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Brain worlds: information order and interwar intellectual cooperation

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Abstract

Information is ubiquitous in International Relations (IR), but typically gets treated as a self-evident epistemic resource. A burgeoning IR literature on the politics of knowledge resists such reification, but has not thus far examined information as such. Mobilising its constructivist premises in historical perspective, this article argues that information is not just an epistemic resource but also an ordering concept. The article examines its emergence in and around the interwar League of Nations Organisation for Intellectual Cooperation (OIC), a predecessor of UNESCO. It focuses on two notable but neglected proposals – Paul Otlet's *Mundaneum* and H.G. Wells' *World Brain* – which considered advances in microfilm storage and bibliography as opportunities to rethink global order. Worried about a crisis of 'intelligence' and reducing political conflict to information gaps, Otlet and Wells introduced systems that mimicked imperial global order: information could be organised, curated and shared to 'diffuse the European mind'. To both, information was not just an epistemic resource but a means of global ordering. Crucially, promoting a world united by information was entirely compatible with infrastructurally reproducing an imperial division of the world by degrees of ignorance. League officials rejected the utopianism of these proposals but held on to the pacifying promise of information. Recovering this history shows how historical perspective allows us to contextualise artificially disembedded IR concepts and objects of governance. It also puts hopes for information as inherently pacifying into perspective: without considering the broader political embeddedness of information, such hopes risk leaving underlying hierarchies intact.

Keywords

Knowledge, League of Nations, Paul Otlet, H.G. Wells, international order, information

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Introduction

From the summer of 1937 to early 1938, Paris hosted the *Exposition Internationale des Arts et des Techniques dans la Vie Moderne*. This major exhibition attracted displays from 45 states and up to 34 million visitors over an 8-month period (Herbert, 1998: 18). Since the mid-19th century, the French capital had been hosting World's Fairs to celebrate a globe connected by an avant-garde of scientists, engineers and artists. By the 1930s, that world had begun to show signs of decay. Europe still reeled from the shock of the First World War and found itself in the midst of the Great Depression. The Nazi threat was looming on the horizon. At a distance from such turmoil, scientists and practitioners gathered – as was customary for World's Fairs – at academic conferences held in parallel (Voges in Legg et al., 2022: 105). One of these was the *World Congress of Universal Documentation*, organised by the International Institute of Bibliography (IIB), which brought together 350 participants from 48 countries (Laqua, 2013: 185; Rayward, 1983). Its attendants recast 'bibliography' as 'documentation' and renamed the IIB the International Federation for Information and Documentation. The future no longer belonged to librarians, but to technicians coordinating hubs of information stored on microfilm (Day, 2001; Rayward, 2014). But the documentalists did not meet simply to advance technical innovation. In fact, the 1937 congress was the culmination of their decades-long quest to build and promote the infrastructure of world peace: a global information index. Among them were the Belgian co-founder of the IIB Paul Otlet (1868–1944) and the British writer H.G. Wells (1866–1946). Both thought that reorganising the world's knowledge resources was the solution to what they saw as one of the greatest problems: ignorance. Ignorance drove war, so the path to peace had to be paved with information. This view affected the parallel creation and work of the League of Nations' bodies for intellectual cooperation, eventually known as the *Organisation for Intellectual Cooperation* (OIC), a forerunner of UNESCO.

This begs the important question: how was knowledge conceptualised as information in the interwar period, and with what consequences for international governance? Based on a close reading of notable but neglected works by Otlet and Wells in the context of the creation of the OIC, this article argues that Otlet and Wells defined knowledge as information to propose a particular way of thinking about global order. Otlet's *Mundaneum* and Wells' *World Brain* considered advances in microfilm storage and bibliography opportunities to rethink global order. Worried about a crisis of 'intelligence' and reducing world politics to information gaps, they introduced systems that mimicked imperial global order: information could be organised, curated, and shared to 'diffuse the European mind' and so advance 'civilisation' (Otlet and La Fontaine 1912; Valéry, 1919). Crucially, they considered the idea of a world united by information entirely compatible with infrastructurally reproducing an imperial division of the world by degrees of ignorance. League officials rejected the utopianism of these proposals, but they held on to the pacifying promise of information.

This historical argument has important theoretical implications for how International Relations (IR) approaches the politics of knowledge. Information is ubiquitous in IR: international organisations (IOs) constantly rely on big data, requiring information to understand their constituencies, to monitor and evaluate their impact, or to respond to

crises. Regime compliance and effectiveness have been understood as hinging on effective 'information systems'. IOs also have opportunities to 'exhibit autonomy when they possess an information advantage over member states' (Olsson and Verbeek, 2018: 282). Calls for improved information-sharing and closing various 'information gaps' imply that more, better, and faster information is crucial (e.g. Hansen-Magnusson et al., 2020). Debates about misinformation similarly assume that without information, international order is at risk. In brief, IR scholars widely take information for granted as an epistemic resource. By contrast, the burgeoning IR literature on the politics and sociology of knowledge resists such reification, but has not thus far examined information as such. Building on this literature, I argue that IR should approach information as an ordering concept. This puts hopes for information as a solution to world-political conflict into perspective: without accounting for the broader embeddedness of information in global order, such hopes risk leaving underlying hierarchies intact. Below, I first outline why and how we should historicise information. Second, I present my reading of the interwar history of information in the context of Otlet, Wells and the OIC. Third, I conclude by discussing the theoretical implications of this new historical interpretation and its payoffs for IR more broadly.

Knowledge politics and information order

How should we understand the role of information in international politics? In IR, the main answer to this question has been to view information as a self-evident epistemic resource. For rational choice scholars, for example, bargaining and negotiation among states require information exchanges; likewise, monitoring policy compliance relies on information (e.g. Milner, 1998). Another literature treats information in terms of information technology, say by investigating the consequences of innovations in media and communications on cooperation and conflict (Drezner, 2019; McCarthy, 2015). On both views, information itself is relatively trivial: it represents knowledge of intentions, behaviours and so on. It can be shared, withheld, manipulated, weaponised. This is a perfectly fine characterisation. But taking information for granted in this way neglects the extent to which, as critical information scholars insist, information is 'a cultural and social phenomenon' (Day, 2014: 1; (McInerney and Day, 2007; Montoya, 2022). So how did knowledge get cast as information in the first place, and with what consequences for international governance? A vibrant IR literature on the politics of knowledge, inspired by Science and Technology Studies (STS), offers tentative clues. Scholars here argue that knowledge production is inseparable from politics, and that choices about what counts as legitimate knowledge affect the construction of governance objects (Jasanoff, 2004; Allan, 2018a; Aradau, 2010; Corry, 2013; Sending, 2015). Historians meanwhile have long recognised the ordering implications of changing views about knowledge, including information (Daston and Galison, 2007; Day, 2001; Hodge, 2007; Miller, 2020; Porter, 1995; Seidenfaden, 2024). Connecting these perspectives represents an opportunity to develop IR's understanding of information further. Let me briefly outline my approach along these lines.

