In April 1759, in the pages of a well-respected review journal, the geographer Anton Friedrich Büsching penned an anonymous review of a geography book by one Johannes Klefeker, syndicus in Hamburg. Büsching's review was mostly positive, though he criticized Klefeker for being insufficiently critical of the sources he discussed. Two weeks later in the widely circulated *Hamburg Correspondent*, another anonymous reviewer of Klefeker's book leveled a thinly veiled, critical response to Büsching's review. The author contested Büsching's criticisms, and implied that Büsching's critique was motivated partly by what he perceived to be Büsching's vanity and desire to dominate the project of earth description.² Having read the review, Büsching wrote to a Göttingen colleague to express his displeasure with the reviewer's comportment. He described it as 'a polemical review...which was directed at me in such an odd and laughable way', and added, 'No one who compares my review with [Klefeker's] book will find it harsh and unsupportive'. Moreover, Büsching posed a simple yet pivotal rhetorical question: 'And why should the same truthfulness and impartiality not be observed with geography books that is observed with other types?'3

Büsching's concern with truthfulness and impartiality was not unique. Rather, editors and authors in the Enlightenment saw impartiality and truth as essential criteria for good reviews, as they made clear in the prefaces to learned journals and in essays on reviewing decorum within such journals (*e.g.* Goldgar 1995, 98-103; Habel 2005, 56-57). Büsching's comment on reviewing decorum stands out, however, because he called attention to its significance for geographical scholarship in particular. Moreover, his remark raises questions not only about why

he was so concerned with truthfulness and impartiality, but also broader questions about the 'epistemological decorum' (Shapin 1994, 193-242) that governed how geographical knowledge was produced, circulated, and contested in and through the pages of the learned journal, one of the Enlightenment's defining print forms (*e.g.* Brandes 2005; Popkin 1991; Raabe 1974).

This article responds to recent calls for attention to geographical print culture. Such calls have emanated from the growing literature on the 'geography of the book', which has shown that understanding where books were made, printed and read, and how books circulated within and across boundaries, is crucial for understanding how print and geography shaped one another (Keighren 2013; Ogborn and Withers 2010a 2010b). Scholars have primarily focussed on 'a specific material form: the printed (non-fiction) book' (Keighren 2013, 752), and especially books of travel (Driver 2013; Henderson 2013; Keighren et al. 2015; Rupke 1999), geography books narrowly understood (Keighren 2006 2010a 2010b; Mayhew 2007a 2007c 2010), atlases (Withers 2005) and books by Darwin and Newton (Livingstone 2003b 2005). In addition, scholars have studied the place of manuscripts in the geographical print culture of the British Empire (Ogborn 2002 2007 2010). Yet, as one leading commentator has rightly argued, 'there is nevertheless an important opportunity to expand the range of material forms and genres which usefully can be subject to geographical interpretation' (Keighren 2013, 752).

This article calls for greater attention to what I term 'periodical geography', namely the geographical knowledge contained in periodicals, and the geographies of knowledge, reading, commerce and colonialism that shaped how periodicals were

produced, circulated and read. Although scholars have shown that periodicals are key sources that help disclose the contextually specific ways that books were read and interpreted (e.g. Keighren 2006 2010b; Livingstone 2005; Rupke 1999), and although this insight is crucial, I want to push the engagement with periodicals further. I want to argue that attention to how periodicals themselves were made and circulated can reveal crucial shifts in the nature of geographical authorship and audiences. This is my broader agenda.

Historians of science have discussed the making and circulation of scientific and learned periodicals in the early modern period (e.g. Broman 2013; Gantet and Shock 2014; Johns 2000; Kronick 1976; McClellan 1979 2003; Van Hoorn and Kosenina 2014), and the place of science in nineteenth-century periodicals (e.g. Cantor et al. 2004; Fyfe 2015; Topham 2004 2013). Nevertheless, this literature has said little about geography. Periodical geography has, however, received some attention from scholars that have highlighted the significance of geographical periodicals in the creation of Enlightenment learned publics (Withers 1999b, 14-18), discussed how maps of the Seven Years War figured in the Gentleman's Magazine (Lehman 2011; Reitan 1985) and how images of America featured in eighteenthcentury German periodicals (Depkat 2001). Others have discussed the place of geographical material in the proceedings of the Paris Academy of Sciences (Heffernan 2014, 64-70) and surveyed the origins of German geography journals (Hohmann 1959; Griep 1999). For the modern period, scholars have highlighted the ways National Geographic shaped modern American geographical imaginations (Rothenburg 2007; Schulten 2001), and discussed educational geographical

periodicals (Norcup 2015). Concerning the geography *of* periodicals, historians have considered how the making and circulation of early modern periodical forms such as broad sheets, learned journals and intelligencers were shaped by the places where they were produced (*e.g.* Bellingradt 2012; Blome 2005; Salzberg 2010). Collectively, such studies suggest that place matters for understanding the making of periodicals, and that periodicals are significant for understanding how scientific and popular conceptions of the world were shaped in the early modern and modern era.

This article illustrates the potential of periodical geography as an analytic category by considering the making of geographical journals in the German Aufklärung (Enlightenment), which I understand as both a historical period and cultural process of learning, communication and reform that had its own geographies (see Bödeker and Herrmann 1987; Withers 2007). The article focusses on Büsching, whose oft reprinted and widely translated Neue Erdbeschreibung dominated German geography in the later eighteenth century. It is concerned in particular with Büsching's 'learned newspaper' (gelehrte Zeitung), the Wöchentliche Nachrichten von neuen Landcharten und geographischen, statistischen und historischen Büchern und Schriften [Weekly reports on contemporary maps and geographical, statistical and historical books and publications, Berlin 1773-87]. Büsching's periodical has received little attention from geographers (Hoffmann 2000, 187-204), yet I would argue it provides crucial insights into how, in the Age of Reason, epistemological norms and material practices shaped geographical print culture, and how the periodical genre itself shaped those same norms and practices.

