' and his hints towards 'ecological economics' are more relevant than ever in popular and academic literature on climate crisis and capitalism.<sup>36</sup> His ideas on socialism and planning still resonate in today's debates on neoliberalism – in particular his dispute with Hayek (see Chapter 9).

The varied list of Neurathian themes relevant to contemporary discourse could be continued: critique of semantics and of private language, value-ladenness of science and its place in society, thought experiments, city planning, and the politics of design.<sup>37</sup> His role in the culture of interwar 'Red Vienna' plays a prominent part in the revaluation of that period, not least in Vienna itself, where its heritage is still visibly present and the Social Democrat tradition is still strong.<sup>38</sup> But 'Red' was immediately followed by 'Black Vienna', which emerged from a web of religious movements, alternative scientific narratives, and right-wing politics; and it is hard not to see parallels between this and the operation of today's populist regimes.<sup>39</sup> Getting a new grasp on Neurath's mature work from his period in wartime Britain might help us to envisage alternative futures. With Martin Heidegger 'in ruins' after publication of his Black Notebooks, some reference points in the history of twentieth-century philosophy are being shaken. 40 In a world beset by crisis and antidemocratic tendencies, Neurath's philosophy of humanistic fellowship could provide some hope.

36 T. Vettese and D. Pendergrass's Half-Earth Socialism: A Plan to Save the Future from Extinction, Climate Change, and Pandemics (London: Verso, 2022) takes inspiration from 'Neurathian' calculation-in-kind and utopianism.

<sup>35</sup> Uebel, 'Otto Neurath: Leben und Werk', p. 7; and 'Introduction: Neurath's Economics in Critical Context', in *Economic Writings*, pp. 1–108, p. 1.

<sup>37</sup> See the various contributions in Nemeth and Stadler (eds.), Encyclopedia and Utopia, and in Cat and Tuboly (eds.), Neurath Reconsidered. See also S. Hochhäusl, Otto Neurath – City Planning. Proposing a Socio-Political Map for Modern Urbanism (Innsbruck: Innsbruck University Press, 2011).

<sup>&</sup>lt;sup>38</sup> Richard Cockett describes Neurath as 'the presiding genius of Red Vienna' in Vienna: How the City of Ideas Created the Modern World (New Haven/London: Yale University Press, 2023), p. 82. See also the exhibition catalogue Das rote Wien 1919–1934: Ideen, Debatten, Praxis (Vienna: Wien Museum, 2019). Perhaps it is not entirely coincidental that Vienna was recently chosen as 'the most livable city in the world' for two years in a row. www.smithsonianmag.com/smart-news/viennamost-livable-city-2023-180982434/

<sup>&</sup>lt;sup>39</sup> See J. Wasserman, Black Vienna: The Radical Right in the Red City, 1918–1938 (Ithaca: Cornell University Press, 2017).

<sup>&</sup>lt;sup>40</sup> R. Wolin, Heidegger in Ruins: Between Philosophy and Ideology (New Haven: Yale University Press, 2023).