IR interest in the politics of knowledge goes back (at least) to postwar functionalism (see Steffek, 2021). The epistemic communities literature, which developed out of

neofunctionalism, has arguably done the most to keep the topic firmly on the IR agenda (Cross, 2013; Haas, 1992). It has since been criticised for over-emphasising cohesiveness within expert communities and exaggerating the separation between science and politics. And while it has been successfully applied to historical analysis, historical examples for non-cohesive expert groupings and non-epistemic expert selection abound (Cross, 2007; Eijking, 2023). Patricia Clavin has shown, for example, how economists at the League of Nations heavily disagreed about the merit of the League, which methods would adequately capture the world economy, but also what interwar monetary and economic policies their work might lend support to. It was not simply epistemic credential that mattered for their selection either, but a combination of 'economic expertise, financial influences, and political links' (Clavin, 2013: 22). Further, as a result of its emphasis on group cohesion, the epistemic communities framework leaves knowledge itself relatively implicit: the shared nature and policy application of knowledge take precedence over changing understandings of how knowledge is to be represented, accumulated and organised. Given this limitation, the framework does not equip us to unpack what role variation in such understandings might play. Recent work in IR and a long-standing literature in history address this question more directly.

IR scholarship on object construction starts from the assumption that how international actors perceive or construct the world tells us something important about how they intervene in it (Allan, 2018a; Sending, 2015). This brings variation in how knowledge gets conceptualised and represented into view. Whether revelation, wisdom, experience, facts, data, objectivity, or information: these are all different ways of representing knowledge (e.g. Daston and Galison, 2007). They entail claims about what it means to know something, where knowledge comes from, what it is for (statements about *epistêmê* or 'knowing that') as well as claims about how knowledge is produced, how it is stored, and how it gets distributed (statements about *technê* or 'knowing how'). These choices affect how political actors see and understand the world – that is, they affect the construction of governance objects. IR scholars concerned with the latter stress how governments, civil society and scientists co-produce governance objects (Allan, 2017; Corry, 2013; Methmann, 2013; Sending, 2015). These objects get reified and then become a part of how international actors approach governance challenges. They are 'contingent concatenation[s] of political interests, technological devices, and policy frames attached to established and credible knowledge' (Allan, 2018b: 155). This sheds light on what governability and actor constraints result from constituting, say, the climate as an object that can be represented and manipulated through a carbon market for emission reductions (Methmann, 2013). Extant studies have unpacked the making of security, human rights, or the climate as objects (Allan, 2017; Aradau, 2010; Madsen, 2011). An adjacent literature zooms in on benchmarking, reporting practices and other methodologies deployed by actors engaged in object construction (most recently: Littoz-Monnet and Uribe, 2023).

There are synergies between object construction and history that have largely been overlooked but that actually help resolve a remaining issue: information is not exactly the same as a governance object. It can be treated as an object, but it is also a way of seeing other objects – a way of 'seeing like a state' or 'seeing like an IO' (Broome and Seabrooke, 2012; Scott, 1998). Less tied to a particular theoretical framework, historical

perspective is particularly capable of capturing this dual quality. Take Ehrenfreund's study of how interwar econometric modelling reimagined the economy as manipulable by nation-states. This represented an attempt at 'reconciling national autonomy in economic affairs with international cooperation and governance' (Ehrenfreund, 2022: 1). The modern concept – object – of the economy was a political compromise resulting from the contestation of wealth and power. Notably, a conception of how we come to *know* the economy was not merely an epistemic resource for observing economic behaviour but an expression of a particular preference for how to *order* the economy. Examining the relationship between those two aspects deserves being explored in more depth. Combining object construction with history, two close but unaware allies, also speaks to renewed interest in conceptual history in IR (most recently: Kessler and Leira, 2024). If concepts are crucial parts of 'the ontology of the modern international order' (Heiskanen, 2021: 232), then in IR we are dealing with *ordering concepts* that are constitutive of the political imagination. This corresponds to Corry's (2013) insistence that an object has ordering effects since it 'categorizes and organizes the elements in a system' (p. 91–92). Historicisation is thus capable of restoring the context objects were cut out of in their making. It allows us to ask different empirical questions: what applications and infrastructures did practitioners have in mind for new conceptions of knowledge? What broader visions did these attach to? We get to widen the aperture of who participates in the making of objects and domains of governance, and whose work and thought consequently we attend to.

To sum up, I approach information as a historically particular understanding of knowledge. My aim is not to advance a new epistemological theory of change in global order. More modestly, I advance a new historical interpretation of the role of information in international governance, mobilising the constructivist premises of IR work on the politics of knowledge in historical perspective. In the following section, I adopt this outlook to focus on two developments: first, the notion of information in the writings of Otlet and Wells; second, their relationship with the work of the League of Nations bodies on intellectual cooperation.

The documentalists and the making of information

Thus far I have suggested that IR work on the politics of knowledge stands to benefit from historicising information. So how was knowledge conceptualised as information in the interwar period, and with what consequences for international governance? Knowledge production and the emergence of regional, cultural, but also legal, medical and other forms of expertise had long been a part of global ordering, especially for imperial relations (Bayly, 2016; Hodge, 2007). Imperial officers involved in establishing the first international organisations put imperial knowledge to 'international' use (Reinisch, 2016: 203–204; Wagner, 2022). The League of Nations in turn did not itself invent a new connection between information and international governance – rather, as I show in this section, European documentalists eager to innovate knowledge organisation already articulated specific visions of global order. They believed ignorance to be the chief cause of war and understood information as inherently pacifying. These thinker-practitioners reconceptualised knowledge as information largely in response to methodological and

technological change. As historian Ronald Day (2001) puts it, for the documentalists '[i]deas about information management intersected with visions of global order in manifold ways' (p. 7). Otlet as well as later documentalists building on his work, notably the French information scientist Suzanne Briet, invented not just a technique of what today we would refer to as data collection. More fundamentally, Day argues, they attached their technical innovations to a whole new way of 'reorganizing social and political life'. Day calls this 'indexicality', akin to what IR scholars following James C. Scott approach as legibility (Day, 2014). In this section, I want to draw out more explicitly what implications this conceptualisation of knowledge had on the possibilities of imagining and pursuing international governance.

