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# THE ELPHINSTONE REVIEW

Volume XII, May 2026

THE ELPHINSTONE REVIEW | Volume XII, May 2026

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The Elphinstone Review is the University of Aberdeen's student-led academic journal. Our aim is to publish the very best work produced by undergraduate students at the University, meanwhile providing students with invaluable experience of editing and writing for an academic journal.

Founded in 2015, The Elphinstone Review started as an Arts and Social Sciences journal. Since then, however, we have expanded our scope and are interested in receiving submissions from all subject areas. As a result, the editorial board each year ideally consists of students from all schools and all levels of study.

We hope you will enjoy this year's volume of The Elphinstone Review. Our hope is that you will find yourself inspired by its content and appreciate the outstanding work produced at The University of Aberdeen.

# The Elphinstone Review

Volume 12

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## Editors-in-Chief

### **Georgina Burns**

*Georgie Burns is an MA Archaeology student who has developed strong research skills and a deep passion for writing and editing. With a focus on diversity and inclusion, Georgie is dedicated to fostering a welcoming atmosphere in cultural spaces and ensuring that knowledge is accessible for everyone. This mission has been carried into her work at The Elphinstone Review.*

### **Sophie Flett**

*Sophie Flett is an MLitt English Language and Literature student within the School of Language, Literature, Music and Visual Culture. Her love for editorial work is one that has stemmed from an enthusiasm for research and prose, with her specific interest in writing being subjects from the arts and humanities. She aims to bring her dedication to literature and passion for creativity through her collaborative approach to editing at The Elphinstone Review.*

### **Naelya Gozalova**

*Naelya Gozalova is a Genetics student within the School of Medicine, Medical Sciences and Nutrition who has a keen interest in scientific writing and editing. With experience in science outreach as a Science and Technology writer for the Gaudie, Naelya aims to maintain the cross-disciplinary approach of the journal and encourages all students, regardless of discipline, to consider editing and publishing for The Elphinstone Review.*

### **Anna White**

*Anna White is an MLitt Creative Writing student at the School of Language, Literature, Music, and Visual Culture. Her primary focus is on the resistance literature of international liberation movements. Anna's experience in cultural exchange has made her enthusiastic to welcome editors and writers from a range of disciplines to The Elphinstone Review.*

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*Simra is a fourth-year Biochemistry student currently on a placement year. She enjoys reading and publishing on STEM topics, particularly astronomy and emerging healthcare innovations.*

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*Lucy is currently in her final year of study at the University of Aberdeen, completing her BSc (Hons) in Neuroscience with Psychology. Her academic interests lie strongly in neurodegenerative diseases, with her research focusing on Parkinson's and Alzheimer's disease; she also has an avid interest in promoting gender equity in science research and accessible science communication.*

### **Rebecca Edwards**

*Rebecca is currently studying for her undergraduate degree in English and Philosophy, with particular areas of academic interest including political philosophy, gender, and queer identity/literature. Next year she will begin studying for her master's degree at the University of Exeter and hopes to continue to engage with academic publishing, both as a writer and editor, throughout these studies.*

### **Hannah Fortune**

*Hannah is a second-year undergraduate studying history and international relations. She writes and edits for the Gaudie, the student newspaper at the University of Aberdeen, as well as local newspapers in Fife! She applied to be an editor for the Elphinstone Review as she was excited to read a variety of work from her peers as well as improve her own writing and formatting through the editing process and training.*

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*Yolanda is a Neuroscience with Psychology student currently in her third year of study with particular interest in behavioural and developmental neuroscience, she hopes to go on to work in the public health sector.*

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*Rebecca is studying a MSc in Translation Studies with a language combination of English and French. Part of her course involves translating various literary texts, as well as medical, arts, and culture articles, which she is compiling into a translation portfolio. Outside of academics, she enjoys painting and attending dance classes.*

### **Jessica King**

*Jessica is a new editor with The Elphinstone Review, pursuing an MSc in Osteoarchaeology at the University of Aberdeen following four years as a professional archaeologist in Canada. Her research interests regard ancient oral health, dental anthropology, and women in archaeology.*

### **Kirsty Nicholls**

*Kirsty is a Candidate for Full-Time Minister of Word and Sacrament in the Church of Scotland and a Theology student, with a particular interest in pastoral care and intergenerational community. She holds degrees in Politics and Broadcast Journalism and previously worked in journalism and communications.*

### **Chukwunoyenim Okoh**

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# The Elphinstone Review | Volume XII: May 2026

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# **The Elphinstone Review | Volume XII: May 2026**

*The opinions expressed in the articles presented hereafter do not necessarily reflect the views of the institution, the editorial board, or the contributors. They should be viewed as exercises of academic criticism intended to spark intellectual debate.*

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## Editorial

*Georgina Burns, Sophie Flett, Naelya Gozalova, and Anna White*

We are proud to present the twelfth volume of The Elphinstone Review, the University of Aberdeen's academic journal. This year's edition is the culmination of new ventures, brilliant authorship, and the dedication of our editorial team. True to our mission, this volume offers a snapshot of Aberdeen's scholarship at its finest. With submissions from all schools, our editorial board selected twelve outstanding papers that reflect the University of Aberdeen's diverse research and demonstrate the strength of interdisciplinary research in addressing complex issues. From exploring the applicability of international law to ethical debates on artificial intelligence in education, and an introduction to autism and menopause, this year's contributions aim to inform, challenge, and inspire our readers.

The Elphinstone Review is a collaborative journal, and we are immensely grateful for the opportunity to bring this volume together and lead this year's team and expansions. We especially thank everyone who has supported and encouraged us in bringing this new edition to life. Our heartfelt thanks go to the Langstane Press, whose generous donation has kept the printed journal alive and whose support, particularly the continuous help from Alan Bruce, has been invaluable throughout this process. We are also thrilled to feature another beautiful cover, designed by Alison Hay.

This year also saw the introduction of a significant new chapter for The Elphinstone Review with the success of our first symposium, where our authors demonstrated their exemplary research alongside Granite, our postgraduate journal co-host. We are proud of this new milestone, as the event created a vibrant space for engaging with fascinating research and furthered our goal of fostering a strong, interdisciplinary academic community within Aberdeen's student body and alums. We are proud of this milestone, which provided invaluable presentation experience, expert training in academic writing and publishing, and thoughtful feedback, enriching our editing process. We are sure that the great success of this event will not only support future editors and authors but will also inspire future initiatives for the Elphinstone Review.

To those reading who feel inspired, whether as a reader, writer, editor, or creative contributor, we warmly encourage you to get involved in the future. On behalf of our team, thank you for joining us in celebrating the work of our peers. We hope you find this volume as thought-provoking and inspiring as us.

## Misappropriations of Vikings in Nazi Propaganda

Sofie Dennis<sup>1</sup>

*This paper explores how Nazi officials misused Norse viking imagery and concepts to promote their racial ideologies. It discusses both the more conceptual aspects of this misappropriation, covering topics like Ariosophy, Nordicism, and Herrenrasse, as well as its practical applications through various forms of propaganda. The entanglement between Norse ideas and German nationalism emerged in the 19th century with figures like Richard Wagner and the Völkisch movement. Völkisch ideas also encompassed racist and antisemitic ideas that persisted and evolved into the 20th century, eventually culminating in Nazi ideas of racial superiority. This essay argues that the Nazis used fictionalised versions of vikings and Norse peoples as a racial and masculine ideal for other Aryans to aspire to, thereby alienating racial others and justifying their own racist practices – such as eugenics through forced or involuntary sterilisation. It analyses propaganda posters and magazine excerpts from the period to demonstrate the communication of viking and Norse ideals to the general populace. It also discusses the role of esotericism in Nazi practices, and how further separation between upper and lower classes made Ariosophical ideas seem fashionable and aspirational. In regard to these ideas surrounding the misappropriations of Nordic and Norse culture, this paper argues for the continued discussion of past and ongoing exploitations of historical narratives and peoples to promote dangerous political ideologies, in order to avoid such circumstances in the future.*

Media representation can be extremely effective in shaping enduring perceptions of historical communities, and one of the most commonly represented groups are vikings. However, beyond modern-day perceptions of vikings that have been shaped largely by TV shows and movies, they have been the subject of calculated propaganda efforts

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<sup>1</sup> Sofie is a fourth-year student studying an MA in Celtic and Anglo-Saxon Studies and History. Her academic research focuses on Norse mythology with her dissertation exploring how archaeology, literature, and linguistic evidence combine to enhance our understanding of Norse gods. Outside of Academics, Sofie volunteers with the Royal Historical Society of Victoria, and also undertook an internship with the Mary MacKillop Heritage Centre.

by extremist groups such as the Nazis. This paper explores in depth the misappropriations of vikings in Nazi propaganda, and how these perceptions were formed and exploited for political purposes. However, before these ideas can be fully explored, a few definitions must be clarified. Firstly, the term viking itself has been the subject of much academic discourse in recent years, specifically surrounding the notion of whether or not to capitalise the ‘v.’ In primary source material, the ‘v’ is rarely capitalised because the Old Norse origin *víkingr* describes the occupation of seafaring for raiding purposes, rather than an ethnographic group as is commonly thought today (Jesch, 2015, p. 5). Therefore, this paper will not capitalise the ‘v’ in viking, unless it is presented in a quote from a scholar who has chosen to capitalise it. Secondly, the term Germanic has also come under significant academic scrutiny because of its association with right-wing extremism. Some scholars, such as Patrick Wormald (2005, p.117), have argued against the use of the term in modern scholarship; however, this is debatable. The crux of their argument rests in its misuse by alt-right groups. While this certainly means care must be taken when using the term Germanic, it is an extreme reaction to omit it entirely from academic discourse, especially when a suitable alternative is yet to be presented. In response to the sensitivity of this term, this paper aims to clearly define what is meant by the term Germanic to avoid any misunderstanding. For the purposes of this essay, I define Germanic as relating to the peoples living in Northern and Western Europe in the period before, during and slightly after the fall of the Roman Empire, as they were connected by their use of Germanic languages (Orel, 2003, pp. xi-xv). While this definition is by no means extensive, it is sufficient for these purposes. Having defined these terms, it is possible to outline the contents of this paper. To fully investigate the misappropriation of Nordic culture, which in this paper refers to the modern context where ‘Norse’ refers to the historical context, in Nazi propaganda, several areas will be discussed. Firstly, an exploration of the origins of Nazi fascination with Nordic culture in the 19th century will be undertaken, followed by an evaluation of Nazi propaganda’s contribution to ideas surrounding racial superiority. Next, this paper will explore the link between masculinity and warfare in Nazi propaganda, as well as investigating the influence of esotericism and Ariosophy on the cycle of Nordic misappropriation that characterised Nazi propaganda.

It is impossible to thoroughly understand the impact of Norse imagery and culture on Nazism and Nazi propaganda without first understanding the context in which Norse culture became associated with nationalistic and racial ideas. The linking of Norse culture with nationalism arose in the 19th century. Hare & Link (2019, p. 583) highlights in particular post-Napoleonic era Germany, which Kieser (2019, p. 12) attests ‘began to reject the popular French culture and ideals, looking instead to their own history for a sense of identity. From this rejection emerged philosophers looking to unite the fractured ‘German culture.’ For example, Forssling (2020, p. 57) discusses how Jacob Grimm’s philological work linked Norse, Anglo-Saxon, and Germanic languages to one ‘Ursprache or prehistoric root-language [...]’. The application of this theory, by subsequent scholars, made a considerable contribution to the emerging field of racial science and the development of Aryanism[,] [the belief in the pseudoscientific race descending from proto-Indo-Europeans][,] and Nordicism[,] [the belief that the “Nordic race” is superior to all others][,] by providing a linguistic rationale for emerging Pan-Germanist theories.’ Concurrent to these academic developments, the Völkisch movement emerged, which encompassed nationalistic, racist, antisemitic, and anti-modernist ideologies (Hare & Link, 2019). It was materialised as a romantic backlash against the Industrial Revolution, valuing a return to simple rural life and traditional values (Varco, 2024, p.5). This belief lent itself to exclusionary practices towards Jewish people, as they were portrayed as the embodiment of the modern industrial society (Varco, 2024, p.5). This, coupled with the growing entanglement between Nordicism and Aryan identities, paved the way for further alienation of Jewish people. The dissonances between ethnic features of Jewish people and Aryans would become starker as those of Aryan descent aspired to emulate their viking ancestors with more veracity. Thus, it can be attested that the ideas of Nordic influence in ideology that was so present in the 20th century actually had long held precedents from the 19th century. The use of academic work such as Grimm’s, combined with more popular movements like the Völkisch movement, legitimised and normalised the othering of ethnic minorities. In doing so, the Nazis would later be able to exploit Nordic culture to promote their ideas of racial superiority.

Racial superiority is one of the most recognisable elements of Nazi ideology and propaganda, and this idea was heavily supported by their distortion of Nordic culture. More specifically, their ideas of Herrenrasse and eugenics were supported by their misappropriation of Nordicism, which then materialised in tangible forms of propaganda, such as magazines. Herrenrasse, as defined by Nighswander (2020, p.6) is the ‘concept which suggests the Nordic people are supposedly descended from the Proto-Aryans, and are thus considered to be racially “pure”’. The notion of racial purity is prolific throughout Nazi propaganda, one example of which is shown below.



**Figure 1:** Excerpt from *Volk und Rasse* magazine, June 1942. The caption reads: "As long as the German people has racially valuable children, its future is assured."

Nighswander attests that, ‘a 1933 scientific journal entry in *Scientific American* describes the Nordic Aryans of Europe as having long, high heads, tall bodies, blue or gray eyes and light- coloured hair [...] This sort of concrete prescription of what Nordic Aryans would look like allows for easily identifiable traits to be distributed as a clear idea of what the “master race” should look like; there is no room for interpretation in the Nordic ideal for appearance’ (Nighswander, 2020, pp. 6-7). In Fig. 1, four young girls are depicted matching this description of the ‘Nordic ideal.’ These images are accompanied by the

caption, which reads 'As long as the German people has racially valuable children, its future is assured.' Nordic features have thus been firmly equated to the ideal appearance. Moreover, the use of the term 'valuable' places further emphasis on the inferiority of other races, as they are inferred then to be valueless.

The concepts and theories of Herrenrasse were then put into practice by the Nazis in the form of eugenics – the practice of 'genetic engineering' that aims to 'change the genetic makeup of a group or population' (Caplan, 1999, p. 335). Their practices were informed significantly by American policies and policymakers, in particular they were associated strongly with American eugenicists like Harry Laughlin, Madison Grant, and Wickliffe Draper. Laughlin, notably, perpetuated the theory that pioneering Americans and Germans shared a common Nordic ancestry (Lombardo, 2001, p. 746). Nazi eugenic practices were extensive. One example was the 'Law for the Prevention of Defective Progeny' (1933) that led to the sterilisation of between 360,000 and 375,000 people between 1933 and 1939 (Lombardo, 2001, p. 761). Of these sterilisations, 63% were either involuntary or nonvoluntary (Sofair and Kaldjian, 2000, p. 313), meaning the procedure was performed without the consent of the person being sterilised. While these procedures were explicitly intended to be used against disabled people, 'healthy Jews and [Roma people] were nonetheless targeted' (Sofair and Kaldjian, 2000, p. 313). Thus, it can be seen that the idealisation of Nordic features fed into a racist mindset that Jews, Roma and other non-Aryan groups were inferior, valueless, and defective. This mindset was then actualised through the use of eugenics in perhaps one of the most salient and extensive misappropriations of Nordic culture by not only the Nazis, but across the Atlantic in the United States. Therefore, it can be inferred that the misappropriation of Nordic culture was a global phenomenon, which was expertly weaponised by Nazi Germany throughout their tenure.

Two other ways that Nordic culture was misappropriated by the Nazis was through their emphasis of viking masculinity and subsequent expertise in warfare. Vikings have become synonymous in popular perception has existed since the 19th century, when European nations such as Britain, Germany, and the Scandinavian countries 'imagined Vikings as their ancestors' and used this idea to 'construct a national identity and history combined with a certain kind of masculinity'

(Petersen, 2020, p. iv). This would then allow said nations to ‘claim characteristics associated with Vikings such as being hypermasculine, strong, warrior-like, adventurous, or civilized but with the capacity to turn to barbarism when needed’ (Petersen, 2020, p.2). In the context of the growing international tensions in Europe in the 19th century, the ability to associate with a strong group, or create a strong group with which to identify is well-founded and is carried through into the 20th century and into Nazi rule. Below is an example of one of Himmler’s Nazi propaganda posters, which highlights the parallels the Nazis wished to draw between themselves and the ideals of the masculine viking.



**Figure 2:** Nazi propaganda poster depicting an SS officer alongside a ghostly viking warrior. The caption reads: "Norwegians. Fight for Norway."

Here, the SS officer is placed in direct comparison to a ghostly viking. They are both depicted with hypermasculine features, such as the strong jawlines and noses. Their posture, looking sternly into the distance gives the impression of duty and valour, which Neher (2017) also attests '[creates] the façade that both warriors have similar, predestined and noble goals'. In doing this, Neher argues that Himmler is attempting to define the SS soldiers as the most elite warriors of the time period (Neher, 2017), which would in turn make joining their ranks an attractive proposition for the Norwegians who are being targeted by this campaign. In this way, the Nazis move beyond simply using Nordic culture as a means for the justification and actualisation of their racial policies, employing it as a tool for recruitment in the military.



**Figure 3:** (left) A Nazi recruitment poster aimed at Danish people using vikings as a comparison to a contemporary soldier.

**Figure 4:** (right) A Nazi recruitment poster aimed at Norwegian and Finns, depicting three vikings holding swords.

This leads onto the idea of Nordic culture as a tool for Nazi militarism. Nighswander connects the firmly established ideas of Nordicism and *völkisch* values to explain that ‘...the Germans, through the *völkisch* interpretation of Nordicism, are descendants of those very same fearless, all-white seafaring Viking warriors...’ (Nighswander, 2020, p. 6). An association with fearless, masculine, seafaring warriors served German militaristic interests by bolstering their military reputation on a foreign stage. As demonstrated in Fig. 2, Germans were portraying their SS legions as viking warriors to a foreign (Norwegian) audience. This effort aimed to fuel the perception of German soldiers as ‘honorable and effective’ (Neher, 2017), thus strengthening their foreign military reputation. In addition, they aimed their Nordic-influenced propaganda at other Scandinavian countries, such as Denmark and Finland.

In Fig. 3, parallels can be drawn to Fig. 2, in which the image of a ghostly viking warrior exists alongside the image of an SS soldier. In this way, it can be seen that the Nazis kept their doctrine about the connection between Nazi soldiers and viking warriors the same across their propaganda efforts. It is almost recycled from the *Kjemp for Norge* poster (Fig. 2) in that it aims to entice Danish natives into Nazi ranks through a direct connection to their national past. Slightly less identical, but still with the same cognitive framework, is Fig. 4. It

depicts three viking warrior hands holding up swords with three flags at the hilts: Norway, Nazi Germany, and Finland. Thus, it can be illustrated that the Nazi's use of viking military imagery and association spread to Finland as well, thereby solidifying the notion that it was a widespread campaign across multiple Scandinavian nations. Likely, the aim of this campaign was two-fold: to ensure further military recruits and replenish the German Army, and to foster a sense of shared Nordic ancestry between the Scandinavian nations and Germany. Using the idea of Nordicism, the Nazis would have seen themselves as descended from the same peoples as Scandinavians, and thus, there would have been an intention to reunite those of the purest Aryan stock against their encroaching enemies. In this way, the ideas of masculinity and warfare in Nazi propaganda tie into their more conceptual and esoteric ideas surrounding Nordicism and *völkisch* thought.

Esotericism, the concept of knowledge that is only intended to be understood by a small, initiated group of people especially with relation to religion (Bergunder, 2010, pp. 9-36), was a defining feature of the Nazis' use of Nordic culture, and while not explicitly dealing with propaganda, it contributed significantly to Nazi understanding of Nordic culture, which subsequently led to their use of it in propaganda. The Nazis' brand of esotericism largely hinged on the ideas and efforts of Heinrich Himmler, who 'aimed to create a neo-pagan "religion of the blood" with Adolf Hitler as the godlike figure at its heart to unify Germanic and "Aryan" peoples about a common past' (Neher, 2017).

Thus, beyond just the connections to secular Nordic culture that have hitherto been discussed, the Nazis also capitalised on the mythological elements. Perhaps the most prevalent example of this mythological influence on Nazism comes from Richard Wagner. Though deceased before Nazi rule, his works 'served as its musical backdrop' (Nighswander, 2020, p. 16). The high culture nature of opera as a form of media also fed into the narrative of esotericism. Its luxury and inaccessibility to the general populace made it a status symbol, and one with which the Nazis wanted to be associated. It is also worth noting that Wagner was known to hold antisemitic views, thereby strengthening his ideological ties to the Nazis, and creating a further motivation for them to use his work as their 'musical backdrop.' However, it was his opera *Der Ring des Nibelungen*, which employed characters from Germanic and Norse mythology, that promulgated the

Nazi fascination with pagan occultism. This philosophy of esoteric occultism is also known as Ariosophy – an umbrella term that also encompasses ideas of Aryan supremacy. Miechová argues that ‘the most eccentric contributor to Ariosophy was...Karl Maria Wiligut’ (Miechová, 2019, p. 22). Karl Maria Wiligut believed he was ‘the secret king’ of Germany and the ‘inheritor of an ancient authority discernible through runes and other esoteric signs...’ Therefore, upon migrating to Germany from Austria and becoming ‘head of the SS Department for Pre- and Early History,’ he began to write ‘reports on esoteric historical, theological, and cosmological topics...’ (Thornton, 2011, pp.867-868). Wiligut’s eccentricity, coupled with his high-ranking position within the Nazi structure, attests to the extent to which esoteric and Ariosophical thought was integrated into the fabric of the Nazi system. Wiligut’s interest in runic symbols, as well as Germanic and Norse pagan occultism, also further demonstrates the ways in which Nordic culture was misappropriated in Nazi Germany (Miechová, 2019). However, while this example is not explicitly about its use in Nazi propaganda, it conveys how entrenched Nordic misappropriation was throughout multiple modes of media in Nazi Germany, both for display to the general public (propaganda) and for a more select group of people (esotericism). This permeation of Nordic culture throughout esoteric circles would then allow for a more sophisticated, in depth understanding and use of it in propaganda. It creates a cycle of high and low culture that feeds into itself and perpetuates the practice of Nordic misappropriation. Therefore, it has been included in this essay because of its importance to the understanding of misappropriation of Nordic culture in propaganda.

What becomes clear upon examination of Norse misappropriations in Nazi propaganda is how prolific and conceptual it was. It is important to understand that the use of Norse culture in propaganda was more than a marketing tactic. It held longstanding precedents from the 19th century that tied into ideas of nationalism, racism, and separatism. The Völkisch movement is the embodiment of these origins. It combined the anti-industrial mindset of many with a romanticised image of Norse culture that led to a fascination which would carry into the 20th century. It steered many academic and philosophical circles into a racial direction, leading to the progression of racial science and growing hatred for ethnic minorities. These concepts

were exemplified in the 20th century by Ariosophical thinkers like Karl Maria Wiligut, who utilised the academic discourse surrounding Nordicism to promote exclusionary esoteric, theological and cosmological beliefs. Esoteric thought manifested in high culture forms of media like Richard Wagner's opera *Der Ring des Nibelungen*, which again promoted the romanticisation of Norse culture. However, high culture media was not the only way in which the Norse were represented. In more accessible forms of media, like propaganda – such as posters and magazines – vikings were used to embody the ideal hypermasculine warrior. This embodiment allowed the Nazis to compare their own soldiers to an idealised warrior, creating the appearance of an elite group of German soldiers. Beyond the military, the traditional ethnic features of vikings, such as blonde hair and blue eyes, perpetuated the idea of *Herrenrasse* and created a scientific atmosphere that allowed for the practice of eugenic sterilisation. This atmosphere was normalised through their use of propaganda, such as Fig. 1. Therefore, it can be argued that the Nazis expertly exploited the romanticised image of vikings for the purpose of extremist ideology. This topic remains supremely important in academic discourse, as even the mere mention of words weaponised by the Nazis, such as Germanic, is hotly contested. However, to omit them entirely from scholarly work would be to allow them the power that the Nazis wished. Open discussion is vital to ensure the exchange of information and knowledge prevents such atrocities from occurring, and thus we must continue to talk.