The article first outlines recent work concerning periodicals and cultures of scientific practice. Second, it discusses Büsching's agenda for reorientating geography's moral economy of knowledge and the responses to this agenda in learned review journals. Third, it illustrates how Büsching used his Wöchentliche Nachrichten as a vehicle to reorientate geography's practices and values, and underlines how competing periodicals sought to challenge his credibility and authority. Fourth, it discusses how Büsching's reform efforts reshaped the moral economy of geographical knowledge in the later eighteenth century, especially in the context of what I term Aufklärungsgeographie (German Enlightenment geography). Büsching's case, I argue, demonstrates there were competing geographies of trust, authority and credibility at work within Enlightenment geography that both reflected and shaped its print culture. Moreover, his case shows that the very periodicity and materiality of the periodical genre transformed the character of geography's authors and audiences in the Aufklärung.

Before proceeding, a word about *Aufklärungsgeographie* is in order. I understand *Aufklärungsgeographie* as a set of practices for writing the earth that were fashioned by institutional geographies, biographies, religious currents and textual traditions unique to the *Aufklärung* (Bond 2016, 65), on the one hand, and by a longer textual tradition on the other. Geographies that distinguished *Aufklärungsgeographie* included the University of Halle, a centre of the early German Enlightenment (*Frühaufklärung*) where many geographers were educated, and the University of Göttingen, which housed one of the earliest geographical societies — the *Kosmographische Gesellschaft* (Cosmographical Society) — and the first chair in

geography in the German lands (see Kühn 1939). As a textual tradition, German geography was distinguished in part by authors' decision to conceptualise geography using thematic and temporal divisions different from the traditional 'general' and 'special' division used by British and French geographers (Fischer 2014, 133-49). *Aufklärungsgeographie* was set apart, moreover, by its development and use of the geographical periodical. Still, it resembled geography elsewhere in two ways. Authors of German geography books engaged in the humanist practice of silent copying common to geography elsewhere (*e.g.* Weise 1687; Hübner 1730), and they employed the compendia format that became standard during the seventeenth and eighteenth century (Fischer 2014, 183-91; Mayhew 2007c, 472-80; on copying, see Mayhew 2000, 38-42). In short, *Aufklärungsgeographie* was defined by distinct geographies, textual practices and print forms, and also by a longer geographical tradition.

Geography, print culture and the moral economy of knowledge

Print culture and scientific knowledge production are closely tied to issues of trust and credit. As historians have shown, scholarly practices, publishing firms and patronage systems came together at times to enable, or hinder, the credibility and authority of natural knowledge, both in books and periodicals (*e.g.* Felton 2014; Frasca-Sparda and Jardine 2000; Fyfe 2005; Goldgar 1995, 98-114; Johns 1998; Kronick 1978; Secord 2000; Sher 2008; Watts 2014). In geography, studies of travel accounts have demonstrated that textual authority hinged on publishers' and

authors' editorial practices, and their claims to authenticity and authority (*e.g.* Keighren *et al.* 2015; Henderson 2013; Mayhew 2007a 2007b 2010; Withers and Keighren 2011). Collectively, this work has demonstrated that manifold geographies shaped the interleaved making of print, scientific knowledge and epistemic credit.

Issues of authority, print and authorship were closely linked in the Enlightenment. The authority of geography as a discipline hinged partly on the material format and 'print space' of geography books. Over the course of the seventeenth and eighteenth century, geography books developed a standardised format that allowed authors to accommodate the abundance of geographical information generated by European expansion. This format lent geography increased authority (Mayhew 2001; 2007c, 472-80). Yet, at the same time, 'geographical authority was subject to repeated subversion' (2007c, 477) through practices of 'silent copying' and plagiarism rooted in the humanist tradition and the commercial dynamics of London's Grub Street, where authors were paid by the page and had little incentive to produce quality work (Mayhew 2000, 37-41). Authors of geographical grammars and maps often claimed their work was compiled from the latest and best authorities, a move intended partly to boost sales, but one that also signalled geographers understood that to achieve some semblance of credibility, they needed to situate their work within 'the larger discourse of epistemological legitimacy' (Edney 1999, 188; see also Withers 2005, 303).

Until the mid eighteenth-century, the project of describing and depicting the earth had been located exclusively in the print space of geographical compendia, schoolbooks and maps. Around 1750, geographers in the German states began to

utilise the print space and periodicity of the learned journal, whose origins lay in late seventeenth-century outlets such as the Philosophical Transactions and Journal des sçavans (Kronick 1976; Dann 1983). In 1748, the Nuremberg and later Göttingenbased Kosmographische Gesellschaft, which had been established to improve knowledge of the German lands through the production of more accurate and methodologically rigorous maps and chorographical descriptions, published the first geographical journal, the Kosmographische Nachrichten und Sammlungen auf das Jahr 1748 [Cosmographical reports and miscellany for the year 1748, Vienna and Nuremberg, 1750]. Yet, the Kosmographische Nachrichten only lasted one issue, and the Society failed to realize its plans for two other journals (Hohmann 1959, 456-57; Kühn 1939, 22-40, 47-49). More successful ventures followed. In 1764, a school rector in Chemnitz named Johann Georg Hager established a geographical review journal that ran sporadically until 1778, namely the Geographischer Büchersaal zum Nutzen und Vergnügen [Geographical library for use and enjoyment, Chemnitz, 1764-78]. Soon after Hager began his periodical, Büsching established his Magazin für die neue Historie and Geographie [Magazine for contemporary history and geography, Hamburg and Halle 1767-88], wherein he mostly reprinted, or printed for the first time, other scholars' material. In 1773, he began the Wöchentliche Nachrichten (Berlin, 1773-87), which, like his *Magazine*, enjoyed a long, uninterrupted print run in a period where many periodicals lasted only a few years. Many more geographical journals appeared between 1770 and 1800 as part of a broader uptick in the number of specialised disciplinary journals (Fachzeitschriften), learned journals, moral

weeklies, books and other printed material (Fischer 2014, 192-201; Hohmann 1959, 459-60; Brandes 2005; Dann 1983).