While the term 'information' had been around in the English and French languages for a long time – its roots go back to the 13th century – it was at this time that it became closely attached to specific technological treatments of knowledge. Let me very briefly address this shift, if at the risk of excessive generalisation. Whereas the term had long referred to education and the imparting of knowledge in general, from around the 1850s information was being adopted in a much more distinctly technical sense, initially in the economic context of market information and pricing. Gradually it entered the vocabulary of librarians, bankers and statisticians. These ascending professionals treated knowledge as divisible and quantifiable: not wisdom passed on from teacher to student, but messages, symbols, references transmitted and stored. Information became a shorthand for knowledge represented and mediated by technology: telegraphic messages were information, telephone switchboard operators handled information, bits of knowledge recorded on microfilm were information (see Oxford English Dictionary, 2009). This related to a broader shift towards trusting indirectly obtained knowledge: until the 18th century, '[p]olitical and business information' was 'spread mainly through networks of personal acquaintances' (Porter, 1995: 46). Only gradually did impersonal documents and numerical representations become acceptable sources of knowledge (information), a departure from knowledge derived from direct personal ties and social networks (advice) (in the context of sovereign lending, see Bruneau, 2022).

The very possibility of accumulating, storing and globally transmitting knowledge-as-information also inspired radically new visions of global order. Information entered the international stage as an ordering concept, not as an externally arising, self-evident epistemic resource. In this section, I turn to two influential but today rarely remembered exponents of this view: Paul Otlet and H.G. Wells. Both understood and represented global order as stratified by distributions of knowledge. Paul Otlet's *Mundaneum* and H.G. Wells' *World Brain*, respectively, developed methods to accumulate and hierarchically distribute legitimate kinds of knowledge. In both works, information implied specific imperatives about global order and was understood as propaganda in the service of 'world civilisation'. To them, international governance had a twin task: to *distribute* knowledge; and to *organise* it. The latter enabled the former. Otlet and Wells also developed *principles* for the reorganisation of knowledge, centred on hierarchies of legitimate types of information; the stratification of information producers and recipients; and geographies of information storage. Wells was hoping for a World Brain – but in so doing he had, like Otlet, conjured up a Brain World. Information was not just an epistemic resource, but also an ordering concept.

Information at the Mundaneum

By the name Mundaneum, Paul Otlet (1868–1944) – the wealthy son of Belgian railway magnate and senator Edouard Otlet – referred to a range of projects he had been working on from the beginning of the 20th century (Van Acker, 2011: 27–28). The basic idea was this: to overcome world ignorance, store all the world's knowledge in a single location, catalogue it, and categorise it on millions of index cards (Rayward, 1975, 1994). Otlet invented the Universal Decimal Classification (UDC) system for this purpose, which is still in use today. Organised in this fashion, the *Mundaneum* could spread like a network across the globe with national knowledge centres that would connect to the same system. The main international centre would be in Europe (initially Otlet preferred Brussels, later conceding to Geneva), where the *Mundaneum* was to be a part of the infrastructure of international institutions, united at a single World Palace.

The idea first germinated around 1895, when with support from the Belgian government Otlet and his lifelong associate, lawyer and later Nobel Peace Prize laureate Henri La Fontaine (1854–1943), organised the first International Conference of Bibliography. This conference established the International Institute of Bibliography (IIB), headquartered in Brussels. In Otlet (1903) speculated that in an age of mass literary production, nobody would any longer be able to read everything—'today one refers to, checks through, skims . . . There is too much to read' (p. 79). As Mazower (2012) has noted, 'Otlet felt that coordination was essential if expert knowledge was to advance unimpeded without getting lost from sight or becoming useless' (p. 199). To avoid such a loss, he invented a system of indices that would systematically collate references to books on a given subject, culminating in a *Universal Book*: a world repository of human knowledge. To pursue this further, Otlet and La Fontaine built a comprehensive catalogue or database on cards: the Universal Bibliographic Repertory (UBR). By 1908, they proposed a 'universal network' of human knowledge (Van den Heuvel, 1991). Gradually, the two bibliographers had prepared, with the help of La Fontaine's sister and feminist campaigner Léonie La Fontaine, a sample index consisting of 400,000 classified entries. By 1912, this Repertory contained nine million cards; by the time of its closure after the withdrawal of Belgian government support, the UBR contained 16 million cards (Van Acker, 2011: 31–32; Rayward, 1994: 238).

At the same time, Otlet and La Fontaine were eager to coordinate existing international institutions. They established the umbrella *Union of International Associations* (UIA) in 1910, an IO hub still in operation today (Laqua et al., 2019: 2). The UIA was created to coordinate 'international life'—the basis for a 'universal synthesis of knowledge' and a 'global division of labour' (Otlet and La Fontaine, 1912: 10). This was a vision of a networked world marked by total reciprocity (Otlet and La Fontaine, 1912: 12). This 'international imperium' required a 'Universal book of knowledge' to bring humanity closer to 'universal civilisation' (Otlet and La Fontaine, 1912: 21, 26, 29). The international centre was to be integrated in a World Centre within a World City, plans for which had been drafted by architects Le Corbusier and Hendrik Christian Andersen. As Otlet and La Fontaine put it in 1914, 'these collections will tend progressively to constitute a permanent and complete representation of the entire world' (Otlet, 1914: 116).

After World War I, the Belgian government relocated all the services, institutes and offices of this *Palais Mondial*, later *Mundaneum*, to the Palais du Cinquantenaire. Subsequently, these premises became a source of contention between the UIA and the government. The government temporarily reclaimed certain sections in 1922, the majority in 1924, and evicted the Palais Mondial from its Cinquantenaire premises in Otlet (1934). The project lived on, however waning. In 1935, *Monde: Essai d'universalisme* restated Otlet's plans for global order and the *Mundaneum's* place in it. The next necessary step was a 'world plan' to enable a 'social machine' that spanned across all levels of society and promised to bring about social harmony by means of 'information and scientific and social documentation'. Otlet embraced Norman Angell's concept of 'political globalism', according to which political divisions and boundaries had a general historical tendency to dissolve (Otlet, 1935: 202-3).