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### Figure 1

*Excerpt from Volk und Rasse magazine (June 1942).*

*Note.* The caption reads, “As long as the German people has racially valuable children, its future is assured.” Adapted from *Volk und Rasse*, German Propaganda Archive, Calvin University, accessed March 4, 2025, <https://research.calvin.edu/german-propaganda-archive/volkrass.htm>

### Figure 2

*Nazi propaganda poster depicting an SS officer alongside a ghostly Viking warrior.*

*Note.* The caption reads, “Norwegians. Fight for Norway.” Adapted from Neher, A. (2017, September 6), *Norse mythology and Nazi propaganda*, The Cross Section.

<https://crosssection.gns.wisc.edu/2017/09/06/norse-mythology-and-nazi-propaganda/>

### Figure 3

*Nazi recruitment poster aimed at Danish audiences using Vikings as a comparison to a contemporary soldier.*

*Note.* Adapted from *De danske østfrontsfrivillige 1940-1945*, Danmarkshistorien.dk, accessed March 13, 2025.

<https://danmarkshistorien.dk/vis/materiale/de-danske-oestfrontsfrivillige-1940-1945>

### Figure 4

*Nazi recruitment poster aimed at Norwegian and Finnish audiences depicting three Vikings holding swords.*

*Note.* Adapted from Neher, A. (2017, September 6), *Norse mythology and Nazi propaganda*, The Cross Section, accessed March 13, 2025.

<https://crosssection.gns.wisc.edu/2017/09/06/norse-mythology-and-nazi-propaganda/>

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## **Femininomenon: Gender Binaries as a Theoretical Trend in Archaeology**

Charlotte Doig<sup>1</sup>

*Through a traditionally masculine-dominated field, new lenses in archaeology have begun to address the visibility of women and gender. Archaeologies of Gender have attempted to move beyond male-female binaries of the discipline in a theoretical trend since the mid-2010s, highlighted by a special issue of the Journal of Archaeological Method and Theory. The two-sex/two-gender model and the sex/gender system are utilised by archaeologists to describe traditional gender interpretations, but do not cover the entire spectrum of gender. To explore gender in archaeology, recent work examining the deconstruction of gender binaries was considered alongside evidence from contemporary and current published research that reinforces the traditional binary models. Work demonstrating the deconstruction of this was then assessed to compare the attempts to reconcile the forgotten groups. Archaeological gender biases constitute much discussion in the discipline and have shaped current knowledge of identity in antiquity. Future research requires nuance in women's roles and away from the binary.*

From the beginning of the discipline, archaeology has been a male-dominated field. The classical image of the archaeologist is deeply intertwined with the rugged action hero; a so-called “cowboy of science” (Gero, 1985). Beyond individual academics and practitioners, archaeology has been used to understand a past all but entirely populated by men and societies driven by male action, with women often invisible or assigned a passive home-maker role. Archaeologies of Gender begin to address this imbalance. While the impact of feminist archaeology has been felt across the wider theoretical landscape (Conkey, 2003, p. 876), it has been subject to the same research trends as any other discipline. In recent research, one such trend has been to move beyond the visibility of women in the archaeological record to the

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deconstruction of gender binaries altogether (Ghisleni et al., 2016, p. 779).

Outside of the framework gender and feminist archaeologies would go on to create, the discipline has had little ability to detect or comprehend differences that fall outside of the traditional binary of “man” and “woman”. Indeed, it has often been difficult for traditional archaeologies to detect the lives of women even from within these binary categories of human existence, with the supposedly masculine “hunter”, “toolmaker”, and “farmer” leaving a visible impact on the archaeological record compared to archaeologically invisible feminine roles (Ghisleni, et al. 2016, pp. 771-772). Scholars of the late 20th century and beyond, spurred on by the contemporary second wave feminist movement, sought out the stories of women and those who have been previously maligned to the fringes of archaeological thinking, and began to reevaluate the modern western gender norms which have been uncritically applied to the past (Conkey & Spector, 1984).

In a special issue of the *Journal of Archaeological Method & Theory* titled ““Binary Binds”: Deconstructing Sex and Gender Dichotomies in Archaeological Practice”, released in September 2016, issues and debates surrounding gender in archaeology were presented in a variety of case studies. This issue focused on the deconstruction of gender binaries, challenging the deeply ingrained categories in modern western culture, and allowing archaeology to approach a richer view of the past better equipped to comprehend the complexities of human life (Ghisleni et al., 2016). Broad in scope, the papers contained within this volume cover a wide range of practical and theoretical barriers to archaeology. From pedagogical discussions detailing how modern binary understanding of gender influence the way researchers see the past (Cobb & Croucher, 2016), to new interpretations of archaeological data giving voice to previously underexplored ways of being outside of the “norm” (Jordan, 2016). This group of papers collectively reflects an attempted paradigm shift in archaeological understanding of sex and gender, stemming from a session at the 2014 Annual Meeting of the European Association of Archaeologists, one of the largest archaeological conferences in the world held in Istanbul (Ghisleni et al., 2016). This session aimed to understand “how binary starting points and methodological practices condition and constrain interpretations of sex and gender variability” (Ghisleni et al., 2016, p. 766). The prominence of

this theoretical proposition is evident both from its appearance as a session in an annual meeting of leading thinkers in European archaeology and as a special issue of a prominent journal, identifying the breaking down of gender binaries as a research trend; in the last decade, considerations of gender have become familiar ground for archaeologists, with the conceptual boundaries beginning to shift.

The research trend expressed above can be characterised through several key theoretical and methodological shifts. Common ground can first be identified in broad similarities in the types of data analysed in both these articles and the wider field of gender archaeology, such as a firm emphasis on mortuary evidence and material culture (Ghisleni et al., 2016, p. 767). These papers can be linked through a rejection of the modern Western gender binary and, indeed, by avoiding preconceived categories of any kind. A comprehension of gender binaries in their modern sense is relatively recent in human history (Holmes, 2012, p. 3).

Gender has been defined differently across cultures and time periods, with widespread variation between each example (Palincaş & Martins, 2024, p. 3). For example, a distinction has been drawn between “sex” as a biological descriptor and “gender” as a socially constructed identity in recent research where these terms were once used interchangeably, both encompassing a great deal of complexity (Ghisleni et al., 2016, pp. 767). Particularly in cases where Indigenous ontologies are acknowledged and discussed, ideas of how individual identity relates to the biological frequently exist beyond the traditional Western binary (Geller, 2009). The issue of definition has created a conceptual infirmity across the breadth of feminist literature, yet one that allows for the diversity and intricacy of human existence to be explored (Hill, 1998, pp. 101–102)

A definition for the traditionally applied models of gender and sex within archaeological research is provided in the introduction of the special issue; the two-sex/two-gender model and the sex/gender system (Ghisleni et al., 2016, pp. 767-768). The two-sex/two-gender model is generally defined in terms of biological dichotomy and a directly corresponding definitive identity, and has underpinned traditional narratives of gendered labour and uncritically applied to mortuary evidence, assigning identity on the basis of skeletal

morphology or specific material culture (Ghisleni et al., 2016, pp. 768–769). Influenced by the second wave feminist movement, the sex/gender system model separates biology and culture, and is more readily accepting of varied interpretation of gender identities; osteological analysis of following this model may determine biological sex using a similar methodology to that of the two-sex/two-gender model, but would not make a direct correlation to individual identity (Ghisleni et al., 2016, pp. 769–770). Both are examples of the “binary binds” this trend seeks to break, and are heavily critiqued within several of the papers, rejecting the dualism created by the imposition of modern norms.

A concrete example of this deconstruction in action can be found in Stratton’s (2016) discussion of Late Neolithic communities in Southeast Europe. At the site of Durankulak, around 75% of burials could be definitively sexed within a sex-based typology established under the common osteological binary system, with the remaining 25% of individuals breaking this pattern (Stratton, 2016). Where these differences could not be rectified, the non-conformant burials were excluded from previous studies, leaving only what could be distinctly patterned as male/female. This reinforces the modern gender binary, whether it was present in the past or not; “by using male/female categories as the starting point for gender analysis, a binary is virtually being pre-determined.” (Stratton, 2016). In wider literature, recognition of the fallibility of the two-sex/two-gender model is also an observable pattern, from Roman burials of an individual exhibiting XY chromosomes with traditionally female grave goods (Power, 2020), to gendered materiality among Inuit peoples, particularly those belonging to “third” gender categories (Walley, 2019).

This deconstruction of binary thinking has also been used effectively to critique instances of modern norms appearing to create diversity of identity, and leads to a second key concept within this trend- a move away from universality of identity and towards intersectionality. In what may at first appear to be a direct contrast to the philosophy of the special issue, two articles argue against the general adoption of gender categories beyond male/female and the interpretation of seemingly divergent identities. Moral (2016) disputes the use of “third” gender categories as they have been applied to the deep past, arguing that they fail to fully interrogate gender binaries as

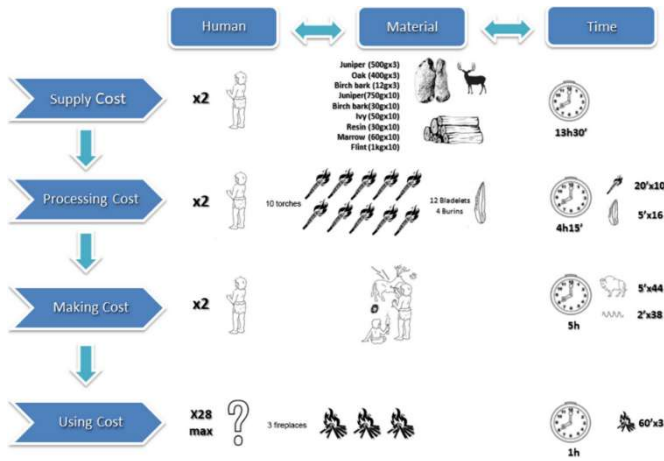
a modern conception and encourage researchers to think of male/female dichotomy as a universal and to critique heteronormative biases. Adopting an intersectional model which appreciates all aspects of identity and recognises world systems that would seek to oppress (Moral suggests that of Lozano-Rubio, 2011), rather than one which relies upon an othering of all who do not conform to predetermined categories, provides a methodology for better understanding past lives (Moral, 2016). This is particularly relevant when looking at gender binaries in a wider archaeological context, such as in the case of Hatshepsut wrongly being assigned a specific modern gender identity or sexuality on the basis of artistic representations of her in traditionally “male” dress, donning the distinctive false beard and headdress traditionally worn by male pharaohs in many of her most iconic depictions. This is a bias at least partially informed by modern gender binaries, ignoring other motivations for doing so, such as access to power and legitimisation of rule, which had been restricted for women (Matić, 2016). Refusing to go beyond the binary in this instance both fails to further our understanding of the past and reinforces modern heteronormative stereotypes.

Without going beyond gender binaries and incorporating intersectional thinking, it is clear to see how circular logic can reinforce gender binaries, even when considerations of gender are clearly expressed. However, there is a significant absence of discussions of intersectionality beyond gender diversity within the identified trend. There has been very little critical analysis of the ways that gender interplays with race, despite explicitly dealing with the remains of women of colour. This critique has been leveled at the discipline as a whole; it is impossible to understand biases around gender without also unpicking those surrounding race (Battle-Baptiste, 2011, pp. 34–35).

A further throughline can be found in the theoretical incorporation of the work of famed feminist philosopher Judith Butler, namely in the form of performativity. The introduction to this special issue begins with a quote from Butler, positioning that “The dyad is an achievement, not a presupposition” (Butler, 2004, p. 146). Echoes of this philosophy can be read throughout the special issue, in wider research in this journal, and beyond. The main thesis of Butler’s work centres around gender as a set of repeated acts which together constitute the performance of a binary gender category, with each combination of

different acts constructing an individual's unique identity (Butler, 1988). Of central importance to archaeological thought is the notion that these acts are socially agreed upon, can change over time, and create material remains (Perry & Joyce, 2005, p. 145). An old adage finds new relevance here; the dead do not bury themselves. Performance of gender is conducted both in life and death, with archaeologists able to detect only the briefest glimpses of identity; a crucial step in this research trend is then to attempt to read beyond the first impressions of material culture to analyse what is an individual performance of identity and what is a symbol meant for group understanding (Arnold, 2016).

While this special issue on breaking down gender binaries is clear evidence of a theoretical trend, the seeds were sown long before these authors put pen to paper and has continued to evolve in the years since. Recent evolutions in archaeological science have allowed for genetic testing of skeletal remains and more definitive answers in terms of chromosomal sex for ancient remains. Within the *Journal of Archaeological Method and Theory*, this has generally been reflected in combination with other aspects of the current trend in breaking down gender boundaries such as careful consideration of intersectionality, such as in Maass' (2023) interdisciplinary discussion of women from the African diaspora populations; attempting to understand the lives of enslaved women in the Caribbean, providing not only a passive voice but an attempt to understand resistance in this context. However, many publications have begun once again to rely on the conflation of sex and gender, with some even arguing that stricter biological sex categorisation could "enhance our ability to understand both biological and cultural sex differences in past populations." (Weiss, 2024, p. 1608) Cultural biases are also difficult to change; within the *Journal of Archaeological Methods*, Garate (2025) discusses the process of inferring demographics of cave artists with a stated aim at understanding the division of labour. No gendered language is used, but in Figure 1, a diagram portrays said artists; the only figures depicted appear to be male (Figure 1).



**Figure 1:** Flowchart diagram illustrating cost components and resource requirements for a process involving human labour, materials, and time (Garate, 2025).

While these theoretical advancements have been made, the question of how much they have impacted general practice remains. The special issue discussed at length here reflects a very specific wider cultural moment. Published in 2016, the special issue occurred in the midst of a cultural reckoning at which LGBTQIA+ and Women’s rights issues were at their most visible in the wake of the #MeToo movement but was shortly followed by the election of Donald Trump just two months later, and an ensuing global turn to right-wing populism (Möser, 2022). Despite general awareness of gender archaeology, it is still considered a sub-discipline and so has a limited impact on the way archaeology is done outside of its narrow reach (Moen, 2019).

Ghisleni et al. (2016, p. 767) state that “it has not been our intention to develop a specific heuristic tool for all of our participants to deploy.” Much has been developed in the theoretical sphere of Gender archaeology in its 60-year history. Yet mainstream archaeologists still understand gender and many other things within traditional binaries (Conkey, 2003). While the past has certainly become populated by women, greater reflexivity and understanding of the relationship between theoretical underpinnings and real data would allow research to not only tell the stories of women, but to break free of binary binds and grasp the wider picture.

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## **The Influence of Social Information Processing and Coercive Parenting on Childhood Aggression: A Two-way Intervention Approach**

Ihechikara Ibekwe<sup>1</sup>

*Childhood aggression is a multifaceted behavioural concern with significant implications for children's social, emotional, and academic development. Aggressive behaviours, including physical, verbal, and relational aggression, arise through the interaction of cognitive processes and environmental influences. This article examines childhood aggression through the lens of social information processing (SIP) and coercive parenting, highlighting how distorted interpretations of social cues and harsh parenting practices contribute to maladaptive behavioural outcomes. Drawing on the Social Information Processing model (SIP), this study explores how hostile attribution bias, deficits in response generation, and impaired emotional regulation increase the likelihood of aggressive responses in social contexts. Coercive parenting is examined as a critical environmental factor that disrupts emotional co-regulation and reinforces aggression through social learning mechanisms. Developmental and cultural considerations are integrated to illustrate how aggressive behaviours manifest across childhood and differ across sociocultural contexts, with reference to the United Kingdom and Nigeria. Evidence-based intervention strategies, including Cognitive Behavioural Therapy (CBT), Parent-Child Interaction Therapy (PCIT), Parent Management Training (PMT), and Dialectical Behaviour Therapy (DBT), are reviewed. This paper argues that culturally responsive, multi-systemic interventions targeting both child cognition and parenting practices are essential for effectively addressing childhood aggression.*

### **Introduction**

Childhood aggression may manifest in many forms, from playground squabbles to intense emotional outbursts, which become serious

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challenges for parents, teachers, caregivers, and others who engage with them. Aggression is referred to as a behaviour with the intent to cause harm to another individual who seeks to avoid such treatment (Baron & Richardson, 1994, p.24). This behaviour may be expressed verbally, physically, or relationally and is often influenced by internal cognitive processes and external environmental factors, as outlined in the General Aggression Model (GAM) (Sukhodolsky et al., 2016). Childhood aggression is a common developmental concern and can be seen through behaviours such as hitting, yelling, or social exclusion, including spreading rumours or gossip with the intent to cause emotional harm (Underwood et al., 2011). This form of aggression may negatively impact a child's psychological, emotional, and social well-being, especially when influenced by biological development, health conditions and general well-being, and environmental factors (Peng et al., 2023). A comprehensive understanding of the root causes of childhood aggression is essential for developing more effective prevention and intervention methods. This article will examine childhood aggression in relation to social information processing and coercive parenting style, and how they influence aggressive behaviours in children, its impact on a child's ability to process social information, and intervention strategies which may help children properly manage this behaviour and develop coping and emotional regulation skills.

According to research, childhood aggression has been a key concern for practitioners because of the academic challenges, mental health issues, and difficulty in sustaining relationships that are associated with it (Fite et al., 2023). Behaviours such as physical and verbal hostility are linked to causal factors including cognitive and environmental challenges, social information processing errors (SIP), and coercive parenting style (Oliveira et al., 2023). Both social information processing and coercive parenting have been found to be major contributing factors to childhood aggression (Ziv, 2012).

### **Social Information Processing**

Social information processing (SIP) refers to the cognitive processes through which children interpret, appraise information, and respond to social cues (Dodge et al., 2015). This involves stages such as encoding, interpretation, response generation, and evaluation (Luebbe et al., 2010). Social cues are verbal or nonverbal signals which are used to

communicate in social situations (Burks et al., 1999). Understanding social cues is very important for children as this may help them interpret people's behaviour, feelings, or intentions (Salancik et al., 1978). Dodge et al. (1990) suggest that children raised in coercive parenting environments are more likely to engage in aggressive responses, escalate conflicts, and have biased, distorted social information processing tendencies. Furthermore, hostile attribution bias, which is a component of social information processing linked to aggression, is a common emotional experience for children with aggressive behaviours. It causes them to perceive threats and conflict where none exists, leading to an aggressive response to the social cue (Crick & Dodge, 1994). For example, a child may interpret a peer's playful nudge as a threat and respond aggressively. Response generation is a crucial problem for children prone to aggressive behaviour as they are likely to respond quickly and in a confrontational manner, even when the situation is non-aggressive and requires a different, milder, or calmer approach (Luebbe et al., 2010). This maladaptive behaviour makes children dependent on aggressive responses, often choosing this option as a conflict-resolution strategy and having trouble choosing negotiation and other problem-solving techniques in response to social cues (Crick & Dodge, 1994). However, this causes a major setback for such children as they often encounter difficulty making and maintaining friendships, face rejection from peers and may struggle to regulate their emotions compared to other non-aggressive children (Calkins & Hill, 2007). Although the social information processing model is reliable and provides a robust framework for understanding childhood aggression, it does not consider cultural context and emotional influences, variability in environments, and it places greater emphasis on cognition (Fontaine & Dodge, 2006). These limitations do not occur in isolation but are intertwined with a child's emotional regulation capacity, often moulded in the family context.

### **Coercive Parenting**

Coercive parenting is defined as a style of parenting which allows unfavourable, harsh practices, such as intimidation, humiliation, threats, and the use of unhealthy controlling methods to enforce obedience at the expense of a child's well-being (Lansford et al., 2014). It includes the use of physical punishment and harsh verbal reprimand

to manage behaviour. This parenting style has contributed to children developing childhood aggression as they live in an environment where the stressors are available to accommodate such behavioural change, making it difficult for children to develop the ability to understand social cues (Day et al., 2021). Coercive parenting is particularly detrimental as it disrupts the parent-child relationship, depriving children of the emotional support needed for healthy social and emotional development. The authoritarian environment increases the likelihood of children adopting aggression as a problem-solving method and may reinforce hostile worldviews, contributing to distorted SIP.

Emotional regulation and social learning are the mechanisms behind the relationship between coercive parenting and aggression (Underwood et al., 2016). Children raised under coercive parenting may develop difficulty regulating their emotions (Loeber & Tengs, 1986). According to Calkins and Hill (2007), children are born with the capacity to experience emotions such as joy, anger, and fear; however, they have not developed skills to regulate them independently in a socially acceptable manner and so rely on parents and caregivers to support and guide them to manage their emotional behaviour through co-regulation. Coregulation is defined as the supportive and responsive behaviour of parents and caregivers targeted at helping children understand, control, and learn appropriate ways to respond to social cues, which may lead to emotional regulation competence and autonomy (Abela et al., 2007). Additionally, Dodge et al. (2006) suggest that children born and raised in coercive households have maladaptive emotional responses, ranging from heightened irritability to impulsivity, leading to aggressive outbursts and adverse childhood experiences. Furthermore, Kytile and Bandura (1978) stated that coercive parenting contributes to aggression through social learning mechanisms. This theory states that children learn new behaviours by observing and imitating the actions of the people around them (Bandura, 1977). Moreover, exposing children repetitively to aggressive behaviours in a coercive environment may lead them to view aggression as the only acceptable and effective approach to problem-solving. Over time, they may begin to interact with their peers, teachers, caregivers, and family aggressively (Patterson, 1982).

## **Adverse Childhood Experiences in Distinctive Societal Contexts**

In both contemporary and traditional societies, aggression can be caused by various issues such as Adverse Childhood Experiences (ACEs), social learning, and family background, as children share common behavioural characteristics and cognitive capabilities; however, these are developed according to the environmental, biological and social backgrounds they find themselves (Boullier et al., 2018). In the UK, children have social cues which vary from those of children raised in other parts of the world, for example, Africa, Nigeria, to be specific (Nwakanma et al., 2024).

In Africa, Nigeria specifically, adverse childhood experiences resulting from coercive and authoritarian parenting styles are more common (Bushura et al., 2022). According to Bushura et al. (2022), these adverse experiences challenge children's ability to communicate and socialise, affect their academic performance, and contribute to behavioural maladjustment. Furthermore, children go through adverse childhood experiences such as financial insecurity which leads to hunger/food insecurity, poor health, poor cognitive abilities, physical abuse which is widespread and an acceptable form of discipline which involves beating, and other forms of disciplinary actions, poor guardianship leading to exposure to unsafe practices and unmet needs which could lead to child exploitation such as molestation or early marriage which is still practiced in certain regions of the country (Aroyewum et al., 2022). Consequently, without adequate support or awareness on how to cope with these experiences, children in this society go through childhood into adolescence and finally adulthood with significant physical and mental health needs including suicidal tendencies, even aggression.

### **Management of Childhood Aggression**

Possible intervention strategies that have shown to be effective in the management of childhood aggression include Parent Management Training and Cognitive Behavioural Therapy (CBT). These are parent-child-focused psychosocial interventions that have demonstrated significant benefits (Kalvin et al., 2025). Dialectical Behaviour Therapy (DBT), a talk therapy that combines behavioural strategies with mindfulness exercises, has also proven helpful in supporting children with aggressive behaviours by managing

discomfort, enhancing interpersonal skills, and promoting emotional regulation (Kalvin et al., 2025). Parenting interventions such as Parent-Child Interaction Therapy (PCIT) aim to equip parents with more positive, child-centred approaches to support children with aggressive behaviours (Webster-Stratton & Reid, 2010). PCIT addresses coercive parenting by enhancing the quality of the parent-child relationship through positive communication and consistent, nonpunitive discipline. It also provides parents with tools to reinforce prosocial behaviour and effectively manage misbehaviour without resorting to harsh methods. CBT, on the other hand, focuses on the child’s cognitive patterns, helping them identify and correct distorted perceptions of social cues, develop problem-solving skills, and practice emotional regulation.