Geography journals were, however, a uniquely German product. Journals such as Büsching's and Hager's were absent in the English and French contexts. Rather, in England, geographical material featured in the *Philosophical Transactions* alongside reports on experiments and discoveries (Sorrenson 1996, 37-39). Around 1800, British geographers such as John Pinkerton began to cite reports from the Philosophical Transactions, along with material from 'disciplinary journals, such as the French Journal des Mines (geology) and the Asiastic Researches (anthropology)', and this reflected 'a nascent disciplinary culture' and increased specialization of knowledge (Mayhew 2004, 266). In France, geographical material featured in the Paris Academy of Science's prestigious annual publication, the *Histoire de l'Académie* Royale des Sciences (1699-1790). Geographical mémoires published in the Histoire de *l'Académie* were crucial for debates within the Academy between Guillaume Delisle and others concerning geography's character and value (Heffernan 2014, 64-70). In short, there was a distinct geography of periodical geography within the Enlightenment world.

Scholarship on geographical journals has said little about epistemic credit.

Rather, both broad surveys and studies of individual periodicals have discussed geography journals in relation to geography's professionalisation and development as a science (Christoph 2014; Griep 1999; Hohmann 1959). In her recent survey of German geographical print culture, Fischer (2014, 190-262) has hinted at the importance of issues of credit and authority. Like others, however, she is more

concerned with how geographers 'establish[ed] criteria for science-writing' and the emergence of scientific currents in geographical print culture (218-22, quote at 219). According to Fischer, German geographers became more concerned with the criteria for scientific writing in response to the growing number of less rigorous, commercially motivated authors of geographical works (219-20). This is an important point. Yet, I would argue that questions of scientific status need to be understood in relation to questions of epistemic credit and trust, since the history of scientific practice—including geography—is fundamentally tied to the 'moral economy of science', by which I mean the 'morally textured relations' between scholars that entail 'notions like authority and trust and the socially situated norms which identify who is to be trusted, and at what price trust is to be withheld' (Shapin 1994, 27; see also Daston 1995; Daston and Gallison 2007; Füssel 2006; Livingstone 2003a, 135-78; Shapin and Schaffer 1988).

The emergence of geographical periodicals had consequences for the character of geographical print. Periodicals made geographical authorship and readership more public and dynamic (on periodicals' dynamic character, see Holenstein *et al.* 2013, 14-15). They were often cheaper than grammars and handbooks, and this created a larger potential readership amongst the learned classes. Reading societies furthered widened readership because they subscribed to periodicals, including geographical ones, and this allowed a single copy of a periodical to pass through several society members' hands (Bödeker 1990, 433-35). With a wider potential audience, geographical debates and criticism—like scholarly criticism more broadly (Broman 2013; Dann 1983, 73, 76-77)—took on a more public

character. Geographical periodicals also had an inherently more open format than books, and this allowed for greater engagement between editor-authors and readers (on journals' open format, see Holenstein *et al.* 2013, 14-15; Popkin 1991, 211; Raabe 1974, 100-101). Readers could submit letters to the editor in which they contested truth claims, or submit geographical reports that editor-authors could print with or without attribution. Periodicals' periodicity, moreover, allowed editor-authors to respond more quickly to criticism in competing journals or books. In these ways, the periodicity and print space of periodicals transformed geographical print culture in the *Aufklärung*. I illustrate such changes in the following sections.

Enlightenment print culture and Büsching's *Neue Erdbeschreibung* project
Büsching was born in 1724 in Stadthagen, a small town in the principality of
Schaumberg-Lippe. An advocate's son, Büsching received his early education in
Stadthagen, and at nineteen procured a stipend to attend the Latin school in Glaucha
near Halle. The following year he enrolled at the University of Halle, where he
studied theology and received his *Magister* degree in 1747. In October 1752, after
having tutored the Danish diplomat Rochus zu Lynar's son for several years, he
moved to Copenhagen to complete the first part of his *Neue Erdbeschreibung*. In the
summer of 1754 he was called to the University of Göttingen, where he taught in the
philosophical faculty until 1761. He spent the next four years in St. Petersburg as
second pastor and director of the school at St. Peter's Lutheran church. In October

1766 he moved to Berlin, where he worked as director of the newly established *Graues Kloster* secondary school, edited his geographical periodicals and published several other geographical works. He died in his Berlin home in May 1793, aged 68 (Büsching 1789; Hoffmann 2000, 17-120).

In his Neue Erdbeschreibung, Büsching set out to describe the earth anew. His project was both a continuation of, and departure from, standard ways of doing geography. In his emphasis on description and in the print format of his book, he followed practices well established in geography by the 1750s (Mayhew 2000, 36; Plewe 1958, 205, 220). Yet, Büsching's project differed in its emphasis on a source critical method for the collection and comparison of geographical knowledge (Hoffmann 2000, 148, 150; Plewe 1958, 205-207). Rather than copying material and plagiarising, Büsching described the earth using information he gathered through correspondence, his own observations from travelling and the best available geographical reports in printed works (Büsching 1752, 5-21; 1754, 1-24). In fact, Büsching's practices resembled those of the naturalist Albrecht von Haller, who relied heavily on his corresponence network in his botanical work on Switzerland, emphasised practices of critical reading and judging, and carried over his critical reviewing practices from the pages of journals to his correspondence (on Haller, see Holenstein et al. 2013, 23-39).

His emphasis on first-hand reports and critical comparison reflected in part his training at the University of Halle (Plewe 1958, 219-20), his indebtedness to the physico-theology tradition (Livingstone 1992, 109), and his uptake of methodological claims in the work of his former teacher Hauber and his Göttingen colleague Johann

Michael Franz (Kühn 1939, 60-61). According to some commentators, Büsching's critical method was his 'essential contribution to the development of geography' (Hoffmann 2000, 148; see also Bowen 1981, 156). Yet, this presentist reading obscures questions about the social nature of Büsching's method that are crucial for understanding his geographical project and Enlightenment geography more broadly.

For Büsching, the need for a rigorous source critical approach in geography was inextricably linked to matters of morality. The widespread practice of uncritical copying in geography had, in his eyes, led authors to include material that was inaccurate and morally questionable. He acknowledged he could have completed his work quicker if he had followed such practices, yet he believed this 'would have been irresponsible and unhelpful' (1752, 6-7). He would have knowingly supported dubious truth claims, failed to advance knowledge of the globe amongst the learned public and knowingly produced descriptions that did little to reveal the true wonder of God's creation (1754, 25-29). This led him to 'work from the outset as if no introduction to geography were written before', because he saw this as the only responsible route to a truly useful and reliable description of the earth (1752, 7; see also 1754, 2-4, 34-36; Bond 2016, 69).