Quoting French poet and philosopher Paul Valéry – who contributed to various League activities in the field of intellectual cooperation, including the OIC—Otlet defined politics as 'intelligence and will affecting the masses as physical and blind causes' (Valéry in Otlet, 1935: 203-4). Valéry exerted considerable influence on Otlet's thought, not least given the former's 1919 *Athenaeum* essay titled *The Crisis of the Mind* in which he too had diagnosed an 'intellectual crisis' (Valéry, 1919). Concern with threats to the cultural and intellectual coherence or unity of European identity was widespread at the time, saturating debates about the future prospects of European 'civilisation'. Oswald Spengler's Decline of the West (1918–1922), Hermann von Keyserling's Spectrum of Europe (1928), or José Ortega y Gasset's Revolt of the Masses (1930) were popular expressions of an interwar anxiety about a loss of European identity (see Hewitson and D'Auria, 2012: 4). To Valéry, this represented a crossroads for the future of 'European genius', threatening 'Europe's superiority'. The fundamental question was this: 'can the European Mind – or at least its most precious content – be totally diffused?' (Valéry, 1919: n.p.)

Valéry left the question open. Otlet answered in the affirmative: precisely by reconceptualising knowledge as something that could be owned, stored, catalogued, distributed – as *information*. To Otlet, this had obvious implications for global order. In the face of proliferating 'nationalist foreign policies, there is room for a world politics in its conceptions or its directions, made of the need to give direction to the general interests of all peoples, States, and men'. To pursue this goal, '[w]e need a complete transformation of the action of States with regard to each other' in 'the framework of the world policy' (Otlet, 1935: 209). A 'World Republic' was to be guided by society's 'active elements' that would act as 'the brain of the masses' (Otlet, 1935: 210). This required a precise understanding of the world republic's composite elements. Otlet introduced a 'formula' to calculate the 'relative power of states' based on coefficients for *population* (quantity; quality in terms of birth rate, lifespan, literacy, productivity, and internationality measured by foreign trade volume) and for *territory* (its extent, and its quality: climate, natural resources, accessibility measured by navigable railroads) (Otlet: 212-13). The consequence was a world stratified by unequal distributions of knowledge: 'All peoples are not equally developed, equally advanced in the ways of civilisation'. 'There are infant peoples, senile peoples, wandering peoples, just as there are individuals of these three types. One educates these individuals, one assists them, or one tries to

straighten them out' (Otlet, 1935: 222). In these passages, Otlet treated information as both a governance object and a way of seeing other governance objects. Information referred, on the one hand, to an object for the diffusion of the 'European mind', and on the other, to the raw material of order itself. In *Monde* he had effectively stipulated that knowledge as information required direction and organisation, such that knowledge was precisely no longer 'diffuse' but instead highly ordered and curated – information was fundamentally ordering. If Otlet's documentation science had produced the possibility of an 'infrastructuralization' of knowledge, then *Monde* projected this logic to the level of global order (Day, 2014: 4).

The paternalism inherent in this view reflected Otlet's imperial internationalism, betraying some of the global ordering assumptions contained in his concept of information. In *Monde* he classified humanity in five races (white, yellow, black, olive, red), claiming that 'in the Negro species, the brain is less developed than in the white species' (Otlet, 1935: 86). Though as a pacifist opposed to aggressive imperial conquest, Otlet generally 'shied away from activities that would seem to challenge colonial boundaries', as Laqua puts it (2011: 233). Otlet's lifelong admiration for King Leopold II of Belgium and the latter's *mission civilisatrice* in Congo makes an even stronger interpretation plausible. In an 1888 pamphlet, a twenty-year old Otlet had suggested that to achieve 'advanced civilisation', America's black population—'already Christianized, accustomed to regular work and shaped to all the requirements of an advanced civilization'—should be resettled to Leopold's Congo: 'Once transplanted into a climate that suits them . . . these negroes will quickly cover the rich valleys of the Congo and Kassai with plantations, to connect the main sources of production by rail, to create new ports' (Otlet, 1888: 13–16). In a racist inversion, this echoed back-to-Africa ideas among American progressives. From a different political vantage point, the activist Marcus Garvey had developed these through his *Universal Negro Improvement Association* in the early 1920s. Concerns over the potential appeal of Garvey's version of Black nationalism provided a delicate context for the 1921 Pan-African Congress in Brussels, an event organised by W.E.B. Du Bois with the support of La Fontaine and Otlet. In Brussels, the organisers were thus keen to avoid any extensive denunciations of colonialism, in contrast to the congress sessions in London and Paris (Laqua, 2011: 233).

Otlet was, in other words, a reformer with pacifist aspirations under conditions of civilisational and racial hierarchy – to which information was central. He maintained this position throughout his career. In 1914, he claimed with a view to postwar settlements that 'the African continent is a completely international domain' (Otlet, 1914: 25). In Otlet (1927), by which time the atrocities in Congo were well-known, Otlet still praised King Leopold II as a 'great man' and 'a king of big ideas and grand visions' (in Wright, 2014: 56). In *Monde*, the difference was that new institutional opportunities had arisen: ensuring the 'conditions of civilisation' was now to be 'entrusted to the world political organism (enlarged League of Nations)' – an organisation that could ultimately become 'a superstate on the federated basis of a United States of the World' (Otlet, 1935: 223-4).

Otlet was familiar with the French interwar cyberneticists, including Le Roy's 'noosphere': 'Intelligence constitutes a veritable sphere around the entire planet, the "Noosphere"' (Otlet, 1935: 237). At the collective level, this had to 'become the creative

instrument of civilisation'. To win the necessary 'fight against ignorance, scourge of mankind', information required systematic reorganisation (Otlet, 1935: 252, 278). In the Appendix to *Monde*, Otlet added a detailed World Plan including sketches of the *Mundaneum*. This 'plan for a directed civilisation' was 'justified by the increasing complexity of society and the extreme division of labour' and 'the growing role of intelligence and rationalisation in all activities'. It amounted to no less than 'the creation of an order'. The World Plan was 'to be global and not international, because it starts from the ideal and from the needs relating to the whole (Humanity, Earth) considered in its unity, instead of starting from the simple international coordination of existing forces' (Otlet, 1935: 432–433). It would favour 'truth, the progress of intelligence, culture and the conceptual unity of the world; against error, ignorance, barbarism and isolated specialism' (Otlet, 1935: 437). The words could have been Wells'—a fellow information internationalist whose work Otlet had read (he referred to Wells in Otlet, 1916, for example).

