Concluding on the Meaning and Implications of Writing Climate Change

I started in search of those with the power to name climate change. I wanted to know why governments were not tackling this issue in a meaningful way, why greenhouse gas emissions continued to increase and why everything appeared to stay the same, while the climate system changed. The IPCC was the site to explore this, and I found an answer in the practice of writing. It is not the answer I expected. And at first, all I saw was scientific and political activity channelled into an exercise of building an international assessment practice that served to maintain the existing order. I wondered at the true utility of this and where climate change was in these activities, as they appeared to continue as they were before and after its discovery and with every scientific alarm that followed. With time this sense faded, because when you watch something for long enough, you see change and that is what I have come to see – a re-making of the order of relations in and through the IPCC and its practice of writing climate change, but not exactly as it was before. It is also a consequence of expanding my site of observation, slowly moving outward from the IPCC to the field of climate activity it is situated within and grasping the effect of this situation – the forces it generates – on how the IPCC practices its assessment and names climate change and the impact this has on collective agreement-making.

It is the analytical approach of the book that enables the IPCC and its assessment reports to be understood as sites and products of agreement making (Hughes et al. 2021; Hughes and Vadrot 2023). There are two dimensions to the book's analytical approach. The first is the capacity to situate the IPCC within and as a component of the broader struggle over climate change and the field of political activity this generates. In Chapter 3, I described the struggle to name climate change as ultimately a struggle over the distribution of social, political and economic resources or order and the values that underpin these arrangements. I identified the IPCC – the main knowledge provider – as the central site in global attempts to determine the meaning of this problem (Hughes 2015). To fulfil its mandated task and to

name climate change, the IPCC has developed and institutionalised a practice for producing assessment reports, what I refer to as the practice of writing. The second analytical dimension is the framework of actors, activities and forms of authority outlined in Chapter 4. This approach makes it possible to identify the social order of the IPCC's practice of writing, its relationship to the broader pattern and distribution of economic resources, how this order imprints on the writing of climate change, and how it is challenged and changes over time.

8.1 The Model of Science in Politics

When I began this research, I did not understand how centrally science is situated within politics and politics within science. Chapter 2 records my journey through models of science in environmental politics. The epistemic community model proposes that scientific knowledge comes before political action. In some respects, this reflects the emergence of climate change and other environmental issues at the time. Peter Haas was looking at emerging environmental problems and conceptualised the role that communities of transnational scientists had in constructing these issues that informed and shaped political action and the formation of new institutions (Haas 1989, 1990). The epistemic community model was influential in documenting the emergence of climate change on the political agenda. However, as scholars observed the global environmental treaty-making process more closely, such as Karen Litfin's study of the Montreal Protocol (Litfin 1994), it became apparent that the underlying assumptions that science informs politics and that this influence is unidirectional did not hold.

Litfin's work revealed that often it was not the scientists that were communicating the scientific knowledge on the discovery and extent of the issue, but actors that emerged through the treaty-making process – knowledge brokers – actors that proved adept at framing the science for policymakers. Litfin's study identified knowledge as something of a public good, available to all actors in the negotiating process to incorporate and deploy in their discursive strategies, rather than the preserve of its scientific producers, as suggested in the epistemic community model. This unravelling of the underlying assumptions continued as research turned from the physical and biological scientists that were central in initially identifying the problem to the fields of knowledge assessing the social and economic consequences of climate change, which identified struggle rather than consensus between disciplinary ways of knowing a problem (Bernstein 2001).

The epistemic community model remains a valid starting point for research interested in the role of science and communities of scientists in treaty formation. It sensitises the researcher to the balance struck between science and politics and government attempts to control the impacts of knowledge in the institutionalisation

of global advice. However, once a practice is in formation for the purpose of approving a knowledge base for collective action, the epistemic community does not offer an accurate depiction of the relationship between science and politics. I have observed and documented three sides to this relationship in the IPCC's practice of writing. On one side, there are the scientific communities invested in the production of climate knowledges from diverse disciplinary perspectives. The scientific conventions and measures of authority that structure the production of knowledge within these fields underpin the practice for writing climate change and order author relationships in its writing (Chapter 6). As the internationally recognised site *for* writing climate change, the IPCC and the field of climate politics that it is situated within also became forces in climate knowledge production (Hughes and Paterson 2017).