Resistance to Büsching's reform efforts appeared in learned periodicals. In particular, it was his decision to work as if he had no predecessors that generated resistance, because this move entailed a dramatic shift in the nature of the trust relations that underpinned geographical scholarship. Whereas previous authors had trusted their predecessors and repeated their claims, Büsching instead made a virtue

of mistrust. An anonymous reviewer questioned Büsching's emphasis on mistrust in an otherwise positive review of his trial version of the Neue Erdbeschreibung, namely the Brief Description of the Duchies of Schleswig and Holstein (1752). The reviewer worried Büsching's decision to set aside his predecessors would lead him to produce new errors in his description, which he might have avoided if he had consulted previous geography books. That Büsching spoke with 'such confidence' about setting aside his predecessors 'is the one thing that does not fully please us', noted the reviewer.⁵ Büsching's confidence would also have undoubtedly appeared as an act of incivility, as a breach in the conventional trust relations that underpinned scholarly work (Shapin 1994, 20, 307-309). Büsching saw the reviewer's claim as important enough to address in the preface to the Neue Erdbeschreibung. The reviewer had 'not properly understood' the rationalisation for his method, and had failed to see that he mistrusted past sources because authors 'did not or could not acquire the best sources, or have sometimes not used them with appropriate thoroughness and impartiality' (1754, 2-3). In short, Büsching's mistrust was rooted in the same moral economy of knowledge that led him to draw on reliable and impartial first-hand accounts, which is precisely what the reviewer had found so praiseworthy about his project.

Büsching's reform efforts were also challenged by Hager, whose geographical handbook Büsching (1752, 7) had criticized. For Hager, Büsching's critique of the inaccuracy of handbooks, and his emphasis on the need to mistrust, were misplaced. In the preface to his *Geographischer Büchersaal*, Hager noted how easy it was for an

author to make errors despite their 'effort and industriousness'.6 Concerning trust, Hager wrote,

One is not all knowing. One cannot travel the entire world. One trusts his predecessors, because one has no reason for mistrust. And nevertheless through this, one will often still be deceived. One deceives, therefore, against his will and his reader's.⁷

That Hager offered a defensive retort is not surprising, since Büsching's critique was an affront to the very trust relations that underwrote his scholarly practice. In claiming that geographers had no reason to mistrust their predecessors, Hager was defending the moral economy of knowledge that Büsching sought to undermine. Hager's humanist moral economy could no longer be justified on methodological or moral grounds. When more accurate knowledge could be produced through rigorous source criticism, to continue to blindly trust one's predecessors was, for Büsching, 'irresponsible'. Geography's epistemological legitimacy rested fundamentally on the mistrust of textual sources.

That responses to Büsching's reform program appeared in learned journals is significant. By publishing such remarks in journals, authors brought methodological debates in geography into the view of a wider learned public, who might not have been privy to such discussions had they remained in the prefaces of costly handbooks. In this way, periodicals gave geographical criticism and debate a more public character.

What the critical responses to Büsching's work signal, moreover, is the presence of competing geographies of moral economy at work *within* the German

territories. Hager's geography was rooted in a profound trust in past authors and, by extension, the geographies of trust on which those authors based their books.

Büsching's position was one that, although rooted in the print format of existing geography handbooks, sought to forge new geographies of trust and credibility in the material form of correspondence networks, limited personal travel and study-bound practices such as critical comparison and letter writing, practices that, whilst already established in the learned world, had figured less commonly in earlier geographical scholarship.

Credibility, authority and the Wöchentliche Nachrichten

Circulation figures for the *Wöchentliche Nachrichten* have not survived. Scholars have shown, however, that periodicals of all sorts needed to sell 500 copies to remain viable, and that learned journals and newspapers saw an average print run of 1,000 copies, occasionally reaching circulation figures over 2,000 (Hellmuth and Piereth 2002, 72). Concerning his journal's profitability, Büsching revealed in a 1775 letter that 'for an entire sheet [eight pages] of the arduous *Wöchentliche Nachrichten* I receive one *Louisd'or*, or for one issue a half *Louisd'or'*. By working on his learned newspaper rather than the *Neue Erdbeschreibung*, he received the same income per sheet for comparatively less effort.⁸

The *Wöchentliche Nachrichten* was printed in a small octavo format. Each issue contained eight pages, although a few double issues were printed (Hoffmann 2000, 193). In its fifteen-year run it included only one image, namely a small woodcut 'Map of the region of the city of Boston in the Province of Massachusetts Bay in New

England' (n.d., n.p.), which accompanied a 1775 report on the American War of Independence.⁹ For the pleasure of reading Büsching's geographical fare, readers within the German lands paid two *Taler* per year for a subscription. Foreign subscribers paid more, and according to Büsching, 'for this the guilt lies not with us [the publisher and editor-author], but rather with the circumstances'.¹⁰ What these circumstances were was left unspecified.

Büsching's audience consisted of scholars and members of the educated classes, which included pastors, merchants and government officials. This audience was widened by reading societies, such as the *Greizer Lesegesellschaft* in Thüringen, which subscribed to his periodical (Greiling 2003, 115-16). His readership extended beyond the German lands to cities such as St. Petersburg, Moscow and London (Hoffmann 2000, 196, 199-200; on readership more broadly, see Hellmuth and Piereth 2002, 69-71). Readers encountered reviews of geographical, historical and theological books, reviews and adverts for maps, occasional letters to the editor, reprints of and commentary on Prussian government treatises, reports on population and its geographical distribution in Brandenburg-Prussia, and reports on scientific and political matters from correspondents such as the pastor Karl Gottfried Woide in London, a government official in Vienna named Friedrich Wilhelm von Taube, and historian Georg Friedrich Müller in St. Petersburg and Moscow.¹¹

Like Hager before him, Büsching was the editor and primary contributor to his journal. It was, then, an 'independent journal' (Kronick 1978, 266-70), a common editorial model in the eighteenth-century. Büsching took responsibility for all the printed content. The reader knew when he was speaking or citing someone else, and

this had consequences for his authorial voice. Whilst in his *Neue Erdbeschreibung*Büsching was careful to list his sources in prefaces and throughout the book, his
voice could get lost in the mass of geographical facts presented. This was a function
of the presentation format of the geographical grammar. In contrast with his
grammar, his periodical critically engaged with geographical, historical and political
works in a readable span of eight pages. In this way, the periodical form allowed
him to develop a stronger authorial voice.