Information in the World Brain

H.G. Wells too considered ignorance the great problem of the time: the average person 'can do nothing against our ultimate supreme enemy, Ignorance, Knowledge or extinction. There is no other choice for man' (Wells, 1944: 212; in Partington, 2003: 87). Against this existential threat, Wells proposed the *World Brain*, a global information network intended to overhaul knowledge organisation. There is no evidence that Wells and Otlet met or corresponded, but both were closely involved in the European documentalist movement. Microfilm had been invented in the 19th century but picked up speed only from the early 1900s when the Belgian chemist Robert Goldschmidt and indeed Otlet developed ideas for a standardised, cost-effective form of capturing entire books on microfilm – the *livre microphotographique* – which would turn microphotography into the information storage medium of choice (Goldschmidt and Otlet, 1907, 1925). As we shall see, the potential of microfilm for the unification of knowledge greatly appealed to Wells.

Wells had long been obsessed with the role of intelligence, leading one scholar to argue that *World Brain* was in fact only the 'culmination of a long crusade' for the 'worldwide dissemination of data and knowledge' to fix 'the deteriorating international situation of the period' (Muddiman, 1998: 86). Picking up speed amid a 'burgeoning public library movement in England', his speculations about the future and judgements of political institutions and community in the past and present typically involved a claim about the reorganisation of knowledge (Muddiman, 1998: 88). This could take the shape of scientific institutions; an expert vanguard; or a world government led by 'super-intelligence'. In his 1901 *Anticipations*, Wells speculated about the consequences of technological revolutions in transport and communication – transformations of what he called *mechanism* – for the future of political community. By around 2000, he claimed, human societies would live according to the scientific worldview. In the future New Republic, a technocratic elite of 'efficients' would hold political power (Wells, 1901).

Wells (1901) considered Anglo-American union the way forward: 'A great federation of white English-speaking peoples', he wrote, would bring the stable global order of the future (p. 260). As Bell (2018) puts it, this was 'a vision of white supremacist global

governance' (p. 870–873). But a 1906 visit to the United States brought about a change in tone: his views about Anglo-American union changed, and the Edwardian Wells no longer advocated a synthesis between the two powers. A concern with organised knowledge, intelligence, or 'brainpower' nonetheless continued to be central. Wells retained an obsession with efficiency, in tune with British debates around National Efficiency at the time. Efficiency, both in the sense of reducing waste of energy and in the sense of improving the functionality of the social-political machine, would remain a central preoccupation of his international thought.

In Wells (1920) turned more decidedly to enyclopaedism as the intellectual avenue of choice. This was the time of his advocacy as chairman of a 'League of Nations Free Society', considering the promotion of new forms of knowledge organisation and retrieval as a centrepiece to such a project and indeed, as Muddiman puts it, the 'basis of postwar renewal' (Muddiman, 1998: 89). In a famous 1919 essay for *The Atlantic*, titled 'The Idea of a League of Nations', Wells (1919) likewise foregrounded the need for an international organisation to harness the potentials—and so avert the dangers—of a relentlessly growing 'intensity, rapidity, and reach of mental and physical communication' (p. 108). In his 1921 *The Salvaging of Civilisation* he outlined the 'Project of a World State' with at its heart the creation of a 'Bible of civilisation' compiled by 'scores of specialists' (Wells, 1921: 136-8). He built on these outlines in his 1928 *The Open Conspiracy* in which he proposed a world revolution spearheaded by experts to advance humanity and fully make use of its knowledge resources (see Rayward, 1999: 560). Such a shift had to start with 'a Movement of Explanation and Propaganda', as he put it (Wells, 1928: 102–114). Early on, Wells supposed a direct link between the reorganisation of knowledge, global order, and the fate of civilisation.

During the 1930s, Wells (1938) built on these ideas to campaign for a complete reorganisation of knowledge and 'the general intelligence services of the world' (p. xli). His *World Brain*, a booklet containing essays and speeches composed between 1936 and 1938, proposed just that. Wells (1938)' starting point was twofold. On the one hand, humanity suffered from a sheer waste of scientific knowledge. To Wells this was 'an enormous waste of human mental, moral and physical resources' (p. xxix). On the other hand, there was a more general link between the organisation of knowledge and the persistence of international discord:

> A general ignorance – even in respectable quarters – of some of the most elementary realities in the political and social life of the world is, I believe, mainly accountable for much of the discomfort and menace of our times. The uninstructed public intelligence of our community is feeble and convulsive. (Wells, 1938: 64)

War typically resulted from misinformation, and so *knowing better* by sharing information would get humanity closer to world peace. What was needed was 'a World Brain, operating by an enhanced educational system through the whole body of mankind' in order to attain 'adequate directive control of the present destructive drift of world affairs. We do not want dictators, we do not want oligarchic parties or class rule, we want a widespread world intelligence conscious of itself' (Wells, 1938: xli–xlii). The twin ills Wells sought to remedy were the problem of *knowledge* misapplied or wasted; and the problem of *ignorance* as the cause of discord.

He suggested tackling these with efficiency, mechanism and brainpower. Efficiency commanded the proper use of available energy—reorganisation, not total reinvention. Mechanism was the acknowledgement of technical possibility, not least the invention of cost-effective microfilm for the storage of books. Brainpower placed a premium on super-intelligence, institutional and individual. The *World Brain* would be a vast encyclopaedia run and organised by a permanent organisation. Divided up by subjects, this organisation would issue the encyclopaedia, made available to anyone anywhere. As he put it, this was 'a scheme for the reorganization and reorientation of education and information throughout the world. No less' (Wells, 1938: 11). More than mere printed volumes, the project would provide 'a sort of mental clearing house for the mind, a depot where knowledge and ideas are received, sorted, summarised, digested, clarified and compared', complete with 'a directorate and a staff of men of its own type, specialized editors and summarists' (Wells, 1938: 46).

Wells (1938) also stressed that microfilm not only meant that a mass of volumes could be stored in a small space, but that these were now incredibly easily replicated. Microfilm foreshadowed 'a real intellectual unification of our race': 'It need not be concentrated in any one single place. . . . It can be reproduced exactly and fully, in Peru, China, Iceland, Central Africa, or wherever else seems to afford an insurance against danger and interruption' (pp. 57–58). Rather than requiring a fixed core site, as in Otlet's *Mundaneum*, the *World Brain* could exist in several places at once, ultimately to ensure its survival in the face of turbulence. This throws its global aspirations into relief: not only was the *World Brain* to be decentralised, there was also an internationalist imperative attached to its networked diffusion across the planet. As Wells (1942) put it in a 1942 essay, microfilm replicability implied 'the abolition of distance on the intellectual plane' (p. 35). Nonetheless, as for Otlet, there was a tension between the ideal of reciprocal knowledge exchange and the choice of Europe as the geographical location from which knowledge was to be 'reproduced'. As we have seen in Otlet's *Monde*, to Wells likewise reorganisation and direction were crucial ways of ordering knowledge as information and, by extension, of ordering the world. Direction and editing, of course, implied directors and editors. For Wells thus, pursuing information implied the reproduction of hierarchies between the intelligent and the ignorant – not in one single metropolitan location (such as Otlet's *Mundaneum*) but in individual sub-chapters of the *World Brain* dotted around the globe. Wells envisioned information as an essential component of world community – such that information was, on the one hand, a good to be distributed (an object) and, on the other, the raw material of global order itself.