On the other side, there is the political activity orientated around responding to climate change, which again has its distinct forms of interests and measures of power that structure and orientate action. The IPCC is a central object or force within climate politics because its assessments provide the knowledge base for negotiated action as well as methodologies for reporting on action. As a result, member governments of the panel have increased their power in and over the IPCC's practice of writing (Chapter 4). This is evidenced in the struggle over the election of the bureau and the approval of the outline (Chapter 5), as governments attempt to maintain some control over how climate change is written through the next assessment.

The third side of this relationship are the places where, by necessity or through design, the science and politics of climate change are brought together, as in the IPCC's practice of approval in Chapter 7. At these sites and for specific purposes, climate knowledge producers and government delegates negotiating collective climate action and/or informing the national position on negotiated action are brought together for a set task, such as approving the wording of an intergovernmental assessment's key findings. The practice of approval is not the only site within the IPCC or the broader field of global climate activity where science and politics are brought together by design to exchange and/or craft a particular outcome, such as an SPM, a workshop report or standardised methods for national reporting. Sites for these exchanges are organised within UNFCCC meeting sites and coordinated with the publication of an assessment or special report through UNFCCC/SBSTA mandated, IPCC organised and author-led events, including expert dialogues and meetings, facilitated exchanges, workshops, side events and more impromptu at booths.

The Global Stocktake (GST) further institutionalised the design of sites and activities to bring climate science and politics together within the UNFCCC. The GST provides for a periodic stocktake of the implementation of the 2015 Paris Agreement 'to assess the collective progress towards achieving the purpose of

this Agreement and its long-term goals' (UNFCCC 2015, Art 14). The outcome of this five-yearly process is designed to inform parties 'in updating and enhancing' nationally determined contributions and collective efforts (UNFCCC 2015, Art 14), and ultimately for enhancing collective ambition in addressing climate change. The latest IPCC assessment reports are identified as a source of input as the 'best available science' for the GST, and during the technical phase a series of world cafés, roundtables, exchanges and poster exhibitions were thoughtfully crafted to facilitate exchange between authors and bureau members of the AR6 and government delegates (many of whom had approved its key findings), to establish the shared knowledge base from which collective progress could be measured.

This designation of the IPCC within the Paris Agreement is likely to have further increased the pressure on the practice of approval in the AR6 and beyond – as any object within the SPM has the potential to travel into and become a force to measure collective implementation. What I take from my observations across these different sites is that (climate) science and (climate) politics are always producing climate change as an object of knowledge and action and are – as forms of knowledge and action – continually being produced through the necessity to address climate change. In this way of thinking, science is not separate from or informing action; it is a central and constituent part of collective action or agreement-making on climate change.

8.2 Actors and the Forms of Authority That Matter

It is the interface between science and politics that has led scholars to study the IPCC as a boundary or hybrid organisation. As I have described in the different sides of this relationship, the origins of organisational practices and sources of authority in the IPCC are amalgamations drawn from both science and politics (Guston 2001; Miller 2004). This is evident in the practice of approval, where delegates learn the intricate details of the science of the underlying report for authoritative reasons to alter the text, and where authors negotiate this re-wording to avoid and accommodate political sensitivities. However, as I got closer to the IPCC, attempting to perceive it solely through its scientific and political content constrained the actors and activities that could be analysed as constitutive of the practice of writing. One of the main motivations of the study became to describe all the different actors that make up the IPCC, the activities they undertake and the forms of authority this gives them in and over the assessment. The analytical framework of the book, actors, activities and forms of authority, makes it possible to document the historical emergence of a social order within the IPCC's practice of writing climate change and to identify the distinct properties that are valued within the organisation.

The description of the IPCC and the order of relations in Chapter 4 reveal that while scientific and political authority remain central determinants of the culture and thereby the social order within the organisation and the conduct of the assessment, they are not the only forms of authority that matter (Hughes 2023). Those that led the establishment of the organisation had to find a way to fulfil its mandate - to produce assessments on the science, impacts and response measures to address climate change. This was not only a significant scientific undertaking; it was a huge administrative task. Realising a global assessment is dependent on the everyday seemingly mundane activities of scheduling and organising meetings, compiling and editing drafts, and harmonising and preparing final versions. The extent of these activities has grown as the fields of climate knowledge, the political demands and external scrutiny have expanded with each assessment cycle. This has required actors within the TSUs to codify authorship of the assessment and instil its importance to ensure the accuracy and rigour of the final report. This reveals the significance of the TSUs as a unit within the IPCC. The organisation depends on the TSU for realising an authoritative assessment, and actors within the unit, through their proximity to the emerging report, have the most in-depth knowledge of its progression, giving TSU actors unique forms of authority in and over the IPCC's practice of writing.