Credibility and authority figured centrally in the *Wöchentliche Nachrichten*. This is clear from the preface to the inaugural 1773 issue, where Büsching outlined his reasons for beginning his new periodical venture. In the years prior to the journal's founding, Büsching had tired of reviewing books and periodicals for journals such as the *Göttingische Anzeigen* and his own *Magazine*. He had reached a point where, in his words, 'no new invitation could have moved me to pick up the pen again for reviews'. Yet, 'in the mean time', recounted Büsching,

I read many *incorrect*, *unjust* and *unsupported* judgements of books, and particularly statistical, geographical and historical ones, while my own collection of books concerning this type of scholarship increased yearly, and my map collection grew ever larger. I rarely found an ad for new maps – even though I had largely given up my extensive correspondence and limited myself to replies – and still often received geographical, historical and statistical news. Such reports deserved to be communicated to enthusiasts but did not suit my *Magazine*, and thus remained concealed with me.¹³

Büsching felt a moral responsibility to intervene in a geographical print culture that evidenced precisely the sort of unjust and partial scholarly practices he saw as detrimental to the project of earth description. Enthusiasts of geographical and historical knowledge deserved accurate, just and truthful judgments, and as one of the foremost geographical authorities in Europe, he saw himself as well positioned to provide such judgments.¹⁴

Büsching's prefatory remarks disclose profound claims to geographical authority. In claiming that he once maintained an extensive correspondence, and that he still received reports from his network of scholars, merchants, statesmen and clerics, he signalled to readers that he had accumulated substantial credibility in the learned world (Goldgar 1995, 29-30, 68), and that he still had access to a consistent supply of new and relevant reports. Having a consistent supply of reports was crucial for the success of learned journals (Goldgar 1995, 66; Schneider 2014, 149; Volmer 2000, 54). Editors of other journals, including Hager and Theophil Ehrmann, lacked such a supply and appealed to the reading public to furnish interesting and useful material. 15 Furthermore, by claiming that he intended to rely heavily on his vast book and map collection, Büsching signalled that his authority was partly grounded in the comprehensiveness of his personal geographical archive (on this archive, see Hoffmann 2000, 121-44). His preface reminded readers of his geographical authority and its underlying epistemological norms, and it helped to set his journal apart in a competitive 'literary marketplace' (Brandes 2005).

Büsching made claims to geographical authority throughout the *Wöchentliche*Nachrichten. For Büsching, authority was rooted in his ability to see manuscript

material such as letters, book manuscripts and unpublished or difficult to access maps. This is well illustrated in a 1773 report concerning Cook's voyages and the then forthcoming German translation of John Hawkesworth's *An account of the voyages undertaken by the order of his present majesty for making discoveries in the southern hemisphere* (3 vols, London, 1773; German translation in 3 vols, Berlin, 1774). In April 1773 under the heading 'London', Büsching wrote,

Today, I can share with you the joy that the sight of the charts belonging to this work caused me. Yes, what a pleasure to see at once nine maps of inhabited regions of the earth, which until now one has not know at all, or rather have only been observed on universal charts of the earth's surface through vague lines and points! These charts are at present a true rarity, not only in the German states but also in England, since they are not shown publically in London. However, the maps were sent to the Haude and Spener bookshop by Mr Hawkesworth, the editor of Mr Banks' and Mr Solander's travel account, to assist with the German translation that they are now being drawn for.¹⁶

Here, Büsching conveyed his experience of geographical enlightenment with enthusiasts of geography. Yet, his emphasis on the rarity of the maps and his privileged access to it were also assertions of his geographical authority. The conditions of possibility for this authority were his residency in Berlin and his connections to the Berlin-based Haude and Spener firm, who not only published the Hawkesworth translation, but also the *Wöchentliche Nachrichten*.

For Büsching, a scholar who travelled little in an era that 'believed perhaps more strongly than any other that travel makes truth' (Outram 1999, 281), claims to have privileged access to that truth in manuscript form were the most authoritative he could make. Of course, his privileged access to draft maps of the South Seas and translation proofs did not eradicate the problems of trust that lay at the heart of travellers' truth claims (Outram 1999; Shapin 1994, 243-66; Withers 1999a). As such, for the learned public reading Büsching's weekly, it was a matter of trust in the word, judgment and indeed the vision of Büsching, as much as it was a matter of trust in the accuracy of the charts and reports produced by Cook and his fellow travellers. Trusting the reports in Hawkesworth's account was itself difficult, because Hawkesworth had not taken part in Cook's first voyage, but rather was subsequently hired to edit the journals of Cook, Byron and other participants. His work was harshly criticised in many quarters, and this was partly because he presented it as a 'first-hand' account (Abbott 1982, 137-86).

Büsching's claims to epistolary and visual authority in the Wöchentliche Nachrichten faced challenges from other learned newspapers. Büsching's journal was an appealing target in a market where journals often stole material to fill their pages with interesting content, reduce publishers' costs and increase profit margins (Gierl 1999, 83-84). Only ten weeks after the Wöchentliche Nachrichten first rolled off the press, journals such as the Hamburgische Neue Zeitung had already poached content. In response, Büsching requested the Hamburg paper properly attribute its content: 'If the Hamburgische Neue Zeitung and others take something from my journal, will they be fair and just and always show where they have taken material from?' 17

Despite Büsching's appeal the problem continued. In the preface to the journal's second volume he again called out periodicals in Hamburg, one of the central markets in the German states for book and periodical publishing: '[A]s soon as they receive my weekly, the editors of papers that are printed in Hamburg and Altona include anything that they like from it...without saying where they took it from'.¹⁸ This practice was not uncommon, since periodicals that contained a 'colourful mixture of literary, geographical, historical, ethnographical and natural historical treatises or travel accounts...often concealed the sources for their reports, which were often journals such as Büsching's' (Böning 2002, 397). For Büsching, this practice was 'offensive and irresponsible', because when periodicals swiftly reprinted his material, those who first saw his content elsewhere viewed him as a thief. 19 By making the reading public think he was a plagiarist, journals that stole his material undermined the credibility and authority he had worked so hard to acquire. His concern with his credibility and reputation, moreover, reflected wider concerns amongst scholars in the 'ordered society' of the early modern German states, where honour was central to scholars' status and identity (Füssel 2006, 292, 296-98).