**Table 1:** *Summary of the mechanisms of SIP, coercive parenting, and intervention strategies for childhood aggression.*

<b>Domain</b>	<b>Description</b>	<b>Impact on Childhood Aggression</b>	<b>Relevant Interventions</b>
Social Information Processing (SIP)	Cognitive steps for perceiving, interpreting, and responding to social cues (encoding - interpretation - response generation - evaluation - enactment)	Hostile attribution bias, misinterpretation of cues, impulsive or aggressive responses, conflict escalation	CBT, social skills training, problem-solving interventions
Coercive Parenting	Harsh, controlling, punitive parenting practices (physical punishment, intimidation, verbal reprimands)	Reinforces aggression, impairs emotional regulation, models maladaptive behaviour, and increases a hostile worldview	PMT, PCIT, positive parenting programs, community-based support

Emotional Regulation/ Social Learning	Learning to regulate emotions through coregulation and observation of behaviours	Poor emotional control, impulsivity, and aggression in response to social stressors	DBT, CBT for emotional awareness, mindfulness interventions, caregiver coregulation support
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Additionally, interventions such as social skills training are incorporated into CBT programs to help children improve peer interactions and reduce reliance on aggression as a response. These combined interventions not only reduce aggressive tendencies but also strengthen a child's capacity to understand, interpret, and respond appropriately to social cues, addressing both SIP and coercive parenting influences. Importantly, interventions must be adapted to cultural contexts. In Nigeria, for instance, establishing community-based centres through local government areas could help provide targeted support, counselling, and intervention to address aggressive behaviours at the grassroots level (Nwakanma et al., 2024). Moreso, these interventions can mitigate the long-term consequences of adverse childhood experiences by fostering environments that support emotional development, resilience, and healthy interpersonal relationships.

**Conclusion**

In conclusion, childhood aggression is a multifaceted issue influenced by both internal cognitive processes, such as SIP, and external environmental factors, particularly coercive parenting. The interaction between these two factors creates a cycle where children misinterpret social cues due to hostile environments and respond with aggression, further reinforcing maladaptive behaviours. Effective interventions such as CBT, PCIT, and parent training programs can break this cycle by equipping children and parents with the skills needed to foster emotional regulation and positive social interactions. Tailoring these interventions to fit cultural and societal contexts ensures their relevance and effectiveness in addressing the root causes of childhood aggression.

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## **Powerful Women: Menace to the Ancient Empire**

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*There are many examples of female rebellion against patriarchal societies and civilisations throughout history; the Amazons, Cleopatra, and Boudica are three such examples of these powerful women. The Amazons challenged Greek norms and posed as worthy adversaries towards them. Cleopatra challenged the Romans to become the first woman to rule independently and Boudica fought against the Roman control in Britain. This article explores these examples of powerful women and their defiance towards these ancient empires. Their methods of defiance will be examined to explore the impacts of these acts of rebellion and the transgression against patriarchal societies, norms, and expectations.*

### **Introduction**

Empires are precarious entities, often rising swiftly but equally vulnerable to decline. They are frequently undermined by ineffective leaders, natural disasters, or invasions. A lasting empire thus seeks order and control. This paper explores how women who defied the established order, through lifestyle, governance, or battle, posed significant challenges to the stability of their respective empires. The Amazons, real and imagined, threatened the patriarchal structure of Greek society. The Cleopatras confounded but were eventually manageable for the Romans, until Cleopatra VII nearly placed her son on the Roman throne. Lastly, Boudica's rebellion brought the Roman occupation of Britain to the brink of collapse. These selected cases highlight the response of empires to powerful women who transgressed gendered norms.

Before exploring these figures, it is crucial to understand why such women were seen as a threat. The setting of the mythical Amazons is Greece: a collection of independent city-states, more often fighting

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among themselves than cooperating, but sharing a common language, culture, societal norms, and religion. These aspects, Doyle argues, are basic elements of an empire. In contrast, the Cleopatras and Boudica lived within the Egyptian and Roman empires, polities that demand a more comprehensive understanding of what defines empire. Doyle provides a succinct definition: “Empire... is a relationship, formal or informal, in which one state controls the effective political sovereignty of another political society. It can be achieved by force, by political collaboration, by economic, social or cultural dependence.” He further posits that by defining empire in this manner, one is compelled to examine not only the existence of control but also why one polity gains control and why another submits or is subdued (Doyle, 1986).

Women who defy control have threatened patriarchal societies throughout history. The Amazons, Cleopatras, and Boudica exposed weaknesses in their respective empire’s ability to control and rule. Each case will be investigated in turn, beginning with the Amazons, whose imagined and real existence adamantly opposed the Greek social order.

### **The Amazons: Equals of Men**

The term “Amazons” first appeared in Homer’s *Iliad*, with Mayor suggesting that the phrase *Amazones antianeirai* should be understood as “equals of men” rather than a mere opposition (Mayor, 2014, pp. 22-23). The Greek mythological portrayal of the Amazons emphasised their strength and valour, but only in the context of their defeat, as the examples of Penthesilea and Achilles, Hippolyte and Herakles, and Antiope and Theseus depict (Papamichali, 2023, p. 14). The Amazonian women were presented as worthy adversaries opposite the Greek heroes, yet they ultimately had to be subdued, usually by violent death or rape. As depicted in Greek art and literature, these Amazons were “the other,” the barbarian, whose very existence threatened the familiar, structured world of the Greeks (Amitay, 2010, ch. 5). Yet in Anatolia, the region where the Amazons were mythically said to reside, their image was not one of defeat but rather of military prowess and heroism. In this area, Amazons were often credited with founding cities and temples. Their representations on reliefs, statues, and coins depicted them not as conquered foes but as symbols of “martial perseverance” (Herring, 2022, p. 362). These depictions offer a very

different narrative - one in which the Amazonian women were not only respected but admired for their bravery and skill.

Despite the Greek depiction of the Amazons as mythical enemies, evidence exists suggesting that these women may have been inspired by real warrior women. Advances in archaeological technology, particularly DNA testing, have shed light on the existence of female warriors buried in Eurasian steppes. It is believed that up to 37 percent of the kurgan (burial mounds) across this vast area contain the remains of armed women (Mayor, 2014, p. 63). These graves have yielded horse remains, weapons, jewellery, food, tools, and religious items, in addition to bones that reveal physical traits indicating a lifetime of horse riding and archery. Battle wounds suggest that these women were, in fact, skilled warriors, and often died in battle (Mayor, 2014, pp. 63-73)<sup>2</sup>. What was once thought purely mythological - stories of warrior women - has a tangible basis in the nomadic Scythians of the Black Sea, Caucasus Mountains, Caspian Sea, and Central Asia. As trade between the Greeks and Scythians expanded, the Greeks' knowledge of these powerful female fighters grew, but their existence was so antithetical to Greek patriarchal ideals that writers relegated them to the realm of myth (Penrose, 2016, p. 7).

The Amazonian women's challenge to Greek norms was both physical and ideological. Their independence, courage, and military prowess transgressed the strict roles assigned to Greek women, who were expected to remain within the domestic sphere. In the Parthenon's Amazonomachy relief, which depicts a pitched battle between Amazonian warriors and Greek heroes, the ultimate defeat of the Amazons reinforces the lesson that those who defy these established gender roles - particularly the institution of marriage - will be destroyed (Penrose, 2016, p. 78). The slaying of Amazonian women thus serves as a cautionary tale, intended to affirm the marginalisation of women and their proper place in the domestic, subservient realm.

These warrior women, whether mythological or real, embodied a direct challenge to the patriarchal structure. By defeating the

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<sup>2</sup> See also Marjorie Mandelstam Balzer, "Introduction: Amazons and Dianas? Female Burials in Perspective", *Anthropology & Archeology of Eurasia* 59 (2020): 81.

Amazons in myth, the Greeks reaffirmed their societal norms and the inherent subjugation of women. Moving forward, the next sections will delve into the figures of Cleopatra and Boudica, who also challenged the established order but in different, yet equally transformative, ways.

### **The Cleopatras: Queens of Kings**

A hallmark of the Cleopatra dynasty is the effective maintenance of power across generations, eventually enabling Cleopatra VII to rule on her own authority. It created a new model for female power in antiquity, with each queen ruling as an equal alongside their male counterpart (Llewellyn-Jones, 2024).

The metropolis of Alexandria, home to both Egyptian and Greek populations, used religious cults to unite its diverse people. Greeks and Egyptians began to associate their deities with one another, with Apollo seen as Horus and Athene as Neith, among others (Llewellyn-Jones, 2024, p. 63). Ptolemy I further solidified this unity by creating a new godhead, Serapis, combining traits of Osiris, Apis, and Hades (Llewellyn-Jones, 2024, pp. 63-64). These strong religious bonds played into the three main building blocks, which were foundational to the reign of the Seven Cleopatras: (1) the validation of royal couples, (2) joint rule, and (3) a dynastic cult and the presence of queens in Egyptian temples. Interfamilial marriages were substantiated with the help of the gods and their sister-wives, both Egyptian and Greek (Sanchez and Lenzo, in Carney and Müller, 2021, p. 73-74). This association with the divine gave the Ptolemies a sense of inimitability that only strengthened their rule (Llewellyn-Jones, 2024, p. 115). The first Cleopatra, upon her husband's death, established joint rule principles by becoming regent for her six-year-old son, and was "the first woman to become basilissa-regent in the house of Ptolemy" (Llewellyn-Jones, 2024, p. 98). Temple depictions of queens making offerings alongside the pharaoh legitimised female authority, traditionally a male role. The dynastic cult practices came to a head with Cleopatra III, who not only "utilized the title 'Priest of Alexander'" but also became "Isis, Great Mother of the Gods," a "living incarnation of the divinity, Isis herself" (Llewellyn-Jones, 2024, pp. 210-211).

By Cleopatra VII's reign, Egypt was in decline, suffering from economic troubles, oppressive taxes, and two years without a Nile flood (Schafer, in Carney and Müller, 2021, p. 125). Ascending to the throne at

18, Cleopatra tried to establish herself as ruler through extravagant religious rituals, but this effort was short-lived. When Julius Caesar arrived to mediate the conflict between Cleopatra and her sibling for the rule of Egypt, Cleopatra seduced Caesar, who eventually handed her full control. However, her attempts to unite Egypt and Rome through her son, Caesarion, were thwarted by Caesar's assassination. After a failed alliance with Antony, the last of the Cleopatras, the "Queen of Kings", ended her life enigmatically (Llewellyn-Jones, 2024, p. 292).

The rule of the Cleopatras showcases women using power and wit to ensure the survival of their families and kingdoms (Llewellyn-Jones, 2024, p. 308). To the Romans, Cleopatra was "masculine, decisive, and cruel... [challenging] Roman politics, religion, and military life" (Gillespie, 2018, pp. 37-38). When faced with the intrusion of this 'other' woman and her bastard son, along with Caesar's growing monarchical aspirations, the empire acted quickly by brutally murdering Julius while Cleopatra was in Rome. Her second attempt ultimately led to her downfall, further reflecting Roman discomfort with female authority and its persistence.

### **Boudica: One Woman...seeking to avenge**

While the previous two illustrations operated on the fringes of empires, the story of Boudica's revolt stands as a direct and powerful affront to Roman imperialism. Previously, Doyle's definition laid the framework for our understanding of empire; however, to set the stage for Boudica's rebellion, additional nuances need to be explored.

Britain, at the time of Boudica's revolt, was considered a frontier of the Roman Empire - an area marked by constant internal conflict among native tribes whose loyalties were often ephemeral and regionally confined. This fragmented nature of Britain meant that, once conquered, Rome typically exerted in-situ control over the land (Doyle, 1986, p. 90). However, following the Roman conquest by Emperor Claudius in the late 40s AD, Prasutagus, the king of the Iceni tribe, became a client king of Rome, in a peculiar arrangement wherein the Iceni remained notionally independent but were required to maintain allegiance to Rome (Gillespie, 2018, pp. 27-28).

In Romanised towns like Londinium, Verulamium, and Camulodunum, Roman culture and commerce thrived, symbolising Rome's dominance. Camulodunum, for instance, became a capital of Roman rule, boasting structures like theatres, baths, and the grand Temple of Claudius. However, while Roman influence was pervasive in the larger trading centres, the Iceni rejected it, maintaining a predominantly agricultural economy and resisting Romanisation. Archaeological findings in Iceni territories show little evidence of Roman goods such as wine, olive oil, or pottery, signalling their disinterest and resistance to Roman culture. Prasutagus' alliance with the emperor Nero, while meant to safeguard his tribe, became a critical weakness after his death. As Gillespie (2018) observes, Roman soldiers seized Prasutagus' property following his death, and the subsequent humiliation of Queen Boudica, including public flogging and the brutal rape of her daughters, revealed deep flaws in the client-king system, especially in distant provinces where local administrators operated with autonomy.

Boudica's ability to unite various tribes against the Romans, despite ongoing intertribal conflict, indicates the profound dissatisfaction among Britons toward their Roman oppressors. Alongside heavy taxation, the native population faced widespread abuse, including forced enslavement, conscription into the army, and the taking of hostages. Boudica's rallying cry, as reported by Tacitus, vividly encapsulates the oppression she sought to avenge: "I am one woman from the crowd seeking to avenge lost freedom, a body weakened by beating, the violated chastity of my daughters". Here, Boudica identifies herself as both an individual and a representative of her people, making her vengeance resonate with others, effectively mobilising the Britons to rise in arms against the Roman Empire (Gillespie, 2018).

The subsequent attacks on Camulodunum, Londinium, and Verulamium were swift and devastating, largely due to the inadequate defences of these Roman settlements and slow responses from nearby Roman legions (Gillespie, 2018, p. 52). Boudica's strategic choice of these locations suggests that she sought to punish these towns for their embrace of Roman culture (Gillespie, 2018, p. 51). The savagery with which these towns were attacked, including the brutality inflicted on their inhabitants, demonstrated the depth of Boudica's and her

followers' rage against their conquerors (History Hit). After three victories, the Britons, emboldened by their momentum, faced approximately 10,000 Roman soldiers in a decisive battle, only to be crushed (History Hit). The fate of Boudica and her daughters remains unclear, and the Iceni tribe, crushed and enslaved by the Romans, effectively vanished from historical records after this defeat.

Boudica's revolt exposed the significant challenges posed by pockets of "unconquered" peoples resisting imperial control, especially in the periphery of the empire (Gillespie, 2018, p. 42). In response to the revolt, Rome absorbed the Iceni territory more fully into its administrative system, fortifying its position by building new military strongholds and rebuilding the cities that had been destroyed. Boudica's insurrection, while ultimately unsuccessful, underscored the vulnerability of an empire reliant on distant and often corrupt local leadership.

## **Conclusion**

Throughout history, women who defied the social order were often labelled as dangerous, monstrous, or subversive. These labels reflect the profound threats they posed to patriarchal norms, both in their own societies and in their interactions with larger imperial structures. One intriguing pattern emerging from the analysis of the figures discussed in this essay is that each woman was described as "masculine." This term, often used to categorise women who defied traditional gender roles, suggests that empires, historically, have been dominated by male ideals, with conquest and territorial expansion assumed to be inherently male endeavours.

Does this innate desire for conquest exist in women as well? Based on the examples of the Amazons, the Cleopatras, and Boudica, this question remains complex and elusive. I argue that in each case, their actions were driven primarily by survival, rather than ambition. They fought not for personal gain but to protect their families, people, kingdoms, and legacies. In their struggle, they inadvertently defied the empires that imagined them as figures of submission, rebellion, and subjugation, thus triggering a systemic response. Their defiance, therefore, reveals a fundamental vulnerability in these empires: they were not always able to accommodate those who did not conform to established norms of power and control.

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## **Partial Witnessing: Trauma, Postmemory, and Mixed-Race Inheritance in Faiz Ahmed Faiz and Creative-Critical Practice**

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*This article focuses on trauma and how it is transmitted and experienced across generations in the British South Asian community, with particular attention to those within the community with mixed-race heritage. It addresses not only first-hand trauma that previous generations experienced, but also how these experiences culminate in the lives of their families, highlighting that trauma is not a single event. It references how mixed-race individuals engage with cultural trauma and how this differs from monoracial subjects.*

### **Introduction**

This creative-critical article discusses Partition, war, displacement, and colonial violence. It is important to acknowledge at the outset that I did not personally witness these events. As a third-generation mixed-race individual, I occupy an ethically complex position: I inherit the affective residue of traumas that shaped one side of my family, while also benefiting from social structures aligned with the other. Writing about these histories, therefore, carries the tension of speaking about trauma that is not directly mine. I use postmemory as a theoretical framework to navigate this position, allowing me to approach inherited experience critically and with respect, rather than claim ownership of it.

This article uses postmemory as its primary theoretical framework. Marianne Hirsch defines postmemory as “the

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relationship that the generation after those who witnessed cultural or collective trauma bears to the experiences of those who came before” (Hirsch, 2008, p. 106), emphasising that this relationship is mediated not by direct recollection but by ‘imaginative investment, projection, and creation’.

While Hirsch’s work is rooted in Holocaust studies, her framing of inherited memory as an affective and creative process is crucial for understanding how descendants of Partition survivors and migrants internalise familial histories they did not live through. For later generations of Partition migrants, these histories are often transmitted through photographs, stories, rituals, and domestic objects that carry emotional significance.

By framing poetry as a mode of partial witnessing rather than testimony, and by situating that practice within Hirsch’s account of affective transmission, this article contributes to trauma and postmemory studies by offering an ethical model for engaging inherited violence from a mixed-race diasporic position.

The article begins by outlining trauma theory and engaging in the debate in trauma studies concerning whether trauma is representable. It then examines trauma through three linked lenses: bilingualism, domestic space, and objects as carriers of memory. Within each lens, selected English translations of Faiz Ahmed Faiz’s poems are paired with my own poems as a method for exploring how trauma is expressed differently when the event is first-hand compared to when it is inherited, and how generational distance and mixed-race identity shape how trauma is processed.

### **Theorising Trauma**

The term ‘trauma’ originated from the Greek word for ‘wound’. Caroline Garland states that “trauma is a kind of wound”, suggesting that trauma is not just a distressing experience, but a rupture that damages the psyche (Garland, 1998, p. 9). Trauma is defined not only by an external event but also by its impact on a subject, both physically and mentally. Some traumas are so overwhelming they can “knock out ordinary functioning and throw the individual into extreme disarray” (ibid, p. 9). This

feeling of disarray can be felt by later generations, who inherit traumas they did not experience themselves.

Garland continues by stating that psychological structures associated with a traumatic event “may never again be able to be fully integrated with the rest of mental functioning” (ibid, p. 200). This is what psychoanalysts describe as a fractured psyche—parts of the traumatic event that remain inaccessible in ordinary memory, yet active in shaping the identity of a person and, crucially, later generations shaped by those who first bore the wound. The idea of fractured psyches is important in the context of postmemory. Later generations inherit the emotional ruptures from the traumatic event. The wound becomes intergenerational, not because descendants experienced the trauma, but because they grow up within an emotional atmosphere shaped by it.

Sigmund Freud states that trauma survivors often suffer from repetition compulsion: “He reproduces it not as a memory, but as an action; he repeats it, without of course being aware of the fact that he is repeating it” (Freud, 2003, p. 60). Often, this repetition is an attempt to comprehend the trauma, suggesting that the past can be experienced in the present.

At a cultural level, trauma behaves similarly. Trauma is not only a psychological wound but a social process operating at the level of the collective. As Neil Smelser explains, while psychological trauma involves “the intrapsychic dynamics of defence, adaptation, coping, and working through” (Smelser, 2004, p. 39), cultural trauma operates through “social agents and contending groups” (ibid, p. 39). Through storytelling, ritual, and silence, trauma becomes embedded in shared meanings and collective identity, transcending the individuals who experienced it first-hand.

A central debate within trauma studies is whether or not trauma can be represented. Cathy Caruth argues that trauma is not defined by the violent event alone, but by the inability to register the event. She states: “not only the reality of the violent event but also the reality of the way that its violence has not yet fully been known” (Caruth, 1996, p. 6). For Caruth, this

inassimilable quality is precisely what gives trauma its structure: it returns as compulsion rather than recollection. Dori Laub also argues that trauma is fundamentally unrepresentable, writing on the Holocaust that “there was, thus, no witness of the Holocaust, either from outside or from inside the event” (Laub, 1992, p. 81).

In contrast, Jeffrey C. Alexander argues that trauma is not a natural response to suffering but a cultural process: “it is a matter of symbolic construction and framing, of creating stories and characters” — that is, trauma acquires its meaning not through the event itself but through the collective narratives communities construct around it (Alexander, 2012, p. 3). Ron Eyerman also argues that trauma is representable; in his studies of slavery and African American identity, the trauma of slavery does not function merely as a historical event but as a “collective memory [...] that grounded the identity-formation of a people” (Eyerman, 2001, p. 1). For both Alexander and Eyerman, trauma is therefore a cultural process in that it is sustained, shaped, and transmitted through the shared meaning-making practices of communities rather than residing solely in the psychology of individuals.

The debate over whether trauma is or is not representable is sometimes seen as oppositional; however, the two positions often overlap. Trauma is unrepresentable in the sense that it cannot be fully captured; there will always be elements of trauma that cannot be translated into language. Yet trauma is representable in the sense that its effects can be represented through symbolic forms, as a way for individuals and communities to relate to their past. Representation is not a replication of trauma, but a critical and creative act; without representation, trauma risks being forgotten. However, representation has limits and must be approached with care and sensitivity to avoid appropriation or simplification.

My work positions itself within the representability debate outlined above and suggests that the goal of discussing trauma is not to decide whether it is representable, but to engage with trauma respectfully and sensitively in order to attempt to understand how to move forward productively.

Dominick LaCapra states that it is essential to move from ‘acting out’ trauma to ‘working through’ trauma; for him, “working through trauma brings the possibility of counteracting compulsive ‘acting-out’ through a controlled, explicit, critically controlled [sic] process of repetition” (LaCapra, 1994, p. 174). By engaging with the trauma of one part of one’s heritage, partial representation becomes an act of witnessing rather than reproducing trauma, allowing the descendant to approach inherited trauma without claiming ownership.

### **Bilingualism**

Firstly, it is important to note that I am only fluent in English and know very minimal spoken Urdu and no written Urdu. Therefore, in this article, I have to rely on academic translations and occasional WhatsApp replies from family members for clarity. These inclusions can be problematic, as each translator brings their own interpretation of the original text, which can lead to differences in tone or missed context. This is especially prevalent in translating poetry, as the translator is given poetic license to adapt the poem through their unique lens. Such interpretations can affect a poem’s structure, flow, rhythm, and cadence.

Urdu translations can be exceptionally difficult, as Urdu has roots in Persian, Arabic, and Hindustani languages. Therefore, when translating into English, context can be lost. These translation issues can be even more difficult when translating Urdu poetry, as rhythm, rhyme, and flow can be lost – especially in specific forms like ghazals. Translations always involve some sort of loss – what Lawrence Venuti (1995) describes as the translator’s unavoidable act of domestication, in which the foreignness of the source text is smoothed over to meet the expectations of the target language’s readers, and for bilingual people, the distinction between ‘real meaning’ and translation can affect how they understand a text. This can also act as a barrier for monolingual readers.