The TSU's forms of authority are also sources of capital for actors in the organisation that have close social relations to them and thereby access to and conduits for their knowledge on the assessment in practice to flow. These forms of capital are most readily available to the developed country co-chairs and governments that host these units. For the co-chair working alongside, this ensures their vision and leadership for the assessment materialises in the final product; for the hosting government, it equals the symbolic power to speak, be heard and to effect the decision-making of the panel, the writing of climate change and the rules by which climate change will be written (of which there is no greater power in the IPCC). The UK and US have hosted TSUs for 5 out of 6 assessment cycles, ensuring it is the culturally valued properties of these countries that govern the order of relations in the panel, bureau and the practice of writing.

TSUs return power to the powerful. However, the technical and administrative authority they hold means that they have potential to act simultaneously as upholders and re-makers of the order of the IPCC's practice of writing. Their role in upholding the scientific authority of the assessment is most visible during author selection, when the TSU applies scientific conventions for measuring a candidate's research impact and productivity. As Chapter 6 indicates, this can produce author lists that, if left unchallenged, reflect developed countries dominant position in the global knowledge economy. When the organisation establishes diversity criteria to ensure geographically and gender diverse authorship, it is the TSUs that must

find a practical way to identify the expertise that meets these criteria and can fulfil the government-approved outline during author selection (Standring and Lidskog 2021). Equally, when a more diverse authorship is appointed, it is the bureau and TSUs that have the capacity to ensure this translates into greater participation in the authorship of the report and broader perspectives on climate change written into the final product. Through organising diversity training, surveying and collating author views and establishing themselves as a point of contact to identify exclusions and harassments (IPCC 2019), the TSUs can play a key role in challenging the pervasive and reproductive character of scientific conventions and measures of authority in the IPCC's authorship of climate change. Either way, TSUs are order makers in the IPCC's practice of writing.

The book's account of the emergence of the TSUs (Chapter 4) and their capacity to structure the order of relations in the authorship of the assessment (Chapter 6) reveals that the forms of authority operating in the IPCC and structuring the order of relations in the organisation and its practice of writing continue to evolve with the forces and pressures exerted on the IPCC by its centrality in and to climate politics. This is also apparent in the emergence of the secretariat's role in and authority over managing IPCC media relations (Section 4.5). It is indicative of how an organisation, like the IPCC, has to continue to evolve in response to the pressures and forces that are generated by its situation within a field that its products shape. It also reveals that even in an organisation identified as a science-policy interface, other activities and forms of authority matter and shape the order and conduct of an organisation, which can only be identified through detailed study. The actor, activities and forms of authority framework makes it possible to take an organisation apart, to look beyond the forms of authority it may be recognised for and to identify empirically the actors and authorities that matter in shaping its practices and products.

8.3 Government Participation and Power

Studying the IPCC through the actors, activities and forms of authority framework reveals the extent of government involvement in the practice of writing and the symbolic power of some over its conduct. It also illuminates the extent of struggle in the practice of approval and increased level of participation by some developing countries during the final stage of writing, where the assessment's key findings are reformulated for presentation to the world and impact on UNFCCC negotiations. Identifying the extent of member government involvement in the practice of writing required following the assessment along the pathway of its production. It was when documenting the decision to repeat the assessment cycle, the election of a new bureau and the approval of the outline that the activities and avenues for

governments to influence the direction and content of the next assessment became apparent.

Chapter 5 reveals the potential for the bureau election to distribute capital and structure the order of relations in the panel, which explains the extent of back channel discussion and manoeuvring documented in WikiLeaks (Section 5.2). Bureau members may sit alongside the national delegation during panel proceedings and the delegate is able to attend bureau meetings, where panel decision-making is discussed and decisions rehearsed. This is important for developed and developing country member governments. For developing country members, it enables them to expand the expertise within their delegation and potentially double their capacity to invest in and undertake IPCC activities, as the travel expenses of both the bureau member and delegate are funded. For all member governments, it enables greater access to and knowledge of the assessment process in practice, as well as the opportunity to build and extend social relations across the bureau, the WG TSUs, the secretariat and other panel members during the smaller, more intimate bureau meetings. As a result, bureau membership enables the accumulation of valuable forms of social and cultural capital, which translate into symbolic power during intergovernmental approval.