Büsching's reform efforts and German geographical print culture

The significance of Büsching's *Wöchentliche Nachrichten* as a vehicle for geographical reform, and for bolstering his authority, becomes evident if we consider Büsching's commentary on other geographical periodicals, along with the aims of periodicals he remained silent about.

Consider Büsching's engagement with Hager's Geographischer Büchersaal. In 1764, Hager had founded his review journal to, among other things, provide 'a detailed report and an impartial judgment of old and new geographical works'.²⁰ Hager envisioned his journal as a tool for writing a more complete history of geography. Büsching had supported this aim and Hager's journal from the outset, especially since he believed its aims resembled those of the Cosmographical Society's Beyträge zur Weltbeschreibung,²¹ a journal that never materialized because of social and economic problems within the Society and disruptions caused by the Seven Years War (Kühn 1939, 21-54). Furthermore, Büsching viewed Hager's journal as a useful supplement to his handbook, the Ausführliche Geographie (Complete geography, 3 vols, Chemnitz 1746-47).²² In August 1764, Büsching had even contributed material to Hager's journal. He sent Hager 'a list of the newest and best geographical books about Portugal and Spain, which I have used in my Geography but are not well known outside these empires'.23 For Büsching's generosity Hager expressed thanks and noted, 'I am pleased that my undertaking has been met with approval by this great expert on geography. It is an honour for this journal that he has offered to make some contributions to it'.24 Hager had solicited such contributions because he lacked an extensive correspondence network and geographical archive that provided him with a steady supply of new material.²⁵ In addition, he knew such contributions were necessary if he wanted to augment his geographical authority, especially in the wake of Büsching's calls for more rigorous source critical geography.

Yet, despite his recognition of the need for a material basis for geographical

authority, and despite his praise for Büsching's contribution to his journal, Hager continued to practice geography in a way that both valued and subverted Büsching's geographical authority. In November 1776, Büsching alerted readers of his Wöchentliche Nachrichten to Hager's subversion. Hager had copied 'entire sections' from Büsching's Magazine, had printed a 24-page 'sketch of all the maps' advertised in the Wöchentliche Nachrichten, and had copied from other sources. Hager claimed he had copied material from Büsching's Magazine so readers would buy Büsching's periodical. Büsching, however, argued that readers would see this as a strategy by Hager 'to complete his [Geographical] Library without great effort of mind' and thereby lessen his workload.²⁶

Even more, Hager at once recognised and subverted Büsching's authority when he reprinted an excerpt from, and appended a critique to, Büsching's 1773 preface to the *Wöchentliche Nachrichten*. For Hager, Büsching's weekly was too costly and his judgments often too candid. This candid style, noted Hager, led critics to call his style 'dictatorial and harsh'. ²⁷ For Büsching, such criticisms were largely rooted in misreadings of his criticisms of plagiarists and personal vendettas. He acknowledged 'candidness...clearly belongs to my shortcomings', yet argued that his candid judgments were credible because they were rooted in his experience working on geography, his access to uncommon reports and willingness to publically acknowledge and correct his errors, a practice that ran 'against the custom of all other reviewers'. ²⁸ Büsching's engagement with Hager underscores that claims to and the subversion of authority were closely interwoven in the making of geographical print culture, and show that authority was subverted not only in the

production of geography books, travel accounts and maps, but also in the making of geographical periodicals.

As a counterpoint to Hager's case, consider Büsching's engagement with Johann Ernst Fabri's Geographisches Magazin [Geographical magazine]. Büsching alerted the learned public to Fabri's new endeavour in January 1783. Fabri's new endeavour appeared promising: 'Fabri's geographical elementary books make it probable that the geographical Magazine...will not be geographical hackwork, but rather contain useful information', such as 'reports on geographical books and maps, excerpts from travel accounts, geographical letters and novelties, and also geographical treatises, not to mention other purposeful material'.²⁹ After Fabri's magazine appeared, Büsching praised him for successfully carrying out his plan for a useful periodical. 'The printed reports from handwritten sources are numerous, and support the accurate and useful knowledge of particular places and regions', said Büsching of one 1784 issue.³⁰ Likewise, speaking of the third volume of Fabri's journal, Büsching noted that 'geography clearly gains much'. ³¹ Fabri's journal was not faultless, however. Fabri included material that Büsching believed did not belong in the journal, and occasionally suggested that readers compare Fabri's reports with those in his own Magazine. 32 Still, Büsching did not criticise Fabri for copying material from his journal or for offering unjust judgments. Fabri's journal more closely approximated his ideal for a useful geographical periodical than did Hager's.

How closely other geographical journalists adhered to Büsching's practices and ideals is more difficult to discern. Editors expressed similar concerns with the

credibility and authority of sources. Writing in 1773, the editor of the Vermischte Beyträge zur physikalischen Erdbeschreibung [Various contributions to physical geography, Brandenburg 1773-87], J.F.W. Otto, informed readers that he only printed reports from sources 'bearing the seal of credibility'. 33 Theophil Ehrmann, editor of the Magazin der Erd- und Völkerkunde [Magazine for geography and ethnography, Gießen 1782-83], saw issues of trust and credibility as central for him as an editor and for geographical scholarship more broadly.³⁴ For Ehrmann, the poor quality of many geographical sources meant that 'with every step he takes in his field of knowledge, the geographer has twice as much cause to ask himself: whom to trust?'35 Ehrmann and Otto's concerns with trust and authority are difficult to attribute directly to Büsching's influence, because neither referred to Büsching in their prefatory remarks, and because concerns with trust, credibility, accuracy and precision had become increasingly significant for scholars in the later eighteenth century (Bödeker 1986, 286-87; Bravo 1999). Still, given Büsching's high standing in the learned world and geographical circles in particular, Otto's and Ehrmann's remarks can plausibly be read as a testament to the success of Büsching's reform efforts.