I did not grow up speaking Urdu or Pahari-Pothwari like my mother. This is an important point when discussing my mixed-race experience. Although some mixed-race people are taught both ancestral languages, others grow up monolingual, speaking only the dominant language of the country where they were raised, with no

ancestral language taught at home at all. The decision to sometimes not teach a mixed-race person both languages can, in some cases, reflect the perception that they are less a part of the culture, and therefore the language is seen as unnecessary or inauthentic to teach them. It can also be used as a way to help the mixed-race person assimilate into the wider community, particularly in contexts where the community is xenophobic. This uneven access to language can itself be a site of inherited trauma for mixed-race individuals: the absence of the ancestral tongue is not merely a practical gap but a severing of the very medium through which cultural memory, ritual, and belonging are transmitted. To be denied a language is, in part, to be denied the grammar of one's own inheritance.

Faiz Ahmed Faiz's poem 'Don't Ask Me for That Love Again' demonstrates how translating Urdu into English diminishes the cultural and political weight the poem carries in its original language. Faiz's poetry has often been read as articulating a fusion of lyric intimacy and political resistance (Burhan, 2017), a tension that makes his work particularly resonant for postmemorial readings. The poem begins with romantic rejection but quickly shifts to political awakening. The speaker rejects romantic love due to the violence and injustice he witnesses in the world around him, suggesting that the language of love cannot be articulated in the face of a violent society. In the poem, he states:

*There are other sorrows in this world,  
comforts other than love.*

*Don't ask me, my love, for that love again (Faiz, 1995, p. 5).*

In Urdu, however, these lines carry additional weight. 'Gham' (sorrow) and 'mohabbat' (love) have a depth that is missed in English. 'Gham' is not a personal sadness but a collective one; 'mohabbat' is not just affection but an obligation towards others. These words carry the weight of specific colonial histories: Urdu itself was shaped by centuries of Persian and Mughal influence before being further politicised under British rule, when its relationship to Hindi became a marker of communal identity that contributed directly to the conditions of Partition. 'Gham' and 'mohabbat', then, are not merely emotional terms but words saturated with histories of loss, resistance, and

collective identity that the English translation cannot contain. When translated, they become muted.

When analysing ‘Don’t Ask Me for That Love Again’ through the lens of postmemory, Hirsch’s description of ‘imaginative investment’ can be seen. In the poem, the speaker does not directly address the experiences of war and trauma; instead, he details the world around him with descriptions of suffering. The poem relies on Faiz’s imaginative depiction of injustice, rather than explicitly stating events. Postmemory can be seen through fragments of language: half-remembered phrases and words that only appear in moments of extreme emotion, such as love and anger. Faiz’s reliance on cultural context with terms that are lost in translation shows how later generations have to negotiate trauma that is lost in time.

In my poem ‘The 1948 Promise’, I include Urdu phrases throughout. I use the Urdu phrase ‘Allah ki qasam?’ (Do you swear by God?) to show both the cultural and religious ties in the narrative. To Urdu-speaking Muslims, the phrase is used to prove honesty and is seen as a sin to say and then lie. However, in the poem, the Kashmiri speaker asks a White Briton to swear by Allah — a promise he may not feel bound by in the same way. This is paired with English bureaucratic language, taken from the British Nationality Act 1948. The Act granted British subject status to citizens of Commonwealth countries, including those from the Indian subcontinent, and is significant in the context of post-Partition migration to Britain. It represents the legal apparatus through which belonging was conditionally extended — and through which the terms of that belonging were defined entirely in the language of the colonial state.

Pairing cultural phrases with legal wording creates an imbalance of language. Whereas the Kashmiri speaker asks the White Briton to promise with a verbal oath, the White Briton wants the Kashmiri to answer in colonial language. This is an imbalance, as it would be likely that the Kashmiri speaker would not understand the English legal wording. Here, Urdu is used to show culture, emotion, and religion, whereas English functions as the language of juridical authority and conditional belonging — the tongue of the colonial state that determines who may be admitted, on what terms, and under whose power.

## **Domestic Space**

Faiz's poem 'Black Out' can be used to discuss how trauma can infiltrate domestic spaces. Although the poem was written in reference to the 1965 Indo-Pak war, the poem itself does not discuss the conflict, but rather the disorientation war causes. Ali's translation states:

*Ever since the lights failed,  
I have been searching to see how I could see.  
Where have my eyes strayed in the dust? (Faiz, 1995, p. 67).*

In a literal sense, a blackout destabilises the domestic environment by disrupting routine – the loss of power and light can make completing everyday tasks harder or, in some cases, impossible. In a poetic sense, Faiz is discussing how not only is the speaker unable to see, but he must now figure out how to adapt to the new conditions in order to proceed with his life and routines. The line 'searching to see how I could see' details how trauma affects cognition. The speaker must re-learn and adapt to life after war has changed the domestic setting – his home and his homeland.

The image of dust deepens this reading. Dust is the residue of destruction, but at the same time, dust is domestic – something that sits quietly on shelves, windowsills, and floors. This image shows the dual meaning of trauma: how it can overtly mask sight, such as after an explosion when dust and debris cover an area, and how it can also go unnoticed, hiding in hard-to-reach places in our homes.

In the context of postmemory, 'Black Out' can mirror the experiences of later generations who inherit trauma through the environment. Hirsch emphasises "noncognitive acts of transfer" (Hirsch, 2008, p. 112). This suggests that descendants internalise the pain of their ancestors that has been passed down to them. A blackout itself can be seen as a metaphor for the partial visibility of trauma. Descendants experience remnants of cultural trauma without the clarity to articulate or understand it in the same way the person who experienced it first-hand did.

My poem 'Between Lines' also uses the domestic setting to discuss trauma. Instead of using explicit storytelling to explore trauma, the poem uses domestic details:

*Mum's scarf hangs on the bannister,  
faint scent of cardamom and rose water caught in its threads.*

This image shows how the domestic can showcase culture through items. The fact that the scents are caught in the threads demonstrates that culture permeates even the small and unseen, similar to how cultural inheritance is carried both internally and externally in a person. The speaker moves through the home, encountering objects they cannot fully relate to — a condition that is both material and linguistic. Similar to the dust in 'Black Out', the scents fill a space quietly, symbolising how trauma can also settle into a home in subtle ways that are difficult to articulate.

Throughout 'Between Lines,' domestic objects communicate the unspoken. This reflects Hirsch's idea of postmemory as 'noncognitive acts of transfer.' The sense of encountering 'objects I never learned the names for' signifies the limitations mixed-race people may experience when they do not learn their mother tongue or engage fully with one side of their heritage.

### **Objects as Carriers of Memory**

Objects can play a central role in how memories are passed down through generations. In diasporic families, these objects can be reminders of homeland and help people feel connected to a home they have left or — for later generations — a home they may have never visited. Objects also often outlive the first-hand witnesses; grandparents or great-grandparents may no longer be alive, therefore, the object is not only a remembrance of the person to whom it originally belonged, but of the place it originally belonged to.

Faiz's poem 'A Prison Evening'—written during his imprisonment following the Rawalpindi Conspiracy Case—uses the objects of a cell to explore oppression and human endurance. Rather than explicitly describing the pain of imprisonment, Faiz uses objects. In Ali's translation, Faiz states: "Each star a rung / night comes down the spiral / staircase of the evening" (Faiz, 1995, p. 19). In this line, Faiz turns natural elements into architectural objects; the night becomes a spiral staircase, and the stars become rungs. The transformation frames the night not as abstract, but as an object to be passed through. Night in this poem is also charged with the specific conditions of Faiz's

imprisonment: it is the time when political prisoners are most acutely aware of their isolation, when the absence of movement and company sharpens into something felt rather than merely observed. In 'A Prison Evening', night descends not as rest but as weight — it is the hour of longing for those left outside the cell, and of separation from the political world the speaker has fought to change. The staircase image reinforces this: the night does not simply fall but comes down, step by step, as if measuring the slow accumulation of time in confinement.

Later in the poem, Faiz uses the material object of a lamp and the celestial object of the moon to discuss memory and endurance:

*This thought keeps consoling me:  
though tyrants may command that lamps be smashed in rooms  
where lovers are destined to meet,  
they cannot snuff out the moon, so today,  
nor tomorrow, no tyranny will succeed, (Faiz, 1995, p. 19).*

Lamps are used in domestic spaces to give sight in darkness; in the quotation it describes their use to light rooms where lovers meet. However, lamps are material objects that facilitate light, which is symbolic of hope. The subject prefaces this idea by stating, 'This thought keeps consoling me,' suggesting that the speaker is using the object to show the power of the human spirit.

Objects play an important role in the theory of postmemory. Hirsch states: "Photographic images that survive massive devastation and outlive their subjects and owners function as ghostly revenants from an irretrievably lost past world" (Hirsch, 2008, p. 115). In this quotation, Hirsch is discussing how objects – such as photographs – act as vessels for cultural trauma.

In my poem 'Iron Backwards', I use material objects. The title is a reference to Accrington NORI bricks. I use the material object of a brick to discuss the memory of my hometown, as well as the memory of my grandparents' house during racist attacks. As the poem progresses, I fictionalise an event that is unfortunately a likely common story for those in the British South Asian community – bricks being thrown through windows. For the mixed-race individual, this has added nuance as not only are they a victim of these acts of aggression, but they also

have lineage with the perpetrators. This doubled inheritance is captured in the poem's central lines:

*We built towers across oceans.*

*But here, we're still dodging the rubble thrown from next door.*

The brick here is simultaneously the material of imperial construction and the weapon of domestic racism — a postmemorial object that refuses to settle into a single meaning.

The poem ends again with the material object of the brick. Rather than throw another brick and escalate the situation, Baba takes a composed response, choosing to display the item on the porch 'like a relic'. In this stanza, the material object of the brick carries memory because it is used as a reminder that racism is still an issue in Britain, and because it engages with the notion of 'violence begets more violence.'

For a British South Asian/White mixed-race person, objects can be seen as carriers of memory through domestic material objects. A household may carry heirlooms and cultural items from clashing cultures. A household could include a Qur'an, a masala dabba and a shawl, as well as a WWII ration book and a ceramic Union Jack mug. This can create friction for the mixed-race person, as they may not understand how they can connect with vastly different cultural items; where the Qur'an may be seen as contentious to white British family members with conservative and nationalistic views, and the ceramic Union Jack mug could be seen as contentious by Pakistani relatives due to colonialism.

In my own experience, my domestic setting changed dramatically between when my father was alive and after he passed away when I was 13 years old. Although my father was an Islamic revert, our house was never filled with overt cultural objects. My mother's Pakistani heritage was seen in sections of her wardrobe – filled with South Asian saris and shawls, alongside her Western attire – in photographs of family members in Mirpur, Kashmir, Pakistan, and in personal religious items, such as the Qur'an. My father's white-British heritage was also seen in photographs and domestic objects such as weathered baptism invites in a drawer.

## **Conclusion**

In this article, trauma has been discussed in relation to the British South Asian/White mixed-race experience through the lens of postmemory. The article defined trauma as both a psychological rupture and a cultural process with the capacity to be transmitted across generations and outlined the central debate within trauma studies concerning the representability of trauma. It then explored how trauma is engaged through three sites—language, domestic space, and objects—pairing Faiz Ahmed Faiz’s poems with my own creative work.

Postmemory provides a way to approach inherited trauma critically and with respect. Trauma can never be fully represented, but it remains important to engage with trauma in order to attempt to process it. Poetry allows fragmentation, non-linearity, metaphor, and silence; the incompleteness and lingering openness that poetry allows for can offer an ethical method of partial witnessing for later generations, particularly those of mixed heritage. In this sense, creative-critical poetry does not resolve inherited trauma but provides a viable ethical space in which later generations can engage it without claiming ownership, authority, or closure. What the readings in this article demonstrate is that for the mixed-race descendant in particular, partial witnessing is not a limitation but a condition of ethical engagement: it is precisely the incompleteness of inherited knowledge — across language, domestic space, and material object — that makes the creative act necessary.

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## **The Vikings and the Northern Isles of Scotland: Evidence of Scandinavian Settlement**

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*This paper discusses the archaeological evidence for Vikings settling in the Northern Isles of Scotland by looking at Norse people's settlement strategies, exploring the ways Vikings introduced their own culture to Shetland and Orkney and how they integrated with existing Pictish culture. It examines the merits and limitations of the archaeological evidence on the subject and how the arrival of Scandinavians in the Viking Age helped to shape the Northern Isles into what they are today. The evidence presented in my paper suggests that the Vikings' arrival introduced new words and methods of living to the Northern Isles but did not overpower the local way of life, rather influencing and building upon what already existed, creating a new blended culture.*

### **Introduction**

The Viking Age is widely considered to have commenced with raids in the AD 790s, with the Viking diaspora migrating from Scandinavia and expanding their territories throughout Europe. During this period from around 800 to 1050 AD, Vikings from Scandinavian countries settled in Orkney and Shetland (Griffiths, 2019). Archaeological evidence of Norse settlements has been found on these islands to support this. Evidence includes grave goods, building strategies, changes in food and resources, and burial practices. This archaeological evidence provides valuable insight into the Norse people's settlement strategies on these islands and allows us to consider how Norse occupation influenced Orkney and Shetland.

### **Viking Buildings**

Examining building strategies on Orkney and Shetland during the Viking Age is highly beneficial when looking for evidence of Norse settlement. During this time, the style of constructions on these islands changed and began to move from 'indigenous traditions of

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predominantly cellular and curvilinear construction' to 'three-aisled rectilinear houses of Scandinavian style' (Barrett, 2012, p. 13). Despite this, at Buckquoy in Orkney, an abandoned settlement was discovered that used both cellular and rectilinear building styles (Ritchie, 1977, cited in Barrett, 2012, p. 13). Speirs refers to this, writing: 'The excavations at Buckquoy in Birsay evidence the gradual replacement of Pictish round houses by rectangular Viking structures, and later replacements by further Norse dwellings.' (Speirs, 2014, p. 7). Combining the traditionally Pictish with the new Scandinavian building strategies suggests that Scandinavian culture did not, at least at first, entirely dominate existing building traditions and that Scandinavian settlers might have adopted aspects of the native islanders' own strategies, providing some evidence of Pictish and Scandinavian cultures integrating in Orkney. As Speirs writes, this suggests that Scandinavian building practices became more prominent over time and that settlers made use of existing Pictish buildings instead of starting afresh. This further suggests integration between Scandinavian settlers and Orkney, as reusing older homes to create new ones was not normalised in Scandinavia (Leonard, 2011, p. 61). Leonard writes: 'The situation in Orkney therefore reflects a response to a previously occupied landscape...' (Leonard, 2011, p. 61). This point suggests that Norse people who made their homes in Orkney started to develop a new culture by combining their own ways and those of the Picts.

### **Building Strategies**

A particularly prominent Scandinavian building strategy was for the roofs of houses to be supported on the building's external walls. An example of this is seen on the site of Underhoull on Unst, the third largest of Shetland's islands. Underhoull is a particularly important site due to its geographical location between Norway, Britain and other western islands, meaning that it could have been a very convenient stopping-off point between Viking journeys. Significantly, 30 Norse longhouses have been recorded on Unst, with another 20 potential longhouses identified (Swindles et al, 2019, p. 212). This large number of longhouses provides evidence of Scandinavians settling in Shetland and suggests that a Scandinavian community existed on Unst, and the effort of building 30, likely more, longhouses strongly indicates an intention of staying on the island.

## **Viking Place Names**

Place names in Shetland and Orkney are also useful as evidence of Scandinavian settlement, although this has its limitations. One of the Orkney islands is named *Egilsay*, which is a combination of the Scandinavian word for 'island', *Ey*, and the Old Norse male name, *Ègill*. Together, the name means that the island is owned by Ègill (Gammeltoft, 2010, p. 16). However, this type of naming is also common in the Scots language, and both languages use the same system of word order. This means it can be challenging to figure out whether a place name is truly Scandinavian or Scots.

Gammeltoft notes: '[...] it appears that the number of island-names of Scandinavian origin in Shetland, totalling 511, clearly outnumbers the ones of Scots origin, tallying 336.' (Gammeltoft, 2010, p. 17). He states that despite its many Scandinavian place names outnumbering its Scots ones, three of Shetland's islands appear to have names of Scots origin: Yell, Unst and Fetlar. Gammeltoft goes on to state that when considering Orkney, Scots place names are a little more common than Scandinavian ones. With more Scandinavian place names on Shetland compared to Orkney, this suggests that a greater number of Scandinavians settled on the Shetland islands. Geographically, this makes sense, as Shetland is closer to Norway than Orkney is and would, thus, have been the easiest to reach for Vikings arriving by longship. If we interpret the extent of Scandinavian settlements solely on place names, this could imply that Orkney was less influenced by the Vikings. However, Shetland retaining three islands with Scots place names may suggest that some of its islands were influenced more by the language of Scandinavian settlers than others.

As discussed above, while place names give us valuable insight into Scandinavian influence in Shetland and Orkney, they cannot be viewed as completely reliable evidence of the extent of settlement by Vikings.

## **Viking Burials**

Burial practices are worth examining in relation to Scandinavian settlers. In *Heimskringla*, Snorri Sturluson's history of Norwegian kings (approximately 1230), Odin declared that all dead should be burned

along with their belongings. Although there is extensive evidence of cremation burials in Norway, evidence has only been recorded of two possible cremations in Orkney (Graham-Campbell and Batey, 1998, p. 144). This is peculiar, as Odin and his beliefs were of great importance to Scandinavians, as evidenced by the number of these types of burials in Norway. This could be interpreted as suggesting less of a Scandinavian presence or influence in Orkney, or could imply a stronger sense of assimilation with the pre-existing culture on the island, and perhaps the adoption of existing pre-Viking Orcadian ways, instead of vice-versa.

On the other hand, evidence of Scandinavian influence within burials can be seen in other ways. The Pierowall Cemetery, Westray, Orkney, was first described by James Wallace (Graham-Campbell, 2003). Wallace described the discovery of graves in the sand and stated that the graves contained a sword, an axe (which he inaccurately referred to as Danish), bodies of dogs, combs and knives. Graham-Campbell wrote: 'Here then is a clear description of the discovery of pagan Norse burials, even if Wallace mistakenly attributed them to a Danish presence in Scotland...' (Graham-Campbell, 2003, pp. 129-130). As Graham-Campbell states, these graves clearly feature Scandinavian characteristics. The axe being described as Danish suggests that it had features that caused Wallace to identify it as foreign, possibly an axe shape or decoration not typically associated with Scotland.

The Westness cemetery, Rousay, Orkney, is also significant as evidence for Scandinavians settling there. Similar to the Vikings' reuse of houses, this cemetery was originally Pictish but continued to be used by Scandinavian settlers. Notably, this cemetery was found to contain two 9th-century Viking boat-burials with various grave goods and contained the 'richest grave of a Norse woman yet excavated in Scotland' (Graham-Campbell, 2003, p. 130). Boat burials were an important Viking practice for the dead, especially elite members of communities. The cemetery is close to a Late Norse farm, near which a sword was discovered. The practice of disposing of an individual's belongings along with their body was also a prominent Viking practice, evident both in cremation burials and boat burials, providing evidence of Scandinavian settlement. The existence of these at Westness Cemetery is significant evidence of Scandinavian settlement in Orkney.

The cemetery on Moa Ness, beside the Bay of Swandro in Orkney, is notable for the grave of a woman who appeared to have died while giving birth (Graham-Campbell, 2003, pp. 130-131). Like the graves at Westness, this grave is remarkable as it contains many items that the woman would have used daily, including jewellery. Examples of the objects she was buried with include a pair of oval Scandinavian brooches from the 9th-century, an Irish brooch-pin made of gold and silver from the 8th-century, a necklace of 40 beads and a pair of Anglo-Saxon strap-ends (Graham-Campbell, 2003, p. 131). She was also buried with tools, such as a sickle, a weaving sword and shears. The inclusion of various pieces of jewellery in this burial could imply that this burial was of someone important to society, and the inclusion of items of daily use, like shears, aligns with the Scandinavian practice of disposing of all a person's personal items with their body. One of the most significant pieces of evidence for Scandinavian settlement from this burial is the Scandinavian brooches that the woman was buried with. The woman being buried with these suggests she may have brought them with her to Orkney from Scandinavia. It must be mentioned that the woman was also buried with Irish and Anglo-Saxon items. These could be interpreted as prize items that the Vikings took with them to Orkney after raids and were perhaps treasure or loot obtained from these locations and given as gifts.

### **Textiles**

Tools used for textile production are also worth considering when looking for evidence for Scandinavians settling in Orkney and Shetland. Although few Viking Age textiles from Scotland survive, lots of the tools - made from bone, clay, metal or stone - that were used to create them still exist (Stirling & Milek, 2015, p. 48). In a study based in Orkney, tools from six Viking and Pictish sites from the Viking Age were examined. Looking at various characteristics of tools can help us determine whether they were influenced by Scandinavian settlers. Focusing on spindle whorls specifically, of those found at the six Orcadian sites, 'nearly all bone whorls were made from femur heads of ox, deer or cattle...' (Stirling & Milek, 2015, p. 56) but in regard to the shape of the whorls, spherical and biconical shapes were only attributed to the Pictish period, whereas conical and unusual shapes were from the Viking Age. Conical whorls are often discovered on sites in Scandinavia, and the evidence from the six sites that spherical and biconical shapes

were put out of use after the Pictish period in Orkney in favour of shapes typically used in Scandinavia suggests that Scandinavian settlers introduced their style of textile tools to Orkney.

The decoration on spindle whorls can also help us to recognise Scandinavian influence. Eight of the whorls discovered at the sites were decorated; Stirling and Milek write ‘seven with a mixture of pits and incised lines and one with an ogham inscription.’ (Stirling & Milek, 2015, p. 58). All the whorls besides the ogham-inscribed whorl, which was late Pictish, were from the early or late Viking Age. Stirling and Milek write: ‘This suggests that people may have been more inclined to personalise their tools at this time, possibly because society was going through a period of change and people felt the need to express their identity through familiar objects.’ (Stirling & Milek, 2015, p. 59). This suggests that Viking settlers might have used decoration as a way of bringing their culture to Orkney. The seven Viking Age whorls using the same style of personalisation could point to them as Viking because the Pictish decorated whorl is the only one of the seven to use a different style of personalisation. This suggests that the style of decoration used on the other whorls with the pits and incised lines could be Viking.

### **The Fishing Industry**

Food and resources were impacted by Scandinavians in Shetland and Orkney, particularly the fishing industry. Fishing was important to these islands during the Viking Age. Archaeological evidence confirms that before 950-1050 AD, there was very little evidence of fish bones on archaeological sites. After this period, fish stocks grew and Scandinavians trading in fish rivalled their trading in furs. Marttila wrote that ‘every Norse excavation in Shetland has provided artefactual evidence of fishing’ (Marttila, 2016, p. 9). Speirs wrote that ‘a thriving fish industry could explain in part how the Earls of Orkney became very wealthy. With this wealth, the Earls were in a powerful position to influence their overlord, the King of Norway.’ (Speirs, 2014, p. 9). This suggests that the prominence and success of fishing positively impacted the Earls of Orkney politically. This enhances the links between the development of the fishing industry and settlement by Vikings, as well as Orkney’s Earls being connected to Norway through fishing, once again suggesting integration of the two cultures.

In Shetland, there was also evidence of a growing fishing industry, with small line sinkers and a sandstone boulder, probably used as a sharpening tool for fishing hooks, discovered at Underholl. At Sandwick South and Jarlshof, line sinkers were also found (Marttila, 2016, p. 9). These were used to pull fishing lines down into the water.

Barrett describes the zooarchaeology of the Pictish Age compared to the Viking Age: 'Statistical comparison of the Pictish and Viking Age assemblages indicates significant differences between the two periods for the NISP (number of identified specimens) of fish bone, the ratio of cod to saithe and the ratio of ling and torsk to rocklings, wrasse and cottids. These variables have notably larger values in the Viking Age...' (Barrett, 2001, p. 151). This adds further evidence to suggest Scandinavians settled in Shetland and Orkney, with increased fish bones clearly coinciding with the Viking Age rise in Scandinavian fishing. This suggests that Vikings settling in the Northern Isles may have introduced Scandinavian fishing techniques to their adopted islands, leading to the rising success of fishing. This, along with the information that Orkney's Earls became richer, greatly enhances the impression of a familiar and personal relationship between Orkney and Scandinavian countries during the Viking Age.