World Brain was explicitly political. On the one hand, Wells emphasised 'detachment from immediate politics': 'if our dream is realized it must exert a very great influence upon everyone who controls administrations, makes wars, directs mass behaviour, feeds, moves, starves and kills populations. But it does not immediately challenge these active people' (Wells, 1938: 22; emphasis original). A technocratic, anti-political approach was the foundation for change. On the other hand, this was itself part of an underlying political conviction: 'A World Encyclopaedia will have by its very nature to be what is called *liberal*. . . . It will necessarily be *for* and not indifferent to that world community of which it must become at last an essential part' (Wells, 1938: 52-3; emphasis original). This connects to Wells' broader views about world community and the world state. In

The Shape of Things to Come (Wells, 1933), a novel written as a future history, a race of the super-intelligent had taken over a nationless world. This was fiction, but it contained 'my matured theory of revolution and world government very plainly' (Wells, 1934: 640). In tune with the eugenics movement flourishing at the time, the story featured 'the pain-less destruction of monsters and the more dreadful and pitiful sorts of defective . . . and also the sterilization of various types that would otherwise have transmitted tendencies that were plainly undesirable' (Wells, 1933: 394). Privileging 'brainpower' implied that the intelligent counted for more than the ignorant. If information was the remedy, the unknowing were troublingly inefficient members of the social organism – they were themselves, in a brutally ableist implication, a waste of energy. Already in his 1905 novel *A Modern Utopia*, likewise considered a thinly disguised social-theoretical tract, Wells worried about society's 'stupid people, too stupid to be of use to the community, its lumpish, unteachable and unimaginative people'. To avert their negative impact on the evolutionary prospects of the human race, 'the species must be engaged in eliminating them; there is no escape from that, and conversely, the people of exceptional quality must be ascendant' (Wells, 1905: 36).

Wells envisioned information, properly organised and distributed, as enabler of the world state. Yet as we have seen, he thought of information not just as a new object entering the international domain. Since ignorance was the core problem driving war and conflict, information stood for a whole new configuration of global order. On these points Wells compares easily to Otlet; but even in Britain he was not alone in subscribing to this vision. He was steeped in the interwar milieu of the British scientific Left, including intellectuals such as J.B.S. Haldane, Lancelot Hogben, Julian Huxley or J.D. Bernal. Bernal (1929) too, for instance, had speculated about a supra-mind unifying humanity in a final step of evolution in his 1929 The World, the Flesh and the Devil (cf. Muddiman, 1998: 97). To Bernal as to Wells, ignorance could be overcome by means of a central knowledge organisation. Yet as Muddiman has pointed out, Wells's plan was not to create an 'open universal information network' but to establish a 'hierarchy of academic and editorial control [to] discriminate between legitimate and illegitimate knowledge'. The final point of the *World Brain* was 'to sift, control, synthesize, and disseminate 'legitimate' knowledge in the name of universal education and the ascent of mankind' (Muddiman, 1998: 96). Microfilm was to make this vision practically feasible. The implication was a Eurocentric order where information would be produced and stored in Europe and distributed, under circumstances of Europe's choosing, to the ignorant 'non-civilised' world. This vision relied on a gaze at the world through the eyes of information.

Information at the League of Nations

The momentum for information order went further still. Paralleling the work of Otlet and H.G. Wells, the interwar period also saw the emergence of international 'intellectual cooperation'. The League of Nations was the central hub for such endeavours, developing in tandem with the documentalist conception of knowledge as information. Indeed the League emerged as a veritable 'truth-production center'. Knowledge exchange furnished an aspiration of building global order not only through the coordination of

power-political interests, but also through the creation of 'a global public sphere' (Biltoft, 2021: 5; see Brendebach et al., 2019). Information, however, was not introduced simply as a form of epistemic capital to be safeguarded by the League in the interest of humanity. Rather it played a significant role in shaping a distinctly 'informational' vision of global order through its information ecosystem, including the OIC but also a separate Information Section dedicated to distributing internationalist propaganda (Seidenfaden, 2024). These institutional hubs daily produced masses of information about 'nations' so-called progress and so-called backwardness measured via indicators of income, infrastructure, education, and literacy' (Biltoft, 2021: 10; Seidenfaden, 2022). They also explicitly aimed, as I show below, to centralise a global information order. Examining intellectual cooperation at the League of Nations, as Laqua argues, 'reveals a concern for order at every level' (Laqua, 2011: 226). This section examines that concern for order to illustrate this article's central argument that as an ordering concept, information was inseparable from visions of global order.

The International Committee on Intellectual Cooperation (ICIC) was established in 1922 in Geneva, tasked with promoting scientific collaboration and exchange across borders. Four years later, an executive branch was set up in Paris, the International Institute for Intellectual Cooperation (IIIC). Along with national commissions for intellectual cooperation established in its member nations, the two bodies made up what later was referred to as the OIC (see Renoliet, 1999: chapter 1). Alfred Zimmern, 1920s Deputy Director of the IIIC, considered the new institution key to shaping the new post-war international order by controlling and managing global information flows. This position not only became fundamental to interwar knowledge governance at the League of Nations. Conceptualising knowledge as information also reproduced documentalist assumptions about global order. Founding members of the League bodies for intellectual cooperation adopted the wider conceptual vocabulary of information. Paul Otlet and Henri La Fontaine directly petitioned to the League, initially with some success; and British Prime Minister Arthur Balfour recommended H.G. Wells as a member of the ICIC. To be clear, the OIC did not emerge out of the *Mundaneum* or the *World Brain*. Rather, information played a specific role in the documentalist imagination of global order, and in this shape we encounter it at the OIC. As Laqua (2011) notes, intellectual cooperation was limited by its attachment 'to categories such as civilization, race, empire, and nationhood' (p. 229). I examine this aspect in the structure and work of the OIC, before addressing in how far Otlet's *Mundaneum* and Wells' *World Brain* related to the organisation.