Commentary in German and British periodicals suggests Büsching's weekly helped bolster his geographical authority. As an anonymous commentator wrote in a 1783 review of Büsching's *Magazine* in the London-based *A New Review*:

It is proper that the learned in this country should be made acquainted with the nature of this publication of Professor Busching's [sic], as the author's reputation stands so deservedly high on account of his Geography, and the monthly magazine of geographical intelligence which he publishes at Berlin [i.e. the Wöchentliche Nachrichten]. Know, therefore, learned reader, that this is a collection of original, authentic, and important papers.³⁶

For an anonymous author of a 1788 tribute essay to Büsching, the *Wöchentliche Nachrichten* testified to Büsching's 'mature judgments' concerning 'geographical works', as well as his extensive reading in the field.³⁷ The successful *Allgemeine geographischen Ephemeriden* underscored the significance of Büsching's weekly when they noted the glaring absence left in the print market after Büsching ended his geographical journals.³⁸ In 1817, the editor of the *Neue allgemeine geographische Ephemeriden* told readers he strove to edit a 'lasting journal', something 'that almost no one has managed to do since the outstandingly meritorious, late *Büsching*'.³⁹ His periodicals' success owed much to his earnest commitment to a moral economy of knowledge that rejected the practices that impelled humanist-inspired geography, along with the commercial imperatives that drove 'pens for hire' on London's Grub Street and elsewhere.

Yet, however successful Büsching's efforts were, they failed to erase the competing geographies of trust and authority at work in German geographical print culture. Rather, those geographies seem to have sharpened by the late eighteenth century. Around 1800, geography as a discipline and discourse gained increased prominence in the learned world, and an increasing number of hack writers in the German states sought to profit from this trend. In response, some scholars worked harder to establish criteria for scientific writing in geography, which writers often described as 'critical geography' (Fischer 2014, 219-22). Concern with criteria for

scientific writing was the result of broader changes in the questions and debates that occupied scholars around 1800. Nevertheless, at stake were the same basic issues of epistemic credit and geographical authority that had impelled Büsching to embark on his ambitious geographical project.

Periodicals, the history of geography and the geography of the book

This article has argued that periodicals' periodicity and materiality transformed the character of geographical print culture in the later eighteenth century. Drawing on the case of *Aufklärungsgeographie*, it has shown that the periodical made geographical authorship and readership more dynamic and public, and that it both strengthened and undermined geographers' authorial voice. Periodicals' periodicity allowed editor-authors such as Büsching to respond more quickly to criticism and plagiarism, whilst periodicals' relatively low price, and status as the central print medium of the *Aufklärung*, meant geographical debate and criticism took on a more public character. Periodicals strengthened geographers' authorial voice through their inclusion of critical book reviews, commentaries and articles. At the same time, geographers' authorial voice was undermined by acts of plagiarists that stole material to meet enthusiasts' constant demand for new and interesting content.

This article has wider implications for understanding the historical geographies of science. Crucially, it shows that understanding the making and material print form of periodicals is crucial for understanding the making of geography's moral economies of knowledge. Büsching's periodical geography, I

have argued, was significant precisely because it sought to reorder the trust relations that defined geographical practice. Once grounded in trust in past authorities, Büsching established a moral economy of knowledge rooted in distrust. As in the case of seventeenth-century science, this emphasis on distrust was accompanied by new ways of *managing* trust in printed, written and spoken testimony, rather than the complete rejection of trust (see Shapin 1994, 193-242, especially 195, 211-242). For Büsching, the methodological means for managing trust was source criticism. This new means of managing trust and its corresponding scepticism of past authorities were the grounds for a new 'epistemological decorum' and civil order in geography (Shapin 1994, 193-242; see also Withers 1999a). Within this order, plagiarism was – to borrow Shapin's phrase – the 'ultimate incivility', because it led to both 'the withdrawal of trust' in new, critically grounded truth claims about the world, and to the withdrawal of trust in the geographer's 'moral commitment to speaking truth about the world' (see Shapin 1994, 36). Taken together, this great incivility and Büsching's efforts to establish a new epistemological decorum shaped the making of geographical print culture in the *Aufklärung*.

By now it is clear that 'books cannot be understood outside their geographies' (Ogborn and Withers 2010b, 25). As I have suggested here, the same holds true for periodicals. Like other print forms, periodicals must be understood as the product of interwoven geographies of scientific practice, commerce and power operating across scales. Such geographies must be understood in relation to geography books narrowly understood, travel writing and geographical speech (Ogborn and Withers 2010b, 19; Keighren 2013, 752-53). Yet, I have argued that periodicals also create their

own geographies of authorship, reading and epistemic credit through their material form and periodicity. By disclosing how such geographies shaped broader geographies of print and science, scrutiny of periodical geographies can advance scholarship on the geography of the book. Moreover, if 'the geography of the book is still defining its remit' (Keighren 2006, 537), I have shown that its remit must encompass periodical geography.

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¹ Göttingische Anzeigen von gelehrten Sachen 1 (21 Apr. 1759) [Review of J Klefeker, Spicilegia sive commentationes geographicae, Hamburg 1758] 429-31.

² Staats- und gelehrte Zeitung des hamburgischen unpartheyischen Correspondenten no. 73 (8 May 1759) unpaginated [3-4] and no. 74 (9 May 1759) unpaginated [3-4].

³ Niedersächsische Staats- und Universitätsbibliothek Göttingen, Nachlaß Johann David Michaelis, Codified Manuscript Michaelis 321, A F Büsching to J D Michaelis, n.p., n.d. [ca. Apr. 1759], fols. 164r-v, '...polemischen recension ...welche auf eine solche seltsame und lächerliche Weise wieder mich gerichtet war. Niemand, der meine recension mit dem Buch verglicht wird sie hart und unbillig finden....Und warum soll den bey geographischen Büchern nicht eben dieselbe Wahrheit und Unparteylichkeit beobachte[t] werden als bey andere?' Based on the personal tone of the review and Büsching's knowledge of the German learned world, his claim that Klefeker authored the review seems well founded.