## **Conclusion**

During the Viking Age, Vikings from Scandinavia travelled to Orkney and Shetland. Archaeological evidence of building strategies, burials, grave goods, place names, tools, and the development of fishing suggests that Vikings settling in the Northern Isles integrated into and influenced local communities. Analysis of the evidence does not suggest that the Vikings dominated existing Pictish culture, but instead that their influence was more subtle and that they built on existing practices, with their own gaining prominence over time. This seems to have resulted in a blended culture, shaping the unique Shetland and Orkney that exists today.

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## **Ghosts in the Machine: International Law, Non-State Actors, and the Stagnation of the Law of Responsibility in Cyberspace**

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*Evolving cyberwarfare has overtaken international regulation, introducing new means and actors that challenge traditional legal frameworks attached to kinetic weaponry. In the absence of *lex specialis*, international law relies on the *lex generalis* of customary law and the law of international responsibility to hold actors responsible for State-infringing cyber operations. This article argues that the current theoretical framework is enforceable against non-State actors; however, the anonymity of cyberspace problematises attribution. By evaluating the limitations of *jus contra bellum*, accountability mechanisms are shown to fall short of effectively adapting to cyberspace. A new test is then proposed to address cyber operations of significant harm, which concludes that due diligence obligations are a 'safety net' that can ensure accountability. To address the gaps in cyber regulation, the theoretical law must adapt to the practicalities of cyberspace with the support of a globally unified approach.*

### **Introduction**

As the international community approaches the 20th anniversary of the first large-scale cyberattack on a sovereign State, debates over international laws on cyberspace remain contentious (Kirichenko, 2024, pp. 10–24). Despite cyberwarfare revolutionising conflict, the rise of cyberweapons has not been met with the same level of regulation experienced by traditional kinetic weaponry (Al-Billeh et al., 2025, pp. 412-417; Pool, 2013, pp. 299–323). Consequently, impactful actors – hackers, criminal groups, terrorists, and national armies – have

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emerged and operate under their own diverging ideologies (Putnik, 2022, pp. 97–98). In the absence of a *lex specialis* cyber regulation, States rely on the *lex generalis* of customary international law and the law of State responsibility to determine the accountability of actors for internationally wrongful acts. However, this framework has become increasingly strained by the rise of powerful non-State actors (NSAs).

Sovereignty is a concept that underpins the issues faced in regulating cyberspace. Traditionally, it refers to the independent right of a State to exercise functions within its own jurisdiction, free from external intervention (*Island of Palmas*, 1928, pp. 838–839). Whereas sovereignty can be clearly delineated by geographical and territorial markers, the decentralised and anonymous nature of cyberspace removes this clarity. For the purposes of this essay, the term ‘cyber operations’ refers to the offensive or defensive use of digital capabilities in order to achieve a political or military objective by disrupting or destroying adversary infrastructure or financial systems, which is reasonably expected to result in death or injury to persons or damage or destruction of property (Schmitt, 2017, pp. 415–420; Veljković, 2024, pp. 17–28).

The global political context has undergone significant shifts over the last twenty years. As traditional alliances have begun to fracture and the number of cyber operations has increased, States continuously fail to reach a unified view on the application of international law (Bouso, 2025; Capital Economics, 2026; CISA, 2025; Dig.Watch, 2025; Doffman, 2025; McPherson & Lema, 2024; Sunak, 2024). Two polarising philosophies have emerged: some advocate for the imposition of national policies using a ‘cyber sovereignty’ approach, whilst others prioritise free digital development through a ‘cyber liberalism’ approach. Such fragmentation enables NSAs to exploit technical and evidentiary weaknesses, facilitating deliberate obfuscation and evasion of legal responsibility.

This paper argues that although existing international law is, in theory, capable of regulating non-State cyber operations, current mechanisms are inadequate for addressing NSA accountability, given the strategies and technological realities of cyberspace. The major recurring obstacle is the failure of enforcement mechanisms to adapt alongside rapid cyber developments, resulting in an inability to hold

NSAs responsible. Firstly, this paper will examine the inability to hold NSAs liable under the *jus contra bellum* prohibition of Article 2(4) of the UN Charter, despite technologically neutral interpretations. Secondly, it will discuss the attempts to hold NSAs indirectly liable under the Articles on the Responsibility of States for Internationally Wrongful Acts (ARSIWA), focusing on the attribution gap created by current evidentiary standards and the issues of identification relating to technical attribution. Here, a novel threshold is proposed for attributing cyber operations to modernise the law. Finally, this paper will conclude by arguing that due diligence is the most practical ‘safety net’ to ensure responsibility, while acknowledging the limitations of the current international legal framework due to the continued lack of unity between States.

### **The Inability to Hold Non-State Actors Directly Liable for Hostile Cyber Operations**

Despite its significance, the international legal prohibition of the threat or use of force (*jus contra bellum*) only emerged recently. *Jus contra bellum* represents a staunch, anti-war philosophy reflected in foreign policies and international relations (ICRC, 2026). Prior to this modern philosophy becoming legally binding in the mid-1940s, war was a legal method of recourse that States could take if their sovereignty was under threat.

The most recent formulation of pro-war policies prior to *jus contra bellum* movements was the Clausewitzian doctrine. It viewed war as the imposed continuation of internal politics by other means; its rationale deriving from the sovereign status of a State, providing it with the exclusive right to freely exercise political decisions, whether within its territory or not (Clausewitz, 1932/1984, p. 87). By the early 20<sup>th</sup> century, there was a partial acceptance of the limitation and prohibition on the use of force due to intellectual movements and international agreements (*Hague Convention II*, 1899, preamble; *Drago-Porter Convention*, 1907, Article 1). However, support amongst major powers was fractured, as debates between a full prohibition or mere ‘breaks’ to the use of force stagnated progress. The *Covenant of the League of Nations* best exemplifies this, as the drafters implemented conflicting articles that ultimately permitted the recourse

to war if negotiations or arbitration failed (*Covenant of the League of Nations*, Articles 10 and 12; Verdebout & Lesaffer, 2025, pp. 257–288).

By the mid-20<sup>th</sup> century, a full prohibition was multilaterally supported by States in response to the failure of the League of Nations and the global carnage wrought by World War II. Article 2(4) of the UN Charter (1945) is the most significant and universal reflection of a *jus contra bellum* codification. It mandates all UN Member States to avoid the ‘threat or use of force against the territorial integrity or political independence of any state’ in the exercise of international relations. It is applied beyond UN members, as it is a customary obligation binding all States, with non-State cyber operations only arising indirectly through attribution or due diligence obligations (*Nicaragua v. United States of America*, 1986, paras. 186–190; *Palestinian Wall Advisory Opinion*, 2004, para. 87). Therefore, States could now be held directly liable for breaching the *jus contra bellum* obligation when exercising or threatening force.

Although the Charter predates the digital age, the prohibition remains relevant to cyber operations through a technologically neutral interpretation (Cyber Espionage Project, 2026). This type of interpretation effectively makes pre-existing laws sustainable, as it focuses on the functional equivalence of the act’s consequences, rather than the specific means used (Ojanen, 2025, pp. 1441–1444). It prevents international law from falling behind and ultimately impeding efficient and satisfactory responses. Legal obligations would not be restricted to the near-sighted policymaking and understanding of 1940s lawmakers; rather, pre-existing law has modern interpretations and can be used to enable greater protection for States against emerging risks from cyberspace.

This means cyber operations will qualify as a threat or use of force if they produce consequences with a sufficiently comparable scale and effect to a traditional kinetic attack (Schmitt, 2018, Rule 11). Additionally, the purpose of Article 2(4) was to establish a general duty for States to prevent conflict escalation across all types of battlefields. While traditional views recognise land, sea, and air, scholars and policymakers are now beginning to recognise a fourth emerging field – cyberspace (Eoyang & Keitner, 2020; Mattis, 2018, pp. 2–3). Therefore, with the tech-neutral interpretation and the recognition of cyberspace

as a battlefield similar to those under the scope of Article 2(4), cyber operations that threaten or inflict consequences of sufficient scale and effect can be addressed by the general duty of Article 2(4) to prevent conflicts and their escalation.

Despite tech-neutral interpretations, the scope of Article 2(4) is nevertheless limited by the inherent 20<sup>th</sup>-century, State-centric rationale of its drafters. Drafters of the UN Charter were preoccupied with the Second World War and the continuing skirmishes in the Pacific; their priority was to protect States and future populations from the 'scourge' of State-to-State war (UN Charter, 1945, Preamble). NSAs were not considered when determining the laws of war because they did not contribute to the war effort to a sufficient level (von der Schulenburg, 2020). Consequently, international law failed to regulate NSAs, as they were not considered to have the potential to hold international legal personality and therefore be a party that can breach Article 2(4). Instead, they were addressed domestically as a matter 'essentially within the jurisdiction of the state' (UN Charter, 1945, Article 2(4)).

The 'non-intervention' principle demands that only the host State of the NSA can take direct action, as other States must respect the internal sovereignty of the State (UN Charter, 1945, Article 2(7)). While this has not always been upheld, as seen with the transnational 'War on Terror' that supported States to address foreign terrorist organisations, no State has had intervention resulting from cyber-NSAs (Verhoeven, 2016, pp. 179-182). Resultantly, there is a profound enforcement gap, as the prohibition is unable to hold NSAs directly accountable for their operations. Such operations are instead recognised as a domestic issue, rather than as an international violation of territorial or political sovereignty.

### **Indirect Liability of Non-State Actors Through the Responsibility of the State**

As *jus contra bellum* only binds States, a legal vacuum emerges regarding the liability of NSAs for cyber operations that infringe upon the sovereignty of nations. The law of State responsibility addresses this by providing a legal mechanism to hold States accountable for the conduct of private actors operating from their jurisdiction or under their protection (Crawford, 2008, para. 65). The International Law

Commission (ILC) codified the laws on State responsibility in ARSIWA, and it is widely recognised as an authoritative statement of customary norms relating to State liability (Republic of Korea, 2025, pp. 6–7; UNGA Resolution 56/83, 2002).

ARSIWA establishes responsibility for conduct arising from cyberspace, as it can be interpreted as technologically neutral, preventing legal oversight in digital accountability. By focusing on the functional equivalence of State conduct, rather than specific cyber means or behaviour, the scope and application of the article remain future-proof, making it applicable to multiple spheres, including cyberspace (Braverman, 2022; Government of Canada, 2022, pp. 28–33). Furthermore, ARSIWA applies *lex generalis* in the absence of a specific cyber treaty (*lex specialis*), leading to the applicable law reverting to the default, customary framework. The effectiveness of this interpretation has received support from numerous States, as it offers legal protection against injury derived from irresponsible cyber conduct not only in the present but also in the future (African Union Peace and Security Council, 2024; Ministry of Foreign Affairs of the Czech Republic, 2024).

Ergo, international responsibility can arise for ‘every internationally wrongful act’ committed in cyberspace (UNGA Resolution 56/83, 2001, Article 1). The dual-element test of ARSIWA is used to establish responsibility. First, a wrongful act or omission must constitute a violation of international law; and second, the conduct must be attributable to the State (UNGA Resolution 56/83, 2001, Article 2(a) and (b)). Irrespective of whether States invoke defences relating to ‘certain circumstances which preclude wrongfulness’, there is a definitive legal framework under international law allowing a State to be held responsible for sovereignty-infringing cyber operations carried out by NSAs (UNGA Resolution 56/83, 2001, Articles 20–27).

### **The ‘Attribution Gap’**

While ARSIWA provides a clear theoretical framework for attributing liability to NSAs, its application is rendered toothless by difficulties related to attribution. As established earlier, the obligation of *jus contra bellum* is an undisputed rule of international law, therefore satisfying the requirement for a pre-existing obligation to be violated by an act. Attribution in this test is more difficult to determine due to the technical

characteristics of cyberspace, such as decentralisation, anonymity, and deliberate obfuscation, alongside rigorous evidentiary standards that make attributing liability to States considerably more challenging. NSAs such as State-sponsored proxies, 'patriotic hackers', and affiliated hacker cells can exploit the threshold to perform operations at an adequate distance from State control to argue plausible deniability (Eoyang & Keitner, 2020, pp. 10–13). As a consequence of being unable to invoke responsibility, injured States cannot pursue complicit States with a sufficient *prima facie* claim. This incentivises the use of NSAs in clandestine State-led cyber operations, as the attribution gap struggles to provide injured States with an appropriate remedy.

### **Sovereign Control Over Cyberspace and Powers of Identification**

The extent to which a sovereign State has control over cyberspace correlates with the capacity of the State to exercise jurisdiction over acts occurring within it. Furthermore, the extent to which it can exercise unrestricted powers will enable it to meet evidentiary thresholds more easily under the law of responsibility. Unlike traditional domains, which States have an exclusive and sovereign monopoly over, cyberspace is primarily owned and maintained by private, commercial entities spread across numerous jurisdictions (Eoyang & Keitner, 2020, pp. 4–5). This has led to cyber infrastructure functioning beyond national borders, empowering private actors with decentralisation and curtailing the ability of a single State to regulate and monitor cyber activity effectively (*In re Search of an Apple iPhone*, 2016). NSAs and sponsoring States have utilised the limitations on monitoring to evade identification. In response, two polarising philosophies of State policy have emerged concerning the extent of State interference in the management of cyberspace.

The 'cyber sovereignty' approach has emerged among non-Western States like Russia, China, and Iran. This philosophy views cyberspace as a digital extension of physical territory, enabling cyber infrastructure and activity that exist within territorial borders to fall under direct State jurisdiction of regulation (Topor, 2023). By imposing direct domestic control, the State not only maintains its national political order and security but also reinstates the traditional sovereign monopoly on the flow of information within cyberspace. By

empowering itself with powers of identification, it improves its capacity to gather technical data required to attribute cyber conduct according to Articles 4-8 of ARSIWA.

Western States oppose this with a ‘cyber libertarian’ philosophy, permitting unrestricted internet access and economic innovation to protect the dissemination of democratic ideals. Akin to a capitalist ‘free market’ approach, it favours indirect regulation by enabling private autonomy (Freedom House, 2026; Shokri, 2025, pp. 6–9). Due to the promotion of democratic ideals, the main drawback of this approach is that State regulation must accord with the promotion of human rights. As cyberspace has offered anonymity since its inception, the protection of privacy is a right that users greatly value (ECHR, 1950, Article 8(1); ICCPR, 1966, Article 17(1)). Yet commitment to digital freedom is a double-edged sword; the protection of individual anonymity also protects NSAs.

While cyber sovereignty is an effective and practical solution, it is politically incompatible with democratic societies. By centralising the data of the State alongside the data of an individual, the pre-established social contract relating to the inception of the internet is breached, as autonomy is overshadowed by the ability of the State to surveil. As seen within the UK, despite its commitment to democratic values and human rights, the government has repeatedly attempted to impose mandatory, digital markers of identification attached to an individual and to the usage of online services (Prime Minister’s Office, 2025; Richards, 2025; Seddon, 2025). There has been sustained public concern regarding the measures intended to better protect UK cyberspace due to increased State interference with individual privacy (Amnesty International, 2025; Coker, 2025; Satariano & Dearden, 2025). These measures would trigger Article 8 of ECHR and Article 17 of ICCPR, as interference with individual digital autonomy and requirements to provide identification data must have a legitimate aim, be necessary and proportionate (*Big Brother Watch v. UK*, 2021, paras. 332–339; ECHR, 1950, Article 8(2); *Pretty v. UK*, 2002, paras. 68–78).

Claims of territorial regulation are opposed by the aterritorial and transnational nature of cyberspace, with data existing and moving across the global network, subsequently complicating the careful exercise of extra-jurisdictional enforcement (Johnson & Post, 1996).

However, international law does not fully prohibit States from controlling cyberspace. Per the *Lotus* principle of territorial jurisdiction, States have exclusive control over any tangible infrastructure that exists physically within internal boundaries (*S.S. Lotus*, 1927, paras. 45–47). Nevertheless, despite the efficacy of the cyber sovereignty approach in identifying actors behind hostile cyber operations, democratic States would struggle to introduce such measures due to public rejection of State interference.

Ultimately, the capacity of the State to identify and attribute actors behind cyber operations has been delimited by the inherently privatised and transnational nature of cyberspace, decentralising authorities with powers of identification. The discord between the effectiveness of the cyber sovereignty model against the autonomy and privacy offered by cyber libertarianism has led to a fragmented approach by States. While the theory of legal responsibility does not require absolute technical certainty to legally attribute conduct, courts will continue to struggle with evidence that ambiguously assigns blame. As cyberspace will remain borderless and mostly governed by private entities, the technical attribution of cyber operations, whilst not impossible, will remain uncertain and highly vulnerable to deceptive strategies, consequently limiting the effectiveness of the law of responsibility.

### **Legal Threshold: Effective vs. Overall Control**

Even when cyber operations can be traced to an identifiable NSA, legal attribution of the conduct to a State remains problematic due to the restrictive scope of the current threshold. The conduct of an NSA is attributable to a State if the actor was under the instruction, direction, or control of a State; or if a State acknowledges and adopts the non-State conduct as its own (ARSIWA, 2001, Articles 8 and 11). Whilst this framework is clear, binary judicial interpretations of ‘control’ have resulted in an enforcement gap that fails to adapt to cyberspace (Council of the European Union, 2024; Kjelgaard & Melgaard, 2023, pp. 446–447; Ministry of Foreign Affairs of Costa Rica, 2024, pp. 3–4).

The ICJ articulated the prevailing threshold of ‘effective control’ in para. 115 of *Nicaragua v. United States of America* (1986). It requires that the State exercises authority over the military operation that resulted in internationally wrongful conduct. Assistance in the

financing, training, equipping, operational planning, and target selection is all insufficient to assert control over the actions of the NSA. Consequently, a high evidentiary burden is required to prevent the incorrect assignment of attribution.

Conversely, the Appeals Chamber of the International Criminal Tribunal for the Former Yugoslavia (ICTY) rejected the threshold for being excessively restrictive in *Prosecutor v. Tadić* (1999). Instead, it argued for a threshold of ‘overall control’. The Tribunal believed that sustained involvement in the general planning, coordination, and supervision of individual or group operations was sufficient; proof was not limited to specific orders (Tsayourias & Morrison, 2018, pp. 257–291).

Despite the pragmatism of the *Tadić* approach, ‘effective control’ was reaffirmed as the authoritative customary position by the ICJ in *Bosnia and Herzegovina v. Serbia and Montenegro* (2007), clearly rejecting the view of the Tribunal. The Court believed that ‘overall control’, in the context of State responsibility, was unsuitable, as it pushed the law ‘almost to the breaking point’. The restrictive approach is logical because having a threshold that is too low would open the floodgates to endless litigation arising from aggressive accusations over minor domestic infractions. It safeguards international relations and the rule of law by preventing the inundation of international courts and political dialogue with relatively small claims.

The *Nicaragua* approach, while protecting wider international relations, fails to adequately adapt to the strategic ambiguity of cyberspace. Since 2007, when the first cyberattack on a State occurred, the common practice for aggressor States is to utilise decentralised proxies and patriotic hackers who operate autonomously and fall outside the scope of ‘effective control’ (Kirichenko, 2024, pp. 10–24; McGuinness, 2017). By utilising the distance of proxies and similar groups, aggressor States can navigate the legal vacuum, while victim States remain vulnerable to repeat operations. To better protect States, the law of responsibility should attach a *de minimis* requirement of State involvement to the ‘overall control’ standard.

By introducing a *de minimis*, the concern that *Tadić* is approaching the limits of the law of responsibility is addressed. An impact-based assessment of cyber operations would only be triggered

for cyber operations with infringements of sufficient 'scale and effect'. Consistent with international consensus, operations resulting in only inconvenience or irritation would fall outside the scope of international responsibility and could be addressed domestically, preventing the inundation of international forums (Al-Billeh et al., 2025, p. 423).

Patriotic hackers would also fall under the scope of this novel approach. States that encourage or generally supervise the collective objective of an individual hacker, or a hacker group, would satisfy the *Tadić* test. However, a *de minimis* requirement would filter non-State operations that significantly infringe upon the sovereignty of States, disarming the defence of plausible deniability without extending liability for every cyber infraction.

A *de minimis* approach is not without flaw, as holding States accountable for domestic regulatory failures that lead to transboundary harm may be framed as an erosion of internal sovereignty. According to this view, punitive attribution constitutes an unlawful interference with the *domain réservé* of a State, undermining its right to independently determine its political and legal order (*Nicaragua v. United States of America*, para. 263). However, internal sovereignty is not an absolute shield against accountability, as it is a bundle of rights that comes attached to obligations, crucially due diligence (*Corfu Channel Case*, para. 43). Furthermore, obligations of good faith ensure State territories are not used to interfere with the rights of other States (Krieger & Peters, 2020, pp. 374-377). It would be unjust for a State to use sovereignty as a means to justify omissions facilitating international harm and leave injured States without recourse.

The formal introduction of a *de minimis* is also challenging, as it may lead to significant legal fragmentation and political polarisation. In the current volatile geopolitical climate, achieving the unified *opinio juris* required to establish an international custom would be incredibly challenging (Quince, 2026, pp. 24-28). States that exploit the difficulties of the legal threshold may interpret a lowered threshold as a politically motivated change, rather than a neutral reform.

Thus, while it may be difficult to introduce a *de minimis* requirement, it functionally adapts the threshold of attribution to the cyberspace. Evolving from the minute assessment of commands to the

severity of operations, the law of responsibility will still be maintained, whilst accepting the reality of warfare in the modern age. Non-State cyber operations specifically designed to operate within the current 'grey zone' could finally be held accountable.

### **Due Diligence Obligations: Pressure to Address Non-State Actors**

While the ARSIWA framework is an authoritative source of State responsibility, it cannot reconcile its practical ineffectiveness resulting from technical attribution difficulties and restrictive evidentiary thresholds. Consequently, due diligence becomes the most practical legal mechanism to address hostile NSAs. Since an 'internationally wrongful act' includes both commission and omission, it bypasses attribution based upon thresholds of control of certain actors and instead attributes responsibility to the failure of a State to police its own domain, which results in transboundary harm (ARSIWA, 2001, Article 2).

Reframing responsibility from control to negligence addresses the shortcomings of attribution-based approaches, as preventative action is encouraged. Although it fails to hold States directly liable under international law, its indirect accountability imposes domestic pressure to regulate, suppress, and cooperate to prevent harm from cyberspace originating within their jurisdiction (Koivurova & Singh, 2022, paras. 1-14). Due diligence acts as a 'safety net', ensuring that legal responsibility for sufficiently serious cyber operations does not disappear into the annals of cyberspace created by anonymity and decentralisation.

Due diligence duties are firmly entrenched in international law; however, their most recent formulation successfully holds non-State actors accountable. The ICJ originally established that it is obligatory for States to refrain from knowingly allowing acts contrary to the rights of another state to occur within its territory (*Corfu Channel Case*, 1949, para. 22). Yet, the most recent formulation has evolved its nature, as the 'No Harm' principle is preventative duty to reduce significant transboundary harm materialising outside of the originating State (*Pulp Mills on the River Uruguay*, 2010, para. 10.5). Saliently, this principle applies to conduct carried out by private actors with no direct attribution to the territorial state. Due diligence obligations have

modernised to recognise the substantial impact of NSAs and the duties of States to regulate and control their actions.

Despite this, the extent of the binding effect of due diligence within cyberspace is contested, as a few States, like Russia and China, have argued it as a 'voluntary norm' as opposed to a binding obligation (UNGA Document A/76/136, 2021, para. 80). The lack of a legally unified understanding has limited the potential of due diligence to carry out its function as an effective accountability mechanism. However, as States gain greater control and surveillance powers, it becomes easier to satisfy the 'knowledge' threshold, and it becomes more difficult to disprove the constructive knowledge of a State. Therefore, when it is not disputed, due diligence is able to effectively address non-State proxies and States that incentivise infringing cyber operations as a consequence of liability arising from omissions to uphold due diligence obligations.