The Geneva-based ICIC had a relatively diverse membership for contemporary standards and attracted attention for the distinguished researchers among its ranks, including Albert Einstein, Sarvepalli Radhakrishnan, Jagadish Chandra Bose, Marie Skłodowska-Curie, Kristine Bonnevie, Gonzague de Reynold, Leonardo Torres Quevedo and Robert A. Millikan (Grandjean, 2020). The ICIC was initially chaired by Henri Bergson, who was replaced with Hendrik Lorentz in 1925 and Gilbert Murray in 1928. Outreach work was carried out through the IIIC which hosted conferences, seminars and a book series. It also facilitated the creation of national committees for intellectual cooperation in member countries. Though formally attached to the OIC, the IIIC was mainly funded by the French government and headed throughout its existence by French directors. Like the

Committee, the Institute embraced civilisational vocabulary, not least by publishing a book series on *Civilisations* that included the 1935 *East and West* by Gilbert Murray and Rabindranath Tagore (1935).

Another connection with the documentalists was the view that spreading information could help achieve world peace. The starting point was detachment from politics, a view closer to Otlet than to Wells – as Gilbert Murray declared in 1933, 'Intellectual cooperation must be universal and must, as much as possible, be independent of politics' (Hewitson and D'Auria, 2012: 246). Zimmern thought that the point of 'intellectual cooperation' at the international level was to 'foster a general mentality among the peoples of the world more appropriate to co-operation than the nationalistic mentality of the past' (in Northedge, 1986: 189). The co-director of the *Bibliothèque de Documentation Internationale Contemporaine*, Camille Bloch, likewise noted in 1927 that the war had 'inspired a need . . . for precise and disinterested knowledge about the events in which they intersect or of which they suffer the repercussions' (in Laqua, 2011: 226; cf. Rietzler, 2014, 830). Intellectual cooperation was widely understood by contemporaries, including Otlet, as postwar 'moral disarmament' (Otlet, 1935: 226; cf. Gatling Book, 2016: 3; Goodman, 2012).

This paralleled the work of the League's Information Section, established to act as 'a press department and what would today be called a communication department' (Seidenfaden, 2022: 372). Whereas the OIC aimed to foster cooperation between intellectuals, the Information Section was concerned more specifically with creating and fostering 'an international audience'. In practice, however, as Seidenfaden notes, this difference was smaller than it sounded since 'the public targeted and imagined by the strategists of the Information Section came to consist of educated, internationalist friends of the organisation'—drawing from and speaking to the same circles the OIC relied on (Seidenfaden, 2022: 370; Akami, 2018). What united them was a shared vision of global order through the lens of information. In the Information Section's American officer Arthur Sweetser's 1919 words: 'As the League will be the centre of world government so *it must be the centre of world political information*' (in Seidenfaden, 2022: 373; emphasis added).

While the OIC's founders expressed a certain hostility to world-state utopianism – ICIC president Henri Bergson noted in a 1923 opening speech that the Committee ought to refrain from 'chimerical' plans for 'supra-national' intelligence (in Pemberton, 2012: 38) – they did deploy a vocabulary that closely tracked that of the documentalists. Salvador de Madariaga, who headed the League's Disarmament Section but was also closely involved in discussions about intellectual cooperation, thought that 'for a society of nations actually to come to life, a society of minds had first to be fostered' (in Pemberton, 2012: 40). He summed up the OIC's mission as the creation of 'the mother cell of a whole field of fermentation of *minds drawn towards unity, order, and hierarchy*' (Pemberton, 2012: 41; emphasis added). His colleague Paul Valéry, whom we have already encountered as an inspiration to Otlet, likewise speculated about a 'city of intellect that is spread over the whole earth' (in Pemberton, 2012: 40).

Like the documentalists, the OIC was committed to knowledge organisation as a necessary condition for world peace. As Gilbert Murray put it in 1928, the year he became president of the ICIC: 'intellectual co-operation aims at the joint study and practical

achievement of means of coordinating and promoting intellectual life' but also has a 'more lofty meaning'. Its 'real purpose' was to impress upon intellectuals everywhere 'the conviction that their interests and duties are everywhere identical' and so render progress 'permanent' by achieving 'spiritual and intellectual harmony' (League of Nations, 1928: 5; in Gatling Book, 2016: 4). The OIC's work on 'another side of disarmament', as Murray would reiterate in 1932 in *The Times*, was an 'unseen process which creates and maintains human progress; . . . [a process] only of the steady growth, amid much discouragement, of the activities that will save civilization if civilization is to be saved' (Murray, 1932). Information was the chief remedy against propaganda 'aimed at disturbing friendly international relations', and an 'effective means of preventing the false presentation of the international situation would be to set up at Geneva an international information bureau' (League of Nations, 1931: 2–3; on Nazi engagements with information see Herren, 2002).

Otlet had promoted his methodological work to various early IOs, such as the International Institute for Agriculture, predecessor of the UN's Food and Agriculture Organisation (Otlet, 1911, 1921). But his involvement in conversations on intellectual cooperation during the early years of the League was particularly insistent, never failing to mention his vision for a World Centre. He corresponded with future Secretary-General Eric Drummond, who in July 1919 replied that 'I have to thank you most sincerely for the copies of your two studies', including a pitch for integrating the *Mundaneum* into the League to 'condense all knowledge, all information' and represent 'the memory of humanity' (League of Nations, 1919a). In the same year, Henri La Fontaine attended the founding assembly of the League of Nations as member of the Belgian delegation. In this capacity he proposed the creation of a League body for intellectual cooperation (Van Acker, 2011: 33; Kolasa, 1962). La Fontaine then joined League deliberations on the founding of such an institution (Laqua, 2013: 194; League of Nations, 1946: 13). Shortly thereafter, Otlet met as UIA director with League delegates and expressed 'the satisfaction felt by the Union [the UIA] in meeting the Delegates' (League of Nations, 1919b). A year later, Otlet submitted a report on 'the Formation of an International Organisation of Intellectual Work under the control of the League of Nations' (League of Nations, 1920).