⁴ Cheaply produced introductory textbooks cost less than some periodial subscriptions. Johann Jakob Schatz's *Kern der Geographie* (Vienna, 1774), for example, cost nine *Groschen*, whilst a subscription to Büsching's *Wöchentliche Nachrichten* cost two *Taler* (one *Taler* was equal to 24 *Groschen*). See *Wöchentliche Nachrichten von neuen Landcharten und geographischen, statistischen und historischen Büchern und Schriften* [hereafter WN] 2 (6 Jun. 1774) 178; WN 1 (27 Dec. 1773) Preface, 8. For a broader discussion of geographical journal audiences, see Fischer (2014, 192-201).

⁵ Göttingische Zeitungen von gelehrten Sachen (16 Nov. 1752) 1122-23.

 $^{^6\} Geographischer\ B\"{u}chersaal\ zum\ Nutzen\ und\ Vergn\"{u}gen\ [hereafter\ GB]\ 1\ (12\ Feb.\ 1764)\ Preface,\ 4v.$

⁷ GB 1 (12 Feb. 1764) Preface, 4v.

⁸ Büsching to Rochow, Berlin, 22 Nov. 1775, in F Jonas and F Wienecke eds *Friedrich Eberhard* von Rochows sämmtliche pädagogische Schriften 4 vols (Reimer, Berlin 1907-10), vol 4: 125-26, cited in Böning (2002, 356-57). Böning is cited because I have been unable to consult the printed Rochow letters.

⁹ WN 3 (11 Sept. 1775) 290-91.

- ¹⁰ WN 1 (27 Dec. 1773) Preface, 8.
- ¹¹ See for example WN 2 (12 Dec. 1774) 403-404; WN 2 (10 Jan. 1774) 13-16; WN 5 (22 Jun. 1777) 182-84.
- ¹² WN 1 (27 Dec. 1773) Preface, 3-4, quote at 4.
- ¹³ WN 1 (27 Dec. 1773) Preface, 4-5, my emphasis; see also WN 4 (1 Jan. 1776) 8.
- ¹⁴ See, for example, WN 4 (11 Nov. 1776) 372 [Review of Hager, GB, issue 7].
- ¹⁵ See GB 1 (12 Feb. 1764) Preface, 4v-5r; Magazin der Erd- und Völkerkunde (Apr. 1782) Preface, 2v.
- ¹⁶ WN 1 (26 Apr. 1773) 135.
- ¹⁷ WN 1 (8 Mar. 1773) Nachrichten, 80, emphasis added.
- ¹⁸ WN 2 (19 Feb. 1775) unpaginated preface.
- ¹⁹ WN 2 (19 Feb. 1775) unpaginated preface. See also WN 2 (1 Aug. 1774) 248; WN 15 (31 Dec. 1787) Beschluß dieser wöchentliche Nachrichten [hereafter 'Beschluß'] 423-24. Periodicals elsewhere in the German states, such as the Zweibrücken-based *Gazette universelle de literature* (Volmer 2000, 33-34), also stole material from Büsching's journal. See WN 1 (12 Jul. 1773) 217.
- ²⁰ GB 1 (12 Feb. 1764) Preface, 3r.
- ²¹ GB 1 (1764) Auszug aus Herrn D. Anton Friedrich Büschings Schreiben vom 17. Aug. 1764. aus Petersburg, an den Verfasser des Büchersaals [hereafter 'Auszug'], 365.
- ²² WN 4 (11 Nov. 1776) 370; WN 2 (6 Jun. 1774) 177-78.
- ²³ GB 1 (1764) Auszug, 365.
- ²⁴ GB 1 (1764) Auszug, 367 [Büsching quote], 366 note 'a' [Hager quote].
- ²⁵ GB 1 (12 Feb. 1764) Preface, 4v-5r.
- ²⁶ WN 4 (11 Nov. 1776) 370-71. See also GB 3 (1775) 83-115, 163-217 [excerpted sections from Büsching's *Magazine*]; GB 3 (1776) 530-55 [material from WN].
- ²⁷ WN 4 (11 Nov. 1776) 371; GB 3 (1776) 525-29 [Hager's excerpt of Büsching's preface and critical remarks].
- ²⁸ WN 4 (11 Nov. 1776) 371-72.
- ²⁹ WN 11 (6 Jan. 1783) 5.
- 30 WN 12 (20 Sept. 1784) 302. See also WN 12 (15 Mar. 1784) 84.
- 31 WN 12 (20 Sept. 1784) 302.

32 WN 13 (21 Mar. 1785) 90-91.

- ³³ *Vermischte Beyträge zur physikalischen Erdbeschreibung* 1 (24 Mar. 1773) Vorerinnerung, 3v. For a similar remark, see *Westphälisches Magazin zur Geographie, Historie und Statistik* (31 Dec. 1784) unpaginated preface. On Otto's journal, see Hohmann (1959, 458-59).
- ³⁴ Magazin der Erd- und Völkerkunde (Apr. 1782) Preface, 1r-2v. On Ehrmann, see Middell (2002, 260-62).
- ³⁵ T F Ehrmann, Ueber die geographischen Kritik, *Allgemeine geographischen Ephemeriden* 11 (Apr. 1803) 414-38, at 424. I owe this reference to Fischer (2014, 219), although the translation is my own.
- ³⁶ A New Review (Dec. 1783) 440-45, at 440-41.
- ³⁷ [Anon] Denkschrift auf Büsching *Westphälisches Magazin zur Geographie, Historie und Statistik* 4 (1788) 293-301, quotes at 300. For more praise, see [J G Meusel] Schreiben aus D...an einen Freund in London über den gegenwärtigen Zustand der historischen Litteratur in Deutschland *Der Teutsche Merkur* 2 (June 1773) 247-66, at 255; and *Allgemeine Literatur-Zeitung* 3 (Jul. 1786) columns 135-36, wherein an anonymous reviewer remarked that Büsching's *Magazine* (vol. 20, 1786) 'belongs to the few works that climbs to a significant number of volumes without losing content' (column 135).

 ³⁸ Büsching ended his weekly because his health was deteriorating, along with his already poor handwriting. See WN 15 (31 Dec. 1787) Beschluß, 424.
- ³⁹ Allgemeine geographische Ephemeriden 1 (Jan. 1798) Introduction, 3-54, at 3-4; Neue allgemeine geographische Ephemeriden (2 Jan. 1817) Preface, iii. On these journals, see Christoph (2014); Hohmann (1959, 460-61); Middell (2002, 294-309).