Although due diligence fails to directly hold NSAs liable for hostile cyber operations, it is the most practical mechanism under existing international law. By addressing acts as well as omissions, the preventative rationale of recent due diligence formulations enables its translation into cyberspace. Due diligence addresses the decentralised and anonymous nature of cyberspace whilst maintaining international law as relevant.

## **Conclusion**

Ultimately, international law fails to hold NSAs responsible for hostile cyber operations. Despite having effective technologically neutral interpretations, the established law is stuck within a 20<sup>th</sup>-century, State-centric understanding. *Jus contra bellum* obligations under Article 2(4) fail to capture NSAs within their scope, and the law of State responsibility is ineffective by mechanisms of attribution failing to adapt alongside the challenges of cyberspace.

Plausible deniability of States, enabled by the high evidentiary threshold, facilitates the continued immunity of State-sponsored proxies and patriotic hackers. To address this, the threshold of control should follow the 'overall control' approach but function alongside a *de minimis* requirement to permit the law to capture actors behind sufficiently serious cyber operations that should be addressed to

uphold justice for injury sustained. If there were greater legal unity on the binding effect of due diligence, States would have greater impetus to ensure that harmful cyber operations do not originate from their territory. However, due to the current polarised relations of States, it is unlikely that effective action will take place soon.

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## Autism and Menopause: A Review

Caitlin McKenzie<sup>1</sup>

*Menopause is often a significant physiological and psychological transition in a woman's life, yet little is known about how it affects autistic women. This review synthesises the existing literature on autistic women's experiences of perimenopause and menopause. A systematic search identified sixty-eight studies, of which nine met the inclusion criteria after screening for relevance, peer review, and accessibility. Five overarching themes were identified. First, autistic traits and menopause symptoms were interrelated, with menopause associated with increased sensory sensitivities, executive function difficulties, and changes in masking behaviours. Autistic women reported greater psychological and physical symptom severity compared with non-autistic peers, including sleep disturbances, headaches, and mood difficulties. Menopause also prompted some participants to recognise previously undiagnosed autistic traits. Mental health challenges, particularly anxiety and depression, were frequently reported, though findings were mixed regarding differences from non-autistic populations. Second, menopause occurred alongside other midlife stressors, such as changes in employment, caregiving responsibilities, and health challenges, which could exacerbate functional difficulties. Third, participants emphasised the importance of social support, yet many described isolation and limited networks, with autistic women particularly affected. Fourth, interactions with healthcare providers were frequently described as challenging, with experiences of dismissal, lack of autism-informed care, and practical barriers to access, contributing to avoidance of help-seeking. Attitudes toward hormone replacement therapy (HRT) were mixed, with uptake influenced by information gaps rather than autism-specific factors. Finally, participants highlighted a lack of accessible, autism-friendly menopause resources, reporting confusion about perimenopause, symptom recognition, and self-management strategies.*

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## **Introduction**

Autism Spectrum Disorder is a common neurodevelopmental/neurodivergent condition, occurring in 1-2% of the UK population (Roman-Urrestarazu et al., 2021). Autistic individuals often show differences in social communication and may display repetitive or restricted behaviours, such as hyperfixations or a strong emphasis on routines. They may experience hyper- or hyposensory symptoms (American Psychiatric Association, 2022). Autistic people can also experience ‘meltdowns’ or ‘shutdowns’. These can occur due to excessive sensory stimulation (sensory overload) or psychological distress. Meltdowns tend to be episodes of intense frustration, often accompanied by physical behaviours such as kicking or yelling. In contrast, ‘shutdowns’ are internalised, often resulting in loss of speech, depression and fatigue (Leicestershire Partnership NHS Trust, 2025; Phung et al., 2021). Many autistic people experience alexithymia, difficulty recognising and expressing emotions, which affects 33–63% of autistic individuals (Kinnaird et al., 2018).

Autism is diagnosed three to four times more frequently in men than in women (Loomes et al., 2017). Proposed explanations include biological factors, such as the female protective effect, whereby women require a greater genetic or environmental load to develop autism (Wigdor et al., 2022), and social factors, including male-biased diagnostic criteria, underrepresentation of women in autism research, and gender stereotypes (Cook et al., 2024; D’Mello et al., 2022). Autistic women are also more likely to present differently and to engage in masking behaviours, concealing autistic traits to appear neurotypical (Alaghband-Rad et al., 2023; Cary et al., 2023). Despite this, the current diagnostic criteria are more inclusive than previous versions, and since Lai et al. (2015) seminal publication, there has been increased awareness among researchers and clinicians regarding sex differences in autism presentation. These developments, along with changing public perceptions of autism, have contributed to rising diagnosis rates among adult women (Grosvenor et al., 2024).

Menopause often occurs in midlife, and is defined as the cessation of menstruation for at least 12 months due to declining oestrogen levels, with perimenopause referring to the preceding transition period (NHS, 2023). Menopausal symptoms affect 85% of

women and include vasomotor symptoms, physical pain, fatigue, sleep disturbance, genitourinary symptoms, and psychological or cognitive difficulties (MGH Centre for Women's Mental Health, 2025). Up to 25% of women find these symptoms debilitating, with symptoms lasting an average of seven years (Gatenby & Simpson, 2023). One in ten women leaves the workforce due to menopause-related effects (The Fawcett Society, 2022).

Despite increasing recognition and understanding of autism in women, little is known about how autistic women experience menopause. Given the significant physical, psychological, and occupational impacts of menopause, understanding how menopausal changes interact with autism-related traits is crucial (Gatenby & Simpson, 2023; MGH Centre for Women's Mental Health, 2025; The Fawcett Society, 2022). This review systematically examines the existing literature on autism and menopause, evaluates the quality and scope of current evidence, and identifies key gaps to guide future research.

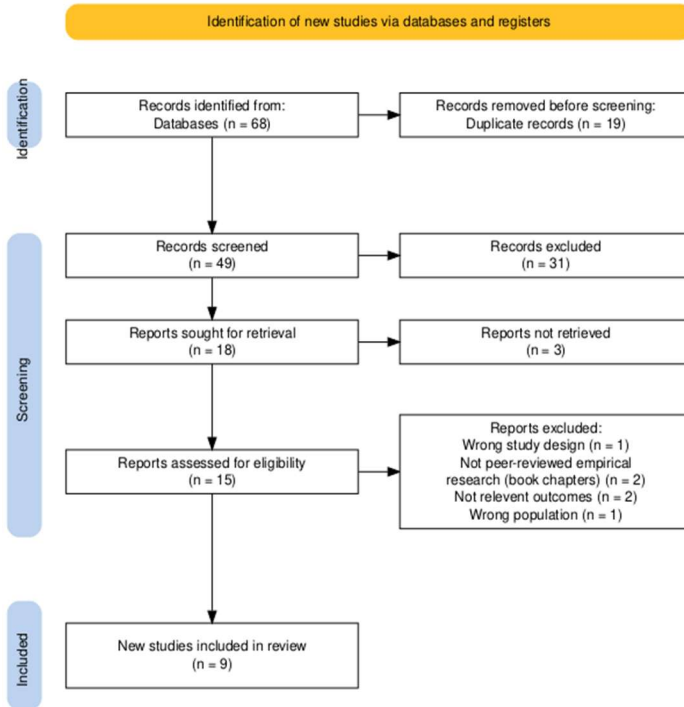
## **Methods**

A literature search was conducted using the databases PubMed, Web of Science, and PsycINFO, using the keyword search: (autism) AND (menopause OR perimenopause). The results were filtered to exclude papers published before 2015. All results, duplicates, inclusions, and exclusions were recorded and reported using the PRISMA framework. The search was conducted on the 9th of June 2025.

Eligible studies were peer-reviewed qualitative, quantitative, or mixed-methods research published in English between 2015 and 2025. Studies were required to report outcomes related to menopause or perimenopause in autistic women, including mental health, physical health, diagnosis, or employment. Studies including self-diagnosed autistic women were retained to reflect known diagnostic barriers for women. Exclusion criteria comprised publications before 2015; non-empirical or non-peer-reviewed sources (e.g., editorials, books, conference materials, or preprints); and studies that did not clearly address both autism and menopausal status.

All records identified in the search were imported into Rayyan, a software tool designed to facilitate systematic review screening.

Titles and abstracts were initially screened for relevance, followed by the retrieval and full-text review of potentially eligible articles. Studies were assessed for inclusion based on the outlined criteria, and reasons for exclusion were recorded. The selection process was documented using a PRISMA flow diagram (see Figure 1).



**Figure 1:** PRISMA 2020 flow diagram, showing the study selection process. The diagram details records identified, duplicates removed, excluded at screening, assessed for eligibility, and included.

The included studies were assessed for reliability and validity using the CASP (Critical Appraisal Skills Programme) Qualitative Studies checklist, or MMAT (Mixed Methods Appraisal Tool) for mixed methods or quantitative studies.

## Results

The database search identified sixty-eight studies, of which nineteen duplicates were removed. Of the remaining forty-nine studies screened,

thirty-one were excluded based on title and abstract. Eighteen full texts were assessed; three could not be retrieved, and six were excluded for not meeting the inclusion criteria. The remaining nine studies met the inclusion criteria and were assessed using CASP and MMAT; all were rated as high quality and included in this review.

## **Theme 1: The Interplay Between Menopause and Autism Symptoms**

### ***Changes in Autistic Traits***

Several studies reported changes in autistic traits during menopause, with increased sensory hypersensitivity being the most common (Benevides et al., 2024; Moseley et al., 2020a; 2020b). Autistic menopausal women are 55% more likely to have 'altered sensory experiences' noted in their medical records, compared to autistic women who are not menopausal (Benevides et al., 2024). These changes could negatively impact daily living, relationships, and mental health.

Other challenges that developed or worsened during menopause included difficulties with executive function skills, increased frequency of 'meltdowns', and greater issues with social communication skills (Moseley et al., 2020a; 2020b). However, this trend was not highlighted by participants in Piper and Charlton (2025).

Several studies also reported that menopause caused changes in masking behaviours, which ranged from masking feeling more difficult to it affecting their mental health (Brady et al., 2024; Moseley et al., 2020a; 2020b). Some participants described how their history with masking and hiding their symptoms influenced their ability to seek help for their menopause symptoms (Piper & Charlton, 2025).

### ***Menopause Symptoms***

Some studies suggest that autistic women may experience more severe menopause symptoms. A comparison of symptom reports between autistic women and non-autistic women showed that, on average, autistic women report more severe psychological and physical symptoms (Charlton et al., 2025; Groenman et al., 2022). Compared with autistic women without recorded menopause, those with symptomatic menopause were significantly more likely to experience sleep disturbances, headaches/migraines, and altered sexual function

(Benevides et al., 2024). This is supported by interview data in which participants often described their struggles with symptoms, changes to their menstrual routine, and the impact on employment, daily life and mental health (Karavidas & De Visser, 2021; Moseley et al., 2020a; Piper & Charlton, 2025).

Participants often described how their autistic traits and menopause symptoms were interconnected, each influencing the other (Brady et al., 2024; Moseley et al., 2020a; 2020b; Piper & Charlton, 2025). Participants who had not been diagnosed at the time of their menopause transition shared that, if they had known, they would have been better able to access support and understand their experiences (Brady et al., 2024).

Another common theme was the difficulty participants faced in identifying menopause symptoms, often due to challenges with alexithymia and interoception (Brady et al., 2024; Moseley et al., 2020a; 2020b; Piper & Charlton, 2025). Participants often attributed their menopause or perimenopause symptoms to other causes, such as mental health issues or medication side effects (Karavidas and De Visser, 2021; Moseley et al., 2020a).

### ***Mental Health***

The development of mental health issues was a common theme throughout the literature, with depression and anxiety reported most frequently (Benevides et al., 2024; Brady et al., 2024; Groenman et al., 2022; Moseley et al., 2020a; 2020b). Some findings suggest higher rates of mental health conditions in menopausal autistic women compared with both non-menopausal autistic women and menopausal non-autistic women (Benevides et al., 2024; Groenman et al., 2022). In contrast, Piper and Charlton (2025) found no qualitative differences in mental health complaints between autistic and non-autistic women.

### **Theme 2: It's Not Just the Menopause (And Other Midlife Events)**

Menopause does not occur in isolation; it often coincides with other significant life events such as children moving out, ageing parents, divorce, and personal health issues (Brady et al., 2024; Moseley et al., 2020a; 2020b; Piper & Charlton, 2025). Some participants described how menopause symptoms could negatively affect their ability to stay in

employment (Brady et al., 2024; Moseley et al., 2020a). A positive aspect of menopause was that some participants reported it encouraged them to adopt healthier lifestyle choices to support their physical and mental health (Moseley et al., 2020a; Piper & Charlton, 2025).

### **Theme 3: Social Support and Relationships**

The third theme in the literature was the importance of social relationships for well-being. Participants often felt isolated and lacked a close social network, with some finding that menopause negatively affected their relationships with family, partners and friends (Brady et al., 2024; Moseley et al., 2020a; 2020b; Piper & Charlton, 2025). Piper and Charlton (2025) suggest that this is something that affects autistic women more, as the non-autistic participants did not highlight a lack or loss of relationships.

### **Theme 4: Interactions with Healthcare Professionals**

#### ***Barriers to Access***

Some participants struggled to access healthcare and medical help; common reasons cited were due to anxiety around making appointments, long wait times, and a lack of GPs, leading some participants to seek private care (Brady et al., 2024; Piper & Charlton, 2025). These issues were raised by the autistic participants in Piper and Charlton (2025) as significant barriers; however, the non-autistic participants did not mention any difficulties with accessing help.

#### **Experiences at the Doctor's Office**

Negative experiences with healthcare providers (HCPs) led some participants to hesitate seeking care. Reported issues included misdiagnoses, inappropriate care, feelings of being “pushed” onto medication, feeling ignored or not taken seriously, and HCPs’ limited knowledge of autism, menopause, or HRT (Brady et al., 2024; Moseley et al., 2020a, 2020b; Karavidas & De Visser, 2021; Piper & Charlton, 2025). There were mixed attitudes towards HRT from the participants (Karavidas & De Visser, 2021; Piper & Charlton, 2025), with some describing how they wanted to try it but received pushback from their GP (Brady et al., 2024).

These points raised are supported by data from De Visser et al. (2024) (see Table 1), which found that often healthcare professionals did not check that the patient had understood what had been said, did not check whether they were accommodating the patient's communication or sensory needs and didn't understand how autism affected sexual health and menopause.

Participants highlighted a lack of accommodations for autistic differences (Piper & Charlton, 2025; Karavidas & De Visser, 2021). Helpful accommodations included video or email appointments and written treatment plans, which allowed time to process information and reduced sensory stress (Piper & Charlton, 2025; De Visser et al., 2024).

### **Theme 5: Knowledge and Resources**

This final theme was the participants' knowledge, or lack thereof, regarding autism or menopause, as well as the resources available. Many participants felt that the current resources available for educating women on menopause were lacking, leading to many participants being confused about menopause, including what perimenopause was, symptoms other than the classic 'hot flushes' (Brady et al., 2024; Moseley et al., 2020a; Piper & Charlton, 2025). Some participants said that menopause would have been more tolerable if they knew what to expect, and that learning about their symptoms and experiences reduced anxiety (Brady et al., 2024; Karavidas & De Visser, 2021; Piper & Charlton, 2025).

Participants also described a lack of autism-friendly or autism-focused menopause resources (Brady et al., 2024; Moseley et al., 2020a; 2020b). Participants reported that ideal resources should be clear, practical, and objectively presented, noting that existing menopause information was often emotion-driven, scaremongering, and overly focused on negative symptoms (Moseley et al., 2020b; Piper & Charlton, 2025). Participants described how they turned to social media for information and to create connections with others (Karavidas & De Visser, 2021; Piper & Charlton, 2025).

**Table 1:** Original results reported in De Visser et al. (2024).

	Never	Sometimes	Usually	Always
How often do primary care staff...				
Explain things in a way that is easy to understand?	3.2%	34.1%	46.8%	15.9%
Give you the opportunity to ask questions?	8.7%	32.5%	38.9%	19.8%
Check that you understand what they say?	32.5%	46.0%	15.8%	5.6%
Give you enough time to process what they say?	41.9%	37.9%	16.1%	4.0%
Check that they are communicating in your preferred way?	71.8%	20.2%	6.5%	1.6%
Accommodate your sensory needs?	69.8%	20.8%	6.6%	2.8%
How often do primary care staff seem to know how your autism affects...				
Your sexual health?	92.2%	4.9%	1.9%	1.0%
Your experience of menstruation?	93.3%	2.9%	1.9%	1.9%
Your experience of menopause (if applicable)	95.8%	2.1%	2.1%	0.0%

## **Discussion**

### **Theme 1: The Interplay Between Menopause and Autism Symptoms**

The findings suggest that perimenopause and menopause may be associated with changes in autism-related traits and increased severity of menopausal symptoms in autistic women, although experiences varied across studies. While several studies reported increased sensory sensitivities and functional difficulties during menopause, Piper and Charlton (2025) did not identify perceived changes in autistic traits, highlighting heterogeneity in self-reported experiences.

Benevides et al. (2024) reported lower recorded rates of menopause among autistic women than non-autistic women in US Medicaid data, despite evidence of greater symptom severity. This apparent discrepancy likely reflects underdiagnosis rather than reduced symptom burden, particularly given documented barriers to healthcare access and help-seeking among autistic women. Differences in healthcare systems and study samples may also contribute, as Benevides et al. (2024) was the only US-based study and included a high proportion of participants with intellectual disabilities, limiting comparability with predominantly European and Canadian studies that excluded this group.

Across studies, menopause was frequently described as a period in which women first recognised autistic traits or sought diagnosis (Brady et al., 2024; Moseley et al., 2020a, 2020b; Piper & Charlton, 2025). Samples largely comprised women who were diagnosed in midlife, suggesting that menopausal transitions may increase awareness of autistic traits, even if not explicitly identified as a causal factor.

The review also indicates increased mental health difficulties during menopause in autistic women, particularly anxiety and depression. Evidence suggests higher rates compared with both non-menopausal autistic women (Benevides et al., 2024) and menopausal non-autistic women (Groenman et al., 2022), although not every study consistently identified group differences (Piper & Charlton, 2025). Given that autistic individuals already have elevated lifetime rates of anxiety and depression (Hudson et al., 2018; Lai et al., 2019), and menopause independently increases risk of mood disturbance (Alblooshi et al.,

2023), it remains unclear whether menopause acts as a causal factor or an exacerbating context. Longitudinal research is required to clarify these relationships.

### **Theme 2: It's Not Just the Menopause (And Other Midlife Events)**

Several studies highlighted that menopause often coincided with other significant midlife stressors, including changes in employment, caregiving responsibilities, and personal health issues (Brady et al., 2024; Moseley et al., 2020a). Some participants described reducing their working hours or leaving employment due to menopausal symptoms. Given that autistic adults already experience higher rates of unemployment and underemployment than the general population (Department for Work and Pensions, 2024), and that 1 in 10 menopausal women leave the workforce (Fawcett Society, 2022), menopause-related challenges may compound existing vulnerabilities. However, there is limited population-level data on employment outcomes for middle-aged autistic women.

### **Theme 3: Social Support, Relationships, and Interaction**

Participants frequently emphasised the importance of social relationships for wellbeing, yet many described feeling isolated and lacking close social networks during menopause. This aligns with broader literature indicating that autistic people are less likely to report close social relationships (Wu & Wang, 2025), suggesting that menopause may exacerbate pre-existing social vulnerabilities.

### **Theme 4: Interactions with Healthcare Professionals**

Across studies, autistic women commonly reported feeling dismissed or not taken seriously by healthcare providers, alongside perceptions that clinicians lacked knowledge of autism, menopause, or their interaction. These experiences contributed to the avoidance of healthcare and delayed help-seeking. Practical barriers, such as appointment formats and scheduling, further limited access to care. Only one study directly compared autistic and non-autistic women, finding that negative healthcare experiences were reported exclusively by autistic participants (Piper & Charlton, 2025), although conclusions are limited by the small evidence base.

These experiences may reflect challenges described by the double empathy theory, whereby differences in communication styles between autistic and non-autistic individuals contribute to misunderstanding in clinical encounters, potentially resulting in miscommunication and reduced quality of care (Williams et al., 2025). However, negative healthcare experiences during menopause are not unique to autistic women; population-level data indicate that up to 60% of women feel dismissed by healthcare providers (Fawcett Society, 2024).

Participants also reported mixed attitudes towards hormone replacement therapy (HRT), consistent with wider literature. Low uptake of HRT has been linked to concerns about risks and inadequate or anxiety-provoking information provided by healthcare professionals (Fawcett Society, 2022), suggesting that uncertainty around HRT is not autism-specific.

### **Theme 5: Knowledge and Resources**

Autistic women commonly reported that available menopause resources were inadequate, difficult to understand, or insufficiently informative, which may have contributed to difficulties identifying perimenopause or menopause. This aligns with broader findings that up to 90% of women feel poorly informed about menopause (Women's Health Strategy for England, 2022), indicating a systemic gap in education rather than an autism-specific issue.

### ***Overarching Limitations in the Literature***

Most studies employed qualitative designs using interviews, focus groups, or surveys, which enabled rich exploratory insights but may be subject to recall bias and self-selection effects. Recruitment through online autism communities may have favoured participants who were more informed or who had negative experiences. Few studies included comparison groups, limiting conclusions about autism-specific effects.

Another key limitation is the lack of participant data on socioeconomic status, education, employment, and ethnicity. Four studies provided no demographic data; the others showed samples that were predominantly highly educated compared with the general UK population. According to the 2021 census, 33.8% of English and Welsh

people have a degree (combined undergraduate degrees, certificates, diplomas and postgraduate). In Charlton et al. (2025), 26.4% held a postgraduate degree, 22.7% held an undergraduate degree, and 19.4% held vocational or professional certifications. In De Visser et al. (2024), 42% held a postgraduate degree, 36% an undergraduate degree. In Groenman et al. (2021), 33% held a university degree.

Limited employment and geographic data were provided, and poverty rates were reported in only one study. In Charlton et al. (2025) 43.3% of participants were in employment, and 24.8% were retired, when compared to the data on employment in autistic people, which shows that on average three in ten autistic people are in some form of employment (Department for Work and Pensions, 2024); however, this report did not separate the employment data by sex. A summary of this data is presented in Table 2. These gaps raise concerns about the representativeness and generalisability of findings to the broader autistic population. Better reporting on participant characteristics is needed for future research.

**Table 2:** *Summary of available socioeconomic characteristics reported, including ethnicity, education history, geography, employment status, and poverty rates when available. Studies with no data were excluded. PG = postgraduate, UG = undergraduate.*

	Ethnicity (as % white)	Education History	Employment Status	Poverty Rate
Benevides et al. (2024)	72.7%	-	-	11.19%
Brady et al. (2024)	80%	-	-	-

Charlton et al. (2025)	93.4%	26.4% PG, 22.7% UG, 19.4% vocational, 5.4% no formal qualification	43.3% employed, 24.8% retired, 16% unable to work, 13.9% students/ volunteers/ carers, 2.1% unemployed	-
De Visser et al. (2024)	88%	42% PG, 36% UG, 5% did not finish secondary school	-	-
Groenman et al. (2021)	-	Autism: 3% less than 6 yrs primary education, 33% UG; Control: 31% UG	-	-

**Conclusion**

This review aimed to synthesise and evaluate the current literature on autism and menopause. This review identified five themes within the literature. The first theme was how menopause symptoms and autism interact, with participants identifying increased hyper-sensitivity, issues with executive function abilities, and increased mental health issues. Participants often cited that they had issues identifying when they had begun perimenopause or menopause due to alexithymia. The second theme highlighted how menopause often occurs alongside other major life events that can impact how participants coped with menopause symptoms and their mental health. The third theme highlighted the importance of social relationships for coping with menopause symptoms, and how participants felt that they did not have those close relationships. The fourth theme showed how participants often had negative experiences with healthcare professionals, which led to some delaying or avoiding medical aid, and some encountered barriers to

getting medical aid. The final theme showed how participants felt that the current resources available were lacking.