It is the approval of the report outline that is most revealing of member government's capacity for structuring the direction and content of the next assessment. The scoping and approval of the report outline serve the dual function of ensuring the next assessment is relevant to its main stakeholders - member governments - and that the co-chairs vision is to some degree aligned with the government's expectations and political concerns in and for the final product. The stakes for member governments in the content of the next report become apparent during the outline's approval, as certain concepts and terms are identified by governments as requiring assessment or there is an attempt to remove them from the outline altogether. This was evident in the struggle over the identification of developed and developing categorisation for assessment in WGIII's outline in the AR5. The Chinese and Saudi Arabian delegations were again careful to ensure this was not inadvertently introduced into the outline for the AR6. However, it is not just terms directly associated with UNFCCC negotiations that can become objects of struggle and requests for removal, as the identification of black carbon in WGI's assessment for the AR5 indicates. Any scientific term or object that shapes global understanding and calculations of the effects of a gas, aerosol or particle on atmospheric warming has the potential to influence climate negotiations and government's policy response in and through the IPCC's practice of writing.

Once the outline is approved, the next activity for governments is the nomination of authors (Section 6.1). Zooming in on the focal point's role and the government's institutionalised process for identifying authors reveals the asymmetry in

capacity between developed and developing countries in undertaking IPCC activities. Ninety percent of developed countries surveyed submitted nominations and identified the institutional processes for raising awareness in the national scientific community (IPCC 2009n). This compares to half of developing and EIT country focal points that were surveyed (IPCC 2009n). The first report by the special committee on developing country participation, published in 1992, indicated that the degree of co-ordination between departments and ministries and the 'manpower' [sic] 'to receive, communicate and disseminate information' was not available in most developing countries (IPCC 1992b: 157). The asymmetry in capacity to fulfil the necessary IPCC activities to meaningfully participate and impact the IPCC's practice of writing has continued across assessment cycles, as is apparent from the limited developing country participation in the expert and government review of reports (6.4 and 7.2). Not undertaking a government review has a double impact on developing countries. First, government actors and expertise within these countries are not able to identify the gaps and sources of knowledge necessary for broadening the assessment and ensuring its relevance to their national needs. Second, it is through the review that governments become familiar with and expert on the content of the report and develop a national position on the text. This ensures informed and focused interventions during the approval and concrete proposals that are more likely to be heard and have an impact on the writing of the SPM.

Analysing each activity as an element within the practice of writing makes these patterns of asymmetry and their impacts apparent. Each activity in an assessment's production enables governments to involve and invest in this global attempt to write climate change, ensuring the product is relevant to the national interests and needs for and from climate knowledge. Nominating authors and conducting a government review of the emerging text are not simply avenues to shape the content; they are avenues to know the content and build capacity on and for its re-writing. Through the activity of reviewing, member governments have the potential to learn the latest knowledge on climate change, assess and disseminate its across relevant departments, develop an informed position and to ensure the final product is relevant to national climate policy needs. It is those countries that have the resources to invest, fulfil the government activities and gain knowledge through their undertaking that the IPCC's practice of writing best serves.

Analysing the IPCC makes it apparent that not all member governments are equal in their capacity to influence bureau elections, the outline of the next assessment, its scientific content through the participation of the national scientific community or the wording of the report's key findings. There are vast asymmetries in every stage and element of the IPCC's practice of writing. Bourdieu's concept of capital is critical to revealing the interrelationship and dependency between IPCC participation and economic resources, which are the condition for any country

to be present at a meeting, to learn the process and become a meaningful participant within it. However, the resources to attend the meeting, as important as they are in enabling presence, are not sufficient to create a meaningful participant. To understand how symbolically powerful member governments emerge, I have documented the history of the emergence of the IPCC and the cultural foundations of the organisation that those leading the process lay. This is important because it identifies the properties that are valued by an organisation and order relations in that social space, instantly empowering actors embodying this way of being, knowing and doing and designating as inappropriate to the style and conduct of work those that do not.