Initially, there was thus a relatively close working relationship between Otlet, La Fontaine and the League. The Belgian committee for intellectual cooperation, one of many national branches united under the League's OIC umbrella during the interwar period, even held its inaugural meeting at Otlet and La Fontaine's Palais Mondial (Laqua, 2013: 196). Yet from as early as 1921, the League had also begun to harbour reservations about the two documentalists. Nitobe Inazō noted that Otlet and La Fontaine had failed to 'offer some direct and if possible tangible service' and reported that if the League simply adopted their Brussels-based project, 'it would not be international and it would not be according to accepted methods' (League of Nations, 1921). The documentalists did not give up. In 1924, the Secretary-General received 'Plans for a World Administrative Centre', envisioned as 'a clearing house for intelligence of all minds in which the peoples of various lands would be interested' (League of Nations, 1924). As late as 1928, Otlet submitted drafts for his World City, proposing a 'greater League of Nations' to foster world culture based on 'intelligence', 'the prime instrument of progress'. At its heart was the *Mundaneum*: 'An instrument of documentation, information, and studies' (League of

Nations, 1928: appendix, 41–42; Otlet, 1929). Eventually, the OIC cast its final judgement of Otlet and La Fontaine: 'their utopian tendencies do little to inspire confidence in those who hold the purse strings' (in Wright, 2014: 178; Rayward, 1975: 276-98).

H.G. Wells was ambiguous about the League of Nations. As mentioned, prior to its inception Wells had been chairman of the League of Free Nations Association, alongside venerable internationalists including Gilbert Murray and Alfred Zimmern. Together the group had published the 1919 *Atlantic* essay on 'The Idea of a League of Nations' mentioned above. In its opening lines the essay promotes plans for such a supranational organisation as the 'unification of human affairs', referring primarily to 'a cessation of war and a world-wide rule of international law' (Wells,1919: 106). But Wells and his fellow campaigners parted ways over how ambitious such a league ought to be. 'What the world needs', Wells noted in 1920, 'is no such league of nations as this nor even a mere league of peoples, but a world league of men. The world perishes unless sovereignty is merged and nationality subordinated' (Wells, 1920: 752; in Partington, 2008: 545). Despite Wells' prior support for a League of Nations, at least in principle, he was of the opinion that the actual League should have been cosmopolitan not internationalist. 'The governing of the whole world may', he wrote, 'turn out to be *not* a magnified version of governing a part of the world, but a different sort of job altogether' (Wells, 1921: 82). He considered it inadequate that the League accord equal status to members that were in fact deeply unequal states; placing Abyssinia on the same level as Belgium was absurd. At the 1921 Washington Disarmament Conference he wrote 'that any real 'League of Nations' . . . must necessarily supersede the existing 'empires' and imperial systems and take over their alien 'possessions'' (Wells, 1922: 263). The League's Mandates Commission, essentially fulfilling that very purpose, was to Wells' liking but did not go far enough: the mandates, he thought, should not be governed by their former imperial powers but by a unitary world governing body. Wells' reservations about the League notwithstanding, his documentation enthusiasm led Arthur Balfour in 1921 to personally recommend him as a founding board member of the Institute (League of Nations, 1923).

With regards to intellectual cooperation, Wells initially favoured the League's OIC as a potential venue for the realisation of his *World Brain* encyclopaedic organisation (Muddiman, 1998: 92). His collaborator, the evolutionary biologist and eugenicist Julian Huxley, would later approach his task as the first director-general of UNESCO based on many of the same assumptions and distinctions that underpinned Wells' information order (Wells et al., 1931; Sluga, 2010). The synergies were unmistakable; Wells was after all a strong exponent of interwar views on information. As we have seen above, his advocacy for reorganising knowledge exemplified, in Muddiman's (1998) phrasing, 'the transition from a static conception of knowledge and books' to a dynamic 'discourse of information, communication and commodity' (p. 86). Nonetheless, eventually Wells ridiculed the League as a 'squirming heap of patriotisms' and dismissed its intellectual cooperation bodies as an 'obscure and ineffective' body about which there was 'very little to be known' (in Osborne, 2014: 9). It was an unambitious talking shop.

In this section, I demonstrated how information was raised to the level of international concern at the League bodies for intellectual cooperation. I discussed the role of information, and information-centric views of global order, at the OIC; as well as how Otlet and Wells in particular related to the League. Both had direct and indirect connections to the

League intellectual cooperation milieu. My analysis illustrated the benefits of examining information in historical perspective, rather than taking it for granted as an epistemic resource only. In the case of the interwar period, the idea of information was tied to hierarchical visions of global order. To League officers and documentalists alike, safeguarding information was about no less than the defence of civilisation; distributing information established a one-way relationship between Western sites of production and non-Western sites of reception; and reorganising or classifying information imposed parochial distinctions between legitimate and illegitimate forms of knowledge. Information reduced governance challenges to information gaps; it was understood as a vector of status in conjunction with existing ideas about 'civilisation'; and through assumptions about where and how information could be stored, information also reinforced material inequalities.

Conclusion

What broader implications emerge from this analysis? First, IR should approach information not only as a self-evident epistemic resource but also as an ordering concept. Second, mobilising object construction in historical perspective allows us to recover what constructed governance objects hide: paths not taken, but also broader ideological attachments and linkages. Information is an epistemic resource of crucial import to international governance, but as this article has shown it also has a history which connects it closely to particular visions of global order. On the visions reconstructed in this article, world politics was reduced to information gaps – international politics was not about disagreements and interests, but about misrecognition and ignorance. Both Otlet and Wells conceived of information as universal, but also reproduced a deeply hierarchical global order, where nations and peoples were ranked by their intellectual 'quality'. Some peoples needed be educated, with others all that could be done was to 'straighten them out' (Otlet, 1935: 222). Wells' obsession with 'brainpower' entailed a vision for a world state ruled by the super-intelligent, and 'the sterilization of various types that would otherwise have transmitted tendencies that were plainly undesirable' (Wells, 1933: 394). For these information pioneers, global order was determined by intelligence, supposedly the fruit of civilisation. Curating and thus policing information was therefore a key imperative to advance world civilisation. On this view, the 'intelligent' would hoard data in Europe and offer tutelage to the 'ignorant'. Promoting a world united by information was, at this point in time, entirely compatible with infrastructurally reproducing an imperial division of the world by degrees of ignorance.

Recovering this history puts present-day hopes for information as a solution to world-political conflict into perspective. Without considering the broader political embeddedness of information, such hopes risk leaving underlying hierarchies intact. The stakes are high: IOs continue daily to consume and produce information. If the League was a massive intelligence agency, IOs still perform this role today. The idea that information is an invaluable good that can be leveraged against political disagreement and conflict likewise persists. Yet if as IR scholars we want to resist reifying the brain worlds of the interwar documentalists, we ought to recognise that calls for more and better information

in the face of world-political conflict are mute unless combined with calls for radically more equal infrastructures of knowledge.

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