This review highlighted several overarching limitations in the literature; however, this is in part because most of these studies are preliminary interviews to establish future research questions. Some limitations highlighted included the homogeneity of study design within the body of literature, participant sampling methods, the lack of control conditions, the fact that the research is predominantly UK-based, and the lack of data on the socioeconomic status and ethnicity of participants. These limitations affect the ability to generalise the results to the wider autistic and menopausal population.

This review highlights key areas for future research, including the effects of menopause on employment status which was briefly touched on by Brady et al. (2024) and Moseley, Druce, and Turner-Cobb (2020a), in which some participants described how they had to either reduce their hours, change jobs, or leave their jobs due to the mental and physical effects of menopause.

Further research could explore this and compare it to how menopause affects a non-autistic woman's employment status, as current research suggests that 1 in 10 women leave the workplace due to the effects of menopause. A second area for future research could be further investigation into healthcare professionals' perspectives. A common theme in the research literature was the participants' distrust of healthcare professionals, usually due to previous negative experiences, such as feeling that they had been ignored or not taken seriously, or the belief that the healthcare providers were not educated on how autism in women works, or menopause.

Further research to investigate the views of healthcare professionals, such as GPs and nurses, to understand their perspectives and to identify where they have gaps in their knowledge. This could eventually lead to educational resources for healthcare professionals, leading to better care for their autistic patients.

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## Is International Law Really Law or Does 'Might Make Right'?

Kamraan B. Nizam<sup>1</sup>

*Thucydides, in his History of the Peloponnesian War, wrote that "right, as the world goes, is only in question between equals in power, while the strong do what they can and the weak suffer what they must." (Thucydides, 397 - The Melian Dialogue). This article explores whether the rules developed over the last century are in fact what we consider to be 'international law', or whether they are more norms of international behaviour that nation-states choose to follow or not follow. The article first considers the arguments presented by realist scholars such as Hobbes, Austin, and Morgenthau to the effect that international law is not, in reality, law but rather a set of moral obligations that States follow when it is in their interest to. The article then presents the arguments of idealist scholars such as Hart, Crawford, and Koh for the proposition that international law has developed to the point that it forms a body of rules that most nations predominantly follow to be seen as acting lawfully on the international stage. Finally, the article concludes that, as events over the last four decades have shown, States act in their own best interest first, such that the maxim 'might makes right' prevails.*

### I. Introduction

Thucydides, in his History of the Peloponnesian War, wrote that "right, as the world goes, is only in question between equals in power, while the strong do what they can and the weak suffer what they must." (Thucydides, 397 - The Melian Dialogue). The twentieth century has seen international law become a ubiquitous presence in world affairs, government, jurisprudence, and academia. In international political discourse, events are spoken of in the context of international law.

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Paradoxically, however, the question keeps arising: Is international law really 'law' or does the maxim 'might makes right' prevail?

Within the context of the study of international relations (hereafter, "IR"), this article sets out to discuss this question. After providing a working definition of the phrase 'international law' (hereafter, "IL") in section II-A, the article will first consider the views of realist scholars who argue that IL is not really 'law'. In section II-B, the article will examine the perspectives of liberal academics who contend that IL really is law. The article will then analyse the competing positions in section II-C. As a prelude to discussing whether IL is really law, it is important to first define the phrase. The standard definition is that IL is "the body of rules that governs the rights and duties of States and their organs and agencies and of international organisations in their international dealings with one another and others" (Cane & Conaghan, 2012, p. 618). However, this definition has changed over time and is subject to disagreement, principally between those who subscribe either to a 'realist' view or, alternately, those who adhere to 'liberal' theories of IL. These differences will be explored further in Section II below.

## **II. Discussion**

### ***A. International Law is Not Law***

#### *Theory*

Proponents of the 'realism' or 'realist' theory in IR argue that IL is not, in reality, law, but instead a set of 'moral obligations' (Morgenthau, 1948, p. 177). This view was originally stated in the 19<sup>th</sup> century by John Austin, who said that "international law is improperly so-called" (Mégret, 2012, p. 72). Building on the works of Machiavelli, Hobbes, and the philosophy of Jeremy Bentham that there can be no legal obligation without the threat of punishment from a sovereign State, Austin argued that law "was a form of command from a sovereign to its subjects, backed by the 'threat of evil'" (Stumpff-Morrison, 2016, pp. 365-366). According to Austin, a 'sovereign' is one who is obeyed by others but does not obey anyone else. In his 'command theory', Austin argued that since IL "does not possess a sovereign that issues commands, IL does not qualify as law" (Pavel & Lefkowitz, 2018, p. 3). This argument was one view of IL at the dawn of modern international

relations, where realist scholars such as Carr and Morgenthau contended that States, the sole actors in IR and IL, are motivated solely by self-interest, seeking power as rational actors to maximise their security and chances of survival (Morgenthau, 1978, pp. 4–15). Morgenthau argued that cooperation between States was to maximise the security of each individual State, and that any act of war must be based on self-interest rather than idealism. To realists like Morgenthau, IL was an “ideological disguise for political policy, used by States whose power interests were served by retention of the status quo” (Morgenthau, 1978, p. 87). In this ideological construct, IL was nothing “more than a tool to be used by the powerful in the pursuit of even greater power” (Mearsheimer 1994, pp. 7, 11; Scott, 1994, p. 319). Other realists maintained that States struggle for ever greater power as a means of continued survival (Mearsheimer, 2007, pp. 71-72).

### *Discussion*

In the view of Realism, IR and IL can appear as a perpetual Hobbesian state of nature in which States act solely based on their national interest, to take advantage of other States, and fight for power (Morgenthau, 1985, pp. 3-17). To realist scholars in the tradition of Austin and Morgenthau, the absence of certain traits commonly found in other branches of civil or criminal law, such as (i) a global sovereign or law-making (legislative) process and (ii) mechanisms of coercive enforcement, alongside the fact that (iii) States are only bound by IL with their consent, means that IL is not really ‘law’ that binds States (Pavel & Lefkowitz, 2018, p. 3). Realism contrasts domestic legal regimes with the international one on each of these points.

i) No sovereign or legislature/legislative process – In traditional State legislative processes, laws are made by institutions constitutionally mandated and empowered for the purpose, such as a parliament/sovereign or congress/president, who enact and sign laws into existence. Such laws reflect the constitutional legitimacy of the law-making process and are therefore considered binding. By contrast, realist scholars argue that IL has no such overarching sovereign or legislative process to which it is binding; in part, there must be a recognised authority or legislative institution to enact IL (Bolton, 2000, p. 2, 7; Singh, 1970, pp. 277-279). Since there is no internationally accepted source of legislation, there is uncertainty as to where ILs

originate and whether they have the imprimatur of State authority and legitimacy (Goldsmith & Posner, 2005, pp. 23-24, 93-95).

ii) No 'coercive' mechanism for enforcement – Realist scholars point to the lack of efficacy of IL in contrast to domestic law, by arguing that in IL there is no "command backed by force", or coercive element, to enforce IL against a transgressing State to compel it into compliance (Goldsmith & Posner, 2005, pp. 29). Realists contend that "international law cannot be real law because real law must be capable of affecting behaviour through the threat and exercise of physical coercion. Since international law lacks mechanisms of physically coercive enforcement, it cannot affect behaviour in the right way and hence cannot be a real legal system" (D'Amato, 1985, p. 1293; Hathaway & Shapiro, 2011, p. 256).

iii) States are only bound by IL with their consent – Realists also argue that IL is not really law because, according to the 'consent' theory, States are only morally obligated to comply with IL if they have given their consent (Goldsmith & Posner, 2005, pp. 189-190). As such, if a State has not consented to being bound by a rule or norm of IL, it cannot be compelled to act in accordance with that rule or norm. Where a State has consented to a treaty, for instance, that is a reflection of binding IL. However, norms of customary international law (hereafter, "CIL") cannot be imposed on States that have not given their consent (Bork, 1990, pp. 3-4; Byers, 1995, pp. 112-114; D'Amato, 1985, pp. 1308-1309; Singh, 1970, p. 189).

As can be seen from the brief survey above, proponents of the position that IL is not really law are, broadly speaking, from the 'realist' school of IR. They take the position that States pursue a policy of self-interest and accumulation of power, and, in that pursuit, view international law largely as a set of moral obligations which they will comply with when it suits their interest (Petallides, 2012, pp. 1-2). From the realists' perspective, IL is not binding upon States because there is no global sovereign or law-making process, no coercive enforcement mechanisms, and States are bound by IL only if they consent (Goldsmith & Posner, 2005, pp. 189-190). The same perspective would hold true for international criminal law (ICL). Those who are charged and convicted of crimes under international law by the International Criminal Court (ICC) would likely only face punishment in two scenarios:

1, that their country agrees to uphold the decisions made by the ICC, and 2, that the individual is apprehended in another country that agrees to uphold the decision of the court. Of course, a third scenario exists in the individual turning themselves in, but this is highly unlikely and cannot be considered a mechanism of international law.

There are many major examples of international law failing, with many of these involving the inability of the U.N. Security Council to properly intervene and stop conflicts, such as the war in Gaza or Russia's invasion of Ukraine, due to vetoes by a permanent member. Other examples include the widespread abuse of human rights despite treaties, genocides where intervention has failed, and a failure to prevent wars of aggression. Many of these display a clear lack of enforcement of rulings by the I.C.J and the ICC. The U.N. Security Council also has a fundamental shortcoming in the form of the veto power that each of the five permanent members possesses. This veto power is often invoked and prevents any action from being taken (Illingworth, 2019, 1). It also means that the five permanent members of the Security Council are not held accountable for their own actions.

Article 2, Section 4 of the U.N. Charter states:

*“All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the purposes of the United Nations.”*

The following events are all clear violations of the rule in Article 2(4):

- **Crimea:** In 2014, Russia annexed Crimea from Ukraine by use of military force. The Russian annexation of Crimea was widely regarded by the international community as unlawful under international law, but Russia has suffered no legal consequences (Amnesty International, 2024).
- **Myanmar:** The ‘Rohingya genocide’ is a set of two phases of military actions carried out by the government of Myanmar: the first being a military crackdown on the population between 2016 and 2017, and the second being the genocide occurring against the Rohingya population.

The Gambia brought a case to the I.C.J against Myanmar in 2019, which is ongoing. The international community widely view the actions of Myanmar as violating international law, but Myanmar has suffered no legal consequences as of today, and Myanmar has ignored the preliminary measures ruling of the I.C.J (United Nations, 2018).

- Russian war on Ukraine: In February 2022, Russia invaded Ukraine, starting the largest war in Europe since World War II, in a major escalation of the initial conflict in 2014. Russia's invasion violated Sec. 2(4) of the U.N. Charter, but it has suffered no legal consequences (Steenhard, 2022, p. 1)
- Israel's bombing of Iran: In June 2025, Israel unilaterally bombed multiple Iranian nuclear facilities and military bases, amongst other targets, and killed high-ranking Iranian military officials, weakening the Iranian military. The U.N. Charter states that any military action other than self-defence is illegal, but Israel has suffered no legal consequences (United Nations, 2026a).
- Gaza, Palestine: The modern conflict in Gaza stems from the 1948 Arab-Israeli war. Many major conflicts have ensued since, with the major escalation occurring in October of 2023, when Hamas launched an attack against Israel. Since then, Israel has committed numerous atrocities and a genocide against the Palestinian people in Gaza, the West Bank, and the other occupied territories (Human Rights Council, 2025). South Africa brought a case at the I.C.J against Israel, charging it with committing genocide, and the case is ongoing. The vast majority of the international community views Israel's actions as overtly illegal under the U.N. Charter, but Israel has suffered no legal consequences and has ignored the preliminary measures rulings of the I.C.J (United Nations, 2025a).

- US intervention in Venezuela: In January 2026, a covert US military operation occurred in Venezuela, capturing the President Nicolas Maduro and taking him to the US. This was a clear violation of Article 2(4) of the U.N. Charter. Nevertheless, the US has faced no legal consequences stemming from violations of international law (United Nations, 2026b).
- The bombing of Iran by the US and Israel under the pretext of preventing Iran from developing nuclear weapons capability. This occurred despite the fact that Article 2(4) of the Charter of the United Nations prohibits the threat or use of force against any state, except in self-defence or if the Security Council approves. Self-defence is only available in response to an actual or imminent armed attack by another country (United Nations, 2025b).

These are just some examples of the failure of international law and the global rules-based order.

## ***B. International Law is Law***

### *Theory*

One response to proponents of the ‘realism’ or ‘realist’ school of thought in IR is provided by ‘liberal’ or ‘idealist’ scholars who argue that IL is legally binding on States (Mégret, 2012, p. 75). Building on the works of Grotius, Pufendorf, and especially Kant, liberalism rejects the view that power politics is the only possible outcome of international relations; it emphasises mutual benefit and international cooperation and establishes international organisations (such as the United Nations) and non-governmental organisations to shape State action. In the international arena, Kant argued that war and conflict between States could be reduced through collective action and “changes to both domestic and international structures of governance” (Kant, 1795, p. 107; Koh, 1997a, pp. 2610-2612; Russett, 2007, pp. 94-95). In this vein, liberalism contends that IL has a role in moderating or constraining State behaviour (Mégret, 2012, p. 75).

*Discussion*

Among the first modern scholars to refute Austin and argue that IL is in fact a form of 'law' was H.L.A. Hart. Writing in 1961, Hart accepted that IL has "inspired misgivings" because in IL there is an "absence of an international legislature, courts with compulsory jurisdiction, and centrally organised sanctions" (Hart, 2012, p. 214). Nevertheless, Hart argued that IL is, however weak, a form of law consisting of only 'primary' rules (which govern conduct) but lacking 'secondary' rules (which allow for the creation, alteration, or extinction of primary rules) (Hart, 2012, p. 214; Murphy, 2009, p. 168). He and liberal scholars writing in his wake have since elaborated on and brought an updated, modern view of the current standing of IL in response to criticism raised by realist scholars.

i) No sovereign or legislature/legislative process – Responding to the charge that IL was not really 'law' because of an absence of an overarching sovereign or legislature to enact laws, Hart noted that even in national systems, not all laws are enacted by a sovereign or legislature. For example, some laws are made through regulations promulgated below the legislative level (cabinet department or executive agency) or are created via the common law in courts over a period of time (Besson, 2009, pp. 348-351; Murphy, 2009, p. 166). In addition, who exactly would a sovereign be in, for instance, the United States? The Congress? The President? Each of those institutions has a role to play in the legislative process, but neither would be deemed a sovereign whose command makes law (Dworkin, 2013, p. 3; Hart, 2012, pp. 220-226). Therefore, if such rules (whether as regulations or legal decisions based on developments in the common law) are deemed 'laws' binding on individuals and organisations, then similar rules in IL can also be binding on States and international organisations (Guzman, 2009, p. 155; Murphy, 2009, p. 166).

Furthermore, in the years since Hart, there have been extensive developments of a quasi-legislative process in the form of Resolutions of the General Assembly of the U.N. This process is different from national systems, but nevertheless one which follows a similar, detailed, and expert-led process by which conventions (e.g., U.N. Convention on Law of the Sea, U.N. Convention Against Corruption) or treaties (e.g., Outer Space Treaty) are and have been agreed by member States. It is

entirely likely that if Hart were writing today, he would conclude that the IL system is far more legislatively robust than it was in 1961.

ii) No 'coercive' mechanism for enforcement – Responding to this argument by Austinian scholars, Hart suggests that while the view that “command backed by threats” has an appealing legal quality, there is more to law. The criminal law has a coercive element in domestic law, Hart argues, but there is the law of contract, wills, and trusts, which do not have the same coercive quality and yet are accepted in society as 'law' (Raponi, 2015, p. 33; Simmons, 2012, p. 147; Spiro, 2006, pp. 6, 17). According to some, including Hersch Lauterpacht, “international law is simply assumed to be modelled on analogies with internal law, in particular, private law” (Crawford, 2003, p. 6). In the same vein, just because U.N. General Assembly or Security Council resolutions may not have the threat of enforceable sanctions attached, it should not lessen their legal nature.

In addition, there are softer pressures that apply against rogue States. If a State violates an international treaty or a norm of customary international law (*opinio juris*), it would be subject to social disapproval, for instance in the form of diplomatic alienation, by other States (D'Amato, 1985, pp. 1298-1299). Furthermore, it is the case that international conventions and treaties often contain enforcement mechanisms (Murphy, 2009, p. 169). An example might be the Comprehensive Nuclear-Test-Ban Treaty (“CTBT”) that creates the CTBT Organisation, which contains a verification and enforcement process and mechanism. Clearly, the signatory States understand their legal obligations under this treaty as binding in IL (Crawford, 2014, pp. 138-141).

Finally, it is true that international courts and tribunals do not have a police force to enforce their decisions on, for instance, rules on the use of armed force, but Hart nevertheless considered such rules 'law' (Murphy, 2009, p. 167). Moreover, the International Court of Justice, the principal judicial organ of the UN, does not have compulsory jurisdiction over disputes that may arise between States. However, that is also true for domestic or national courts. For instance, in the US, the Supreme Court does not have to accept jurisdiction over most cases which come before it, nor does it have a police force to enforce its decisions (Cane & Conaghan, 2012, p. 12; Henkin, 1984, pp.

1555-1569). Nevertheless, when the Supreme Court announces its decision, it is legally enforceable, whereas the decisions of the I.C.J. are not, despite often being viewed as enforceable by the world community. This is because there is no provision in the U.N. Charter or in the Statute of the International Court of Justice that enforces the decisions of the I.C.J. Similarly, as to other international tribunals such as the World Trade Organization and the International Criminal Court, there are many more avenues for the adjudication of primary rules that Hart could not have foreseen in 1961 but now reflect a robust international legal system that is binding on States without the need for physical coercion (Alvarez, 2009, pp. 163-165; Dworkin, 2013, pp. 20-21; Murphy, 2009, p. 169).

Liberal scholars also maintain that, occasionally, both individuals and States will break the law even though there is a coercive enforcement mechanism, but that does not mean there was no law to begin with (D'Amato, 1985, p. 1313-1314; Koh, 1997b, pp. 1824-1861).

iii) States are only bound by IL with their consent – To the realist argument that States are sovereign and can only be bound by their consent, Hart responds that “a State which is sovereign may also be ‘bound’ by, or have an obligation under, international law.” Hart suggests that the word ‘sovereignty’ is not to be taken as some form of ‘Superman’, “above the law whose word is law for his inferiors or subjects” (Hart, 2012, pp. 220-226). Dworkin expands this view, adding that whether a State has consented to a particular rule of IL is simply a matter of history and does not mean that the State is not subject to other peremptory norms (*jus cogens*) of IL that cannot be cancelled or derogated from (Dworkin, 2013, pp. 5-6).

Another view is that every State is privy to certain entitlements in the community of nations, such as the peaceful sharing of boundaries, exchange of ambassadors, diplomatic immunity, ability to enter into treaties, etc. (D'Amato, 1985, pp. 1307-1308). Collectively, these entitlements define what it means to be a State in the world today. If, as the realists maintain, IL is based on the consent of each, which can be withdrawn at any time, particularly when the State finds a rule of IL to be objectionable, “The result would be to wipe out the notion of ‘law’” (D'Amato, 1985, p. 1309). Yet, paradoxically, a State that

argues that it can withdraw its consent at any later time relies on IL when harmed by another State. Consent, therefore, is an elusive notion.

As seen from the discussion above, when Hart wrote on IL in 1961, he accepted it as 'law', albeit as a weak form of law because it lacked secondary rules. Proponents of the idea that IL is actually 'law' would argue that if he were writing today, it is quite likely that he would consider IL a vigorous and comprehensive form of law binding on States.

Under ICL, there are, of course, countries which are signatories to the Rome Statute. In these countries, a criminal suspect wanted by the ICC would be arrested, detained, and handed over to the ICC for prosecution (Ferragamo & Klobucista, 2025). As such, IL does apply and is effective to some extent.

### ***C. Analysis of Competing Arguments***

The arguments presented by the competing sides above, represented by realist and liberal scholars of international relations and international law, are appealing and persuasive in certain ways. To determine the efficacy of these theories, this article will apply them to specific world events to ascertain whether they are sustainable to that form of scrutiny.

On the international stage, it is a trite statement that States act in their own self-interest. Whether it is to engage in international trade, approve a treaty, go to war, or assist with a humanitarian effort, generally speaking, a State phrases its motivation to act, whether individually or in concert with other States, in terms of national self-interest (Crawford & Koskeniemi, 2012; Morgenthau, 1985).

i) No sovereign or legislature/legislative process – On this point of debate, liberals seemed to have the more persuasive argument. While the realists are correct that there is no World Parliament or Congress or other overarching sovereign to enact laws, there is, in fact, a thorough and exhaustive lawmaking process and procedure in the United Nations to achieve this outcome. The process engages member States and calls upon experts from across the world when a new convention or treaty is under consideration. Therefore, while the process differs from national law-making practices (which themselves

differ substantially), the U.N. legislative process is sufficiently robust to attribute it 'legal' status. While treaties, decisions of courts and tribunals (including the I.C.J.), and *opinio juris* certainly fall into this binding law category, evolving norms of customary international law may well not be considered binding upon States (Dworkin, 2013; Guzman, 2009; Hart, 2012; Murphy, 2009).

ii) No 'coercive' mechanism for enforcement – On this point also, the liberals have the more persuasive argument, but perhaps more narrowly. It is certainly the case that States are compelled to follow international treaties and conventions they have entered into and which may have 'coercive' enforcement mechanisms contained in them. States are also bound to abide by the decisions of courts and tribunals to which they have agreed to cede jurisdiction (D'Amato, 1985; Murphy, 2009; Raponi, 2015).

However, realists raise the point that a law is really not 'law' if there is no prescribed punishment for breaking it. This argument has an appealing quality (Bolton, 2000; Bork, 1990). While it is true that there are many such laws in the domestic legal arena, there is some sanction or ability to go to court to resolve the dispute, either by compensation, declaration, or specific performance. This is not the case for some forms of IL.

iii) States are only bound by IL with their consent – Finally, as to the point of consent, it is a split decision. The liberals seem to have the more persuasive argument in terms of *opinio juris* and peremptory norms of CIL, which should be binding on States whether they have consented to them or not (Crawford & Koskeniemi, 2012). However, as to treaties, conventions, decisions of the I.C.J. (and other tribunals), and evolving norms of customary international law, realists have a more persuasive position that a State should only be compelled to follow IL if it has given consent.

### **III. Conclusion**

Louis Henkin once observed that "almost all nations observe almost all principles of international law and almost all of their obligations almost all of the time." (Henkin, 1979, p. 47; Koh, 1997a, p. 2599). That certainly seems accurate, with the odd outlier catching all the attention.

This article first considers the views of scholars who argue that IL is not really 'law'. These realist scholars contend that IL is not really law because (i) there is no sovereign or legislature/legislative process which creates IL, (ii) there is no 'coercive' mechanism for enforcement of IL, and (iii) States are only bound by IL with their consent. On some points, especially as to the need for consent of States to be obligated under IL, the realists had some persuasive arguments, particularly in the area of consent in following the law. IL is not, in reality, law, but instead a set of 'moral obligations'. The article then examined the perspectives of liberal academics who contend that IL really is law, (i) even in national systems, not all laws are enacted by a sovereign or legislature, (ii) while criminal law has a coercive element in domestic law, there is the law of contract, wills, and trusts, which do not have the same coercive quality and yet are accepted in society as 'law', and (iii) it is true that international courts and tribunals do not have a police force to enforce their decisions, but often neither do domestic courts, and yet their rulings are deemed to state the 'law'. However, for the reasons and points raised by the realists and the real-world examples provided above, the article firmly concludes that international law is not really 'law' that is binding on States in most situations. In that way, Thucydides was right: might does make right.