The cultural foundations of the IPCC elevated scientific and technical modes of knowledge and expertise as the valued properties in members and as ways of organising proceedings. This already provides some explanation for the persistence of the developed and developing country divide within the IPCC and the organisation's ability to meaningfully challenge the asymmetries of participation. Unlike the international scientific actors leading the process, many developing countries did not identify climate change as a scientific and technical issue, but an issue of development. Initial assessment quickly established that developing countries did not have either the scientific/technical expertise on climate change or the resources to attend multiple meetings across the world, through which this expert capacity and knowledge of the emerging process could be developed (IPCC 1992b). From the outset, this had profound effects on some developing countries willingness to accept the IPCC as the basis of knowledge for negotiating climate change (Hughes 2015). And an even greater and lasting impact on all developing countries capacity to become meaningful participants in the IPCC's practice of writing.

8.4 Imprinting Order

What is the imprint of order on the IPCC's practice of writing and most critically, its' products? Carried through the scientific, political and administrative activities of writing climate change and imprinted on its product are the social order of relations of its making. This social order is a product of the distribution of economic, social, scientific and political resources that enable some actors to leave a greater mark on naming climate change than others. This distribution of resources is not unique to the IPCC, although within the IPCC there are uniquely valued properties, it is contiguous to and a reflection of the global distribution of resources.

What we learn from the book is that meaningful participation in the IPCC is resource intensive. On the author and assessment side, interest in the IPCC is dependent on having the national resources to invest in generating and supporting scientific knowledge production and the related institutions and infrastructure

(Chapter 6). A national author's capacity to participate is dependent on time and access to literature. This brings the focus back on national research capacity and the infrastructure and supporting institutions that climate knowledge production is dependent upon (libraries, laboratories, WiFi, computers, computing power, instruments, software, etc.), plus research support for authors to schedule sufficient time for the assessment. On the government side, interest in the panel requires having a designated focal point that preferably remains constant over time, attends all meetings and has the necessary human resources to undertake IPCC activities through which the process is learned, capital accumulated and symbolic power gained to imprint on the practice of writing. These activities include identifying and nominating national experts as authors, having a bureau member, participating in relevant task groups, organising and conducting a government review of the draft report and preparing a well-informed position on the SPM text. This means that IPCC participation is first and foremost dependent on economic capital and a countries capacity to participate is a product of global order.

As the economies and resulting greenhouse gas emissions of some developing countries have increased so has the national scientific capacity, which is observable in the number of authors and co-chairing of an assessment. However, even for countries with growing strength in climate knowledge and expertise, this is not sufficient to significantly imprint on the writing of climate change. It is therefore in the practice of approval that some developing countries emerge as effective writers of climate change. Central to this is the need for consensus (De Pryck 2021), which ensures that a strongly held and spoken objection must be accommodated (with all the clauses identified, about what constitutes the symbolic power to speak and have a strong objection heard). Interestingly, over the last three assessments one of the greatest struggles has emerged over assessment and analysis of developed and developing categories and related responsibilities for emission reductions in the UNFCCC. I have documented this across the approval of the outline (Section 5.4), through review comments (Section 7.2) to the approval of WGIII's contribution to the AR5 (Section 7.3). In the case of the AR5 this resulted in all related content being deleted and careful guarding of the approval of the outline for the AR6 to ensure it remained unassessed.

Another interesting example is the increased participation of Caribbean member governments in the IPCC. In Chapter 7, I document how, combined, Saint Lucia, Saint Kitts and Nevis, and Trinidad and Tobago totalled 6% of the total interventions across the three WGs of the AR6. In the approval sessions, these states frequently intervened to support the authors and to strengthen mentions to issues core to their interests, such as the 1.5 temperature goal, the impacts of climate change, barriers to adaptation, loss and damage and urgency (Bansard, Eni-ibukun and Davenport 2021; Eni-ibukun et al. 2022; Templeton et al. 2022). This reveals

just how important the IPCC's practice of approval is for challenging how climate change is named as a collective problem. As developing countries have argued all along, climate change is not just a scientific and technical issue that can be left to scientists and scientific forms of knowledge predominantly produced in the global north to write. Climate change is an issue of development. Core to this problem and knowing this problem, is the global distribution of economic resources and the GHG emissions generated in production and through accumulation. There is order in the IPCC's practice of writing, there is reproduction, and there is also change – as the distribution of resources within the IPCC reflects and facilitates shifts in global order through writing climate change.

8.5 The Implications of the Book

The actors, activities and forms of authority framework of the book makes it possible to study and understand international organisations, like the IPCC, differently. It reveals the social order of relations within an organisation and the values that underpin the distribution of authority and symbolic power, which is a power to shape the conduct of the organisation and its products. The social order of an organisation imprints on its products through the activities that compose it. Mapping the social order and understanding what constitutes that order of relations and with what effect on organisational products makes it possible to identify points to intervene and change.

In the case of the IPCC and as documented in Chapter 4, it becomes apparent that the bureau played a central role in laying the cultural foundations of the IPCC. This included privileging technical and scientific forms of authority in the conduct of the IPCC's work, as well as a concern for broadening the participation of developing countries (Section 4.1). The designation of these values was critical to establishing the IPCC as the leading assessor of climate change and maintaining and strengthening the organisation's symbolic power to name this problem (Sections 3.1 and 4.2). The bureau remains a critical determinant of cultural values in the IPCC. In Chapter 6, I describe how the organisation's focus on gender disparity has significantly increased the number of women in the assessment. I also indicate that while earlier bureau members devalued developing country participants, other bureau members have been key for maintaining the organisational focus on the issue. These actors, with the support of secretariat and TSU actors, have identified measures and mechanisms to create a more inclusive order in the writing of climate change, despite a very limited capacity to shape the broader distribution of social, scientific, political and economic resources. This indicates that within the IPCC, bureau members are well-placed as change makers in the AR7 and beyond. It is in this way that the actors, activities and forms of authority framework

makes it possible to both map the order of relations and identify the actors and activities through which the valued properties of the organisation can be challenged and changed.

Understanding the IPCC as practice of writing and the centrality of order in and to the writing of climate change has profound implications for the design of new knowledge processes. This understanding can be used to inform the design of knowledge inputs into treaty-making to prevent and repair global environmental degradation that we as peoples collectively face. The IPCC model has already proven influential in the design of IPBES, which has been referred to as the IPCC of biodiversity (Larigauderie and Mooney 2010). Treaty makers and scholars alike are again looking to the design of the IPCC in negotiations for a new global science-policy body for chemicals and waste (Wang et al. 2021). What are the implications of studying the IPCC as a practice of writing for the design of knowledge bodies for treaty-making purposes? The practice of writing and the actors, activities, forms of authority framework bring to the fore two key dimensions. The first is that science is a site of struggle in agreement-making. The second is that social order matters and emerges from the design of a new organisation, which itself is a product of the existing distributions of economic, social, scientific and political resources or global order.

Despite attempts to separate science and politics and theoretical ideals about the importance of maintaining this separation, science and politics are inseparable in the naming of an environmental issue for collective action. As a result, any assessment body for the purpose of treaty making will be a site of struggle over the meaning of the issue for and in agreement-making. In the establishment of a new body, this struggle plays out over the following dimensions:

- 1. Where the body will be situated in relation to the treaty the power it will have in determining decisions and establishing the basis for evaluating implementation.
- How the knowledge products will be written, on the basis of what rules and procedures, and by what actors, through which activities and on the basis of what authority.

These initial decisions determine the culture of an organisation – the valued properties and their distribution, as recounted in this book for the IPCC. It is this culture that will order relations within the new body and through the assessment activities imprint on the final product. That means, from the outset, the most important facet of a new body is to design for meaningful participation by all members, so that the emerging culture embodies and reflects the multiple worlds and orders that exist in the world and which must all have a place and be preserved in and through collective environmental agreement-making (de la Cadena and Blaser 2018; Vecchione Gonçalves with Hughes 2023). This can be hard to ensure in the political struggle

over a new body, in which the powerful seek to privilege the cultural properties of their power. However, if this dominance is left unchecked, there will be nothing left. The order must reflect the diverse ways of knowing, understanding and valuing the Earth so that preserving life on Earth remains central to all activities and valued forms of authority. Perhaps from this, everything else is simple in comparison: practical design and mechanisms to ensure participation by all, as learned through the lessons of the IPCC's practice of writing.