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## **The Erosion of Peru's Energy Sovereignty: China's Weaponised Interdependence over Critical Minerals**

Suamy Gabriela Perez Ortega<sup>1</sup>

*With the expansion of international trade after the Second World War, power relations among states shifted away from the primacy of military force towards economic, technological, and institutional linkages. In this context, interdependence emerged as a system of reciprocal relations capable of generating mutual benefits through cooperation and reducing reliance on conflict. However, globalisation also produced structural asymmetries, creating vulnerabilities for states that depend on critical nodes controlled by others. This condition enables forms of coercion known as weaponised interdependence, whereby dominant actors leverage their position within global networks to exert geopolitical pressure. This dynamic has intensified amid the global energy transition and decarbonisation agendas. Critical minerals and rare earth elements have become essential inputs for clean energy technologies, while their geographical concentration and complex processing chains have reinforced global inequalities. China, which controls a significant share of the production and processing of these materials, has leveraged its position to expand its geoeconomic influence over both advanced economies and resource-rich developing regions, particularly in Latin America. Against this backdrop, this research examines how China's expansion across the critical minerals value chain—spanning extraction, infrastructure, and energy systems—affects national energy sovereignty in Peru. It argues that such dynamics increase the country's exposure to geopolitical, environmental, and social risks, highlighting the structural challenges embedded in the contemporary energy transition.*

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## **1. Introduction**

With the post-Second World War boom in international trade, the concept of “Power and Interdependence” developed by Keohane and Nye (1977) acquired new significance. They argued that the new relations of power were increasingly influenced by economic, technological, and normative ties, as opposed to the traditional reliance on military force. Within this framework, interdependence was defined as the reciprocal relations and influences among international actors, capable of producing positive outcomes through extended networks of collaboration. For the authors, such interdependent relationships were a mechanism for fostering interstate cooperation and reducing the resort to force in conflict resolution. Nevertheless, despite the advantages brought by globalisation, interdependence simultaneously generated asymmetric relationships among states. These disparities fostered vulnerabilities, enabling those with greater structural power to exert coercion over states more dependent on global networks. From these dynamics emerged the notion of “weaponised interdependence”, which describes how economic integration can be transformed into an instrument of geopolitical leverage.

In 2015, two milestones in climate governance redefined the trajectory of global energy development and the priorities of the United Nations member states: the Paris Agreement (UNFCCC, 2015) and the launch of the Sustainable Development Goals (United Nations, 2015). Both underscored the imperative of expanding clean energy generation through technologies capable of reducing greenhouse gas emissions and limiting the global temperature increase to no more than 1.5 °C by 2050. While these commitments sought to improve the quality of life of present and future generations, their implementation deeply reshaped global trade dynamics.

In this reconfigured context, critical minerals and raw materials have become indispensable inputs for the energy transition. These strategic resources, geographically concentrated in specific regions of the planet and requiring complex industrial processes for their utilisation (IRENA, 2023), have fostered new global asymmetries. China, controlling almost 90% of the production and transformation of critical minerals (Triolo, 2025), has instrumentalised this position to

exert geoeconomic coercion upon rival powers and upon peripheral raw-material exporters such as Peru. Based on this context, this research poses the following question: How does weaponised interdependence, through China's control of critical minerals, erode Peru's energy sovereignty and expose the country to geopolitical risks?

## **2. Global Critical Minerals Interdependence in the Age of the Energy Transition**

The role of weaponised interdependence in the supply chain and trade of critical minerals acquires vital significance due to their strategic relevance in the context of the global energy transition. According to the International Energy Agency (IEA, 2021), critical minerals not only constitute fundamental pillars for the manufacture of clean technologies, but their geostrategic importance in the 21st century could be compared to that of oil in the 20th century. This assessment rests on projections that global demand for key minerals could increase by up to six times, depending on the pace of climate policies implementation and the trajectory of climate change itself (IAE, 2021).

Furthermore, the value chain of critical minerals reveals a pronounced geographic concentration. While primary extraction is located predominantly in Latin America and Africa, processing, refining, and manufacturing capacities remain heavily centralised in China. This imbalance confers upon critical minerals a strategic dimension from a geopolitical approach, situating China as a central actor in the energy transition through the deployment of soft power instruments. This dynamic, defined as “diplomacy of minerals” (González-Vicén, 2024), materialises through bilateral agreements, technical cooperation programs and strategic investments in peripheral countries with high reserves of critical minerals. In this way, China secures control over critical infrastructure and key nodes in the global mining value chain without the need to resort to force.

### **2.1 China's Weaponisation of Critical Minerals: Coercion Against Rivals**

With control of almost 90% of the global reserves of critical minerals and raw materials (CEPA, 2023), China has positioned itself as the hegemonic power in the market for inputs essential to the energy transition. This dominance has triggered dynamics of weaponised

interdependence on a global scale, particularly with other competing powers. The coercion exercised by China in its hegemonic role over critical minerals corresponds to a mechanism of direct coercion: actions aimed at disrupting trade flows and undermining the development of its principal economic rivals, such as Japan and the United States.

In 2010, the detention of a Chinese captain by the Japanese Coast Guard near the Senkaku Islands (Evenett, 2021) was used as a pretext for the Chinese government to impose restrictions on rare earths exports to Japan, without officially declaring it as a retaliatory measure. This situation represents a case of weaponised interdependence, whereby a hegemon resorts to the strategic control of resource flows as an instrument of geopolitical pressure. From the perspective of structural coercion (Drezner, 2021), China exerted control over a critical node (rare earths) and the commercial flow that sustained it, thereby interrupting Japan's market access. At the same time, in line with the framework of interdependent coercive strategies (Edwards, 2022), this action can be interpreted as a unilateral restriction: China exerted its dominion over a strategic resource to condition an adversary's behaviour without resorting to military instruments.

Similarly, in 2023, China adopted measures of direct coercion against the United States in response to restrictions imposed by Washington and the European Union on semiconductor exports (CSISa, 2023). Although the tactics of Western powers also constitute a case of weaponised interdependence, China retaliated with equivalent measures, restricting exports of Gallium, Germanium, and Graphite, all minerals fundamental to the energy transition and to the defence industry. In this case, China employed a mechanism of instrumental coercion (Drezner, 2021) by exerting control through a concrete act of disruption.

## **2.2 Geoeconomic Expansion in the Global South**

Another modality through which China exerts weaponised interdependence is geoeconomic expansion, in which peripheral countries assume strategic significance. This situation is manifested in the penetration of Chinese enterprises, state-owned and private, into mineral-rich countries of the Global South, as well as initiatives associated with the Belt and Road Initiative (BRI).

To consolidate its hegemonic position in the global critical minerals market and to secure the steady supply of resources for its own energy transition, China has sought to establish stable flows of mineral commodities. Through acquisitions and investments in mining projects across Africa, Latin America and Southeast Asia (AidData, 2025), China has ensured access to strategic resources such as Lithium in Argentina, Chile and Bolivia (the so-called “Lithium Triangle”) (Harvard International Review, 2023), and Cobalt in the Democratic Republic of Congo. This strategy, underpinned by institutions such as the Chinese Development Bank, enables Beijing to exert control over multiple stages of the mineral value chain, thereby securing raw material inputs whilst internalising value added at later stages. In this way, the primary-exporter countries are relegated to subordinate positions within the global economy.

Another aspect of China’s geoeconomic expansion has been the Belt and Road Initiative (BRI), initially conceived as an investment plan in the logistic infrastructure (ports, railways and roads) in developing countries, but in recent years extended to encompass mining and energy projects (Green Finance & Development Centre, 2024). Through electrification initiatives, China has financed the construction of transmission lines, hydroelectric facilities, and mining infrastructure in countries such as the Democratic Republic of Congo and Zambia (CSISb, 2023). In Latin America, Chinese investments have increasingly focused on renewable energy (IDB Invest, 2022), thereby linking its expansion strategy to the regional energy transition.

### **3. Peru’s Mining Power and the Risk to National Sovereignty**

The value chain of critical minerals extends far beyond the mere extraction of the raw materials. It encompasses the stages of exploration, processing and refining, the logistical and port infrastructure, manufacturing, and, ultimately, the international commercialisation of the transformed products. Throughout this integrated process, China has consolidated a prominent role in Peru’s mining sector, projecting its influence well beyond the extraction to encompass strategic nodes that determine the added value of resources.

To illustrate this dynamic, four emblematic projects will be analysed, each demonstrating how Chinese geoeconomic power extends across the entirety of Peru's critical mineral value chain.

### **3.1. China's Expansion in the Mining Explorations of Río Blanco and Pampa de Pongo**

The Chinese companies Zijin Mining and Jinzhao Mining Peru S.A. have undertaken exploration activities in deposits rich in polymetallic resources across the highlands of Peru. The Río Blanco project, located in the province of Cajamarca, is oriented towards the extraction of Copper and Molybdenum (Zijin Mining, n.d.). Meanwhile, the Pampa de Pongo project, located in the province of Arequipa, is emerging as one of the largest iron ore operations in Peru. The latter project additionally involves Chinese investments in technological and logistical infrastructure associated with mining activity, including the construction of a port to facilitate the export of raw materials and the installation of transmission lines designed to supply electricity to its own operations (Rumbo Minero, 2023). This case illustrates how, even at the preliminary stage of mineral exploration, Chinese influence transcends strictly mining activities to encompass critical nodes in the value chain, such as port logistics and energy supply. Framed within the narrative of international cooperation and the promise of industrialisation and employment in Peru, these investments exemplify a form of soft power that, in practice, secures China's control over the commercial flows and the infrastructure associated with critical minerals within a foreign country.

### **3.2. Las Bambas and Toromocho: State-Backed Chinese Influence in Peru's Cooper Mining Industry**

At the stage of mineral extraction, China has consolidated its presence in two of Peru's most significant copper projects: Las Bambas and Toromocho, through an estimated USD 16 million in state-backed loans channelled into their development. Las Bambas, located in the province of Apurímac, was acquired by Chinal Minmetals (via its subsidiary MMG) with the support of Chinese state financing amounting to USD 6.90 million (AidData, 2023). On the other hand, the Toromocho project, centred on the Copper and Molybdenum extraction, was financed with almost USD 10 million through joint ventures that granted China the participation in profits and direct operational control (Walsh, 2025).

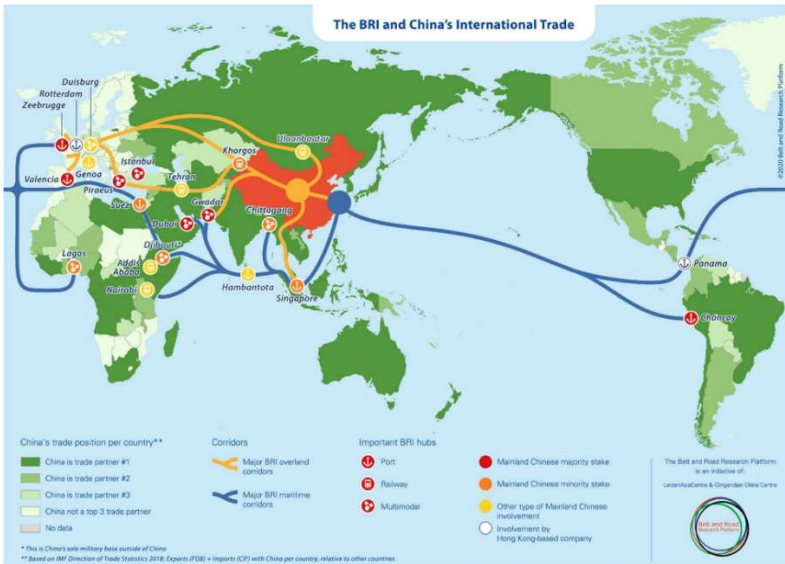
These cases illustrate how the Chinese involvement in the Peruvian critical minerals sector transcends the realm of private investment, constituting a mechanism of direct state influence instead, as financing is channelled through banks and funds underwritten by the Chinese government. In this sense, such loans go beyond the conventional financial conditions of commercial banking, embedding a political dimension that fosters structural dependency. This dynamic represents a tangible loss of financial sovereignty for Peru, as it compromises the Peruvian autonomy in relation to a foreign investor that, at the same time, is a geopolitical power in the global market of critical minerals.

### **3.3. From Shanghai to Chancay: The Geoeconomic Impact of Latin America's Most Strategic Mega Port**

Control over critical minerals extends well beyond the processing of raw materials. It encompasses the entire value chain, with the logistics stage assuming a decisive role. Storage hubs and export routes constitute strategic nodes that determine the speed, cost, and regulatory conditions under which minerals reach international markets. In this context, Peru is today deeply connected to China, following the inauguration of the Chancay Megaport in 2024. This port facility is operated by the conglomerate Cosco Shipping Ports Peru, with a Chinese representation of 60% in the capital account (EI Peruano, 2024). Through this investment, Chancay emerged as a fundamental logistical hub for the export of Peruvian minerals to Asia, while simultaneously serving as a powerful symbol of China's strategic influence over Latin America's port infrastructure.

The Chancay Megaport illustrates the weaponised interdependence across at least three dimensions. First, the port establishes a relationship of geoeconomic dependence by channelling Peru's mineral exports through a preferential route to China, creating a pattern of exclusivity in the country's commercial relations at the expense of other international partners. Second, in the absence of a robust regulatory mechanism from the Peruvian State, the consolidation of Chinese presence may enable the proliferation of illicit economies linked to smuggling and the illegal occupation of surrounding lands. Finally, in the context of escalating tensions between China and its principal commercial adversaries, the Chancay

Megaport could become a strategic target of retaliation, thus compromising the security of Peru’s critical infrastructure.



**Figure 1:** *The Chancay Megaport within the new Belt and Road Initiative (CESEDEN, n.d.).*

### 3.4. The Chinese Monopoly over the Electricity Distribution in Lima

China’s influence over critical minerals in Peru extends well beyond the mineral processing, reaching into secondary and even tertiary stages of the value chain. In this regard, the Chinese involvement is not confined to the control of raw materials but projects itself into multiple sectors linked to electricity generation and commercialisation, thereby consolidating comprehensive dominance over strategic nodes of the Peruvian energy system.

In the sphere of electricity generation, the trend is marked by a growing wave of acquisitions of hydroelectric facilities by Chinese enterprises. In 2019, China Three Gorges (CTG) acquired the company Empresa de Generación Huallaga S.A. (the current operator of the Chaglla Hydroelectric Power Plant) for over USD1.3 billion (Sullivan & Cromwell, 2019). Subsequently, in 2022, the San Gaban III hydroelectric project (206 MW) obtained USD 365 million in loans from the China Development Bank (The Asset, 2022). And, the most paradoxical case

occurred in 2023, when ENEL's operations in Peru (valued at approximately USD 3.1 billion) were acquired by China Southern Power Grid International (CSGI) (El Comercio, 2023). To this scenario must be added the pre-existing control of Luz del Sur, one of the largest electricity distributors in Peru, already under Chinese ownership. Taken together, these operations have consolidated a monopoly over the electricity distribution in Lima, which is now 100% managed by Chinese capital.

#### **4. The Invisible Cost of China's Critical Minerals Interdependence**

China's weaponised interdependence in the peripheral primary-exporting countries endowed with abundant critical mineral resources is not confined to the creation of commercial dependency, as is the case in Peru. These asymmetrical relations also manifest in environmental degradation, the forced transformation of rural livelihoods, and the erosion of labour rights. In recent years, numerous mining projects associated with Chinese capital have been accused of reproducing a recurring pattern of negative effects that extend well beyond the purely economic sphere.

In the case of Las Bambas, whose majority shareholder is China Minmetals Corporation (CMC), the company disregarded the original plan to transport minerals via a special pipeline, opting instead to utilise a communal road. This decision led to the deterioration of rural housing and disruption to livestock activities due to the pollution and constant noise. Similarly, the company Chinalco (Aluminium Corporation of China), in its Toromocho project, exerted a mass resettlement of peasant communities in the province of Yauli. This process altered the peasants' lifestyle, suffering restrictions in access to basic services and weakened social cohesion. In northern Peru, the Río Blanco mine in the province of Piura, operated by the Chinese company Zijin Mining, has faced persistent social opposition due to the mining operation without a social licence and under the enduring rejection of the Huancabamba community. Finally, Shougang Hierro Peru, located in Marcona, represents one of the most emblematic cases in the labour sphere. The company has been repeatedly criticised for its lack of compliance with fundamental labour rights and the absence of

adequate occupational health and safety protocols (Inversiones Chinas Peru, n.d.), which has led to constant labour strikes.

These cases demonstrate that the presence of Chinese capital in large-scale mining projects, even when operating within Peru's mining regulatory framework, entails far more than commercial dependence, but it also generates environmental, social and labour liabilities. These "invisible costs" confirm that the interdependence with China is eroding not only Peru's mining and energy sovereignty but also its social and ecological sustainability. In this sense, as long as the development of the energy transition remains tied to a commercial interdependence with a single hegemonic partner, Peru will remain exposed to structural vulnerabilities that may subject its own energy transition to economic constraints, loss of autonomy, and a deeper geopolitical subordination in scenarios of international tension.

Paradoxically, the weaponised interdependence in critical minerals, intended to facilitate the energy transition, is undermining the goal of autonomy that the transition seeks to achieve. In Peru, rather than advancing toward a sovereign energy transition, the country risks consolidating a new form of geoeconomic subordination to China.

## **5. Conclusion**

The evidence examined demonstrates that economic interdependence, far from consolidating itself solely as a mechanism of international cooperation, can be instrumentalised as a geopolitical coercion instrument, enabling the exercise of structural power. Therefore, the control of strategic resources such as critical minerals has ceased to be a matter confined to economics: it now represents a central dimension of international security, with direct implications for technological autonomy, energy sovereignty, and state dependence.

The structural power exerted through critical minerals varies according to the actor with whom weaponised interdependence is configured. While strategies of direct coercion are deployed against China's geopolitical rivals, in Latin America, soft power predominates. Through commercial agreements and investments in critical infrastructure, the foundation of growing geoeconomic subordination is being laid. In the case of Peru, this influence is not confined to a single front of the mining activity: China has progressively captured the value

chain, consolidating its presence in exploration, extraction, construction of logistic infrastructure, and investments in the renewable energy industry, where these same minerals (transformed abroad) are utilised in electricity generation and reintroduced in Peru's own energy market.

China's capture of Peru's critical minerals economy cannot be interpreted as a mere commercial partnership aimed at industrial development. Rather, it must be understood as a process of encroachment upon Peru's mining and energy sovereignty, in which its role as a primary-exporter country is entrenched without decision-making power or the capacity to generate added value. This dynamic not only exacerbates the structural weaknesses of extractive economies but also produces enduring environmental, social and labour liabilities, while simultaneously rendering Peru's infrastructure a critical asset exposed to vulnerabilities in scenarios of international tension.

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## **From Territorial Control to Cognitive Authority: Rethinking State Sovereignty**

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*This article examines widespread claims in academia that globalisation and digitalisation have weakened the authority of the nation-state, presenting contemporary governance as increasingly dominated by transnational markets, private corporations, and digital platforms. It argues that such interpretations confuse institutional transformation with institutional decline. Drawing on political economy and governance ideas, the article analyses how state power continues to operate through interrelated mechanisms of coercive authority, administrative and infrastructural capacity, regulatory reach, and discursive cognitive influence. The analysis shows that legal frameworks, digital infrastructures, and regulatory systems have not displaced the state but instead changed how authority is practiced across economic, informational, political, and social domains. By reassessing influential theories of state decline and examining the ongoing dependence of non-state actors on state-backed institutions, the article demonstrates that contemporary transformations have deeply embedded state power within the infrastructures that organise everyday life. The study concludes that understanding state authority as a system of complementary, self-justifying mechanisms provides a more accurate framework for analysing political power under conditions of globalisation and digital change.*

### **Introduction**

For the last several decades, scholars have predicted the decline of the nation-state due to globalisation. Mobile capital, multinational corporations, global value chains, international organisations, and digital platforms, among others, are frequently cited as forces that diminish territorial sovereignty and weaken state authority (Ohmae, 1995; Strange, 1996; Scholte, 2005). More recent academic literature

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extends this argument by suggesting that large digital platforms (such as Google, Meta, and Amazon) increasingly perform governance functions traditionally associated with the state, especially in the areas of information control, communication, and market coordination (Gillespie, 2018; Gorwa, 2019). From this perspective, the expansion of transnational networks and private infrastructures seems to point towards a structural displacement of state authority.

This article argues that such conclusions misidentify functional transformation as structural decline. It is not a reach to say that globalisation and digitalisation have altered the mechanisms through which state power is exercised and have expanded state authority in the process. Claims of state retreat rely on implicit zero-sum assumptions about power, treat territorial mismatch as institutional weakness, and underestimate states' capacity to adapt their governing methods. This article will analyse state power as a bundle of different operative mechanisms to clarify its continued centrality.

The core claim advanced here is that state resilience rests on four interrelated mechanisms: coercive authority, infrastructural capacity, regulatory reach, and discursive cognitive influence. These mechanisms have been reconfigured through legal, administrative, and digital systems that increasingly structure economic activity and everyday life. Even actors commonly portrayed as challengers to state authority (such as the multinational corporations, global platforms, and transnational networks discussed) remain dependent on state-backed legal frameworks, enforcement capacities, and infrastructural coordination.

By separating state power into its constituent mechanisms, this article offers a corrective to theories of state decline that fuse changes in governance form with institutional authority erosion. While states vary significantly in their capacities and their power is unevenly distributed across the international system, the state as an institutional form remains structurally central to contemporary global order. The analysis will critically reassess claims of state decline, examine each mechanism of state power in turn, and evaluate whether these mechanisms are likely to resist ongoing global and digital transformations. In doing so, it demonstrates that these (the

transformations) have simply changed the core mechanisms through which state power is exercised.

### **Reassessing Theories of State Decline**

Early accounts of globalisation frequently predict the erosion of state authority. As capital mobility increased and information flows accelerated, scholars argued that governments would lose their ability to regulate economic activity, control markets, and maintain policy autonomy (Ohmae, 1995; Strange, 1996). Subsequent work on global governance and global value chains reinforced this diagnosis by highlighting the growing influence of international organisations and transnational production networks owned by private actors (Scholte, 2005; Castells, 2009; Cutler et al., 1999; Hall & Biersteker, 2002; Gereffi et al., 2006). More recent contributions extend these claims into the digital domain, suggesting that platform companies increasingly structure markets and information flows in ways that outpace or constrain state regulation (Gillespie, 2018; Gorwa, 2019).

Taken together, these perspectives document genuine transformations in the organisation of economic and informational power. However, they also share a set of analytical assumptions that exaggerate the extent of state decline. The most important of these is an implicit zero-sum conception of power, in which the growing influence of non-state actors is treated as evidence of an automatic loss of state authority. This assumption does not take into account the extent to which multinational firms, platforms, and transnational networks remain within state-constructed legal orders and depend on public enforcement, licensing, and infrastructural provision to operate at any scale.

A second limitation of state-decline theories is their treatment of territorial mismatch as an indicator of institutional weakening. When global flows exceed national borders, it is interpreted as proof that the state has become obsolete. However, this interpretation presumes that effective governance must correspond neatly to territorial boundaries. In practice, states have repeatedly responded to such mismatches by developing new regulatory instruments, extending jurisdiction extraterritorially, and coordinating through international regimes. Changes in governing techniques to meet new conditions show only how governance is exercised.

Third, much of the literature pays insufficient attention to how states have actually responded to global and digital challenges. Empirically, governments have expanded regulatory capacities, invested in administrative and digital infrastructures, and restructured institutions to govern precisely those transnational systems said to undermine them. Financial surveillance, data protection regimes, cross-border tax agreements, platform regulation, and so on all show active state engagement rather than retreat. By focusing on the emergence of new governance actors and neglecting the evolution of state practices, state decline defenders risk mistaking institutional change for institutional replacement.

Once these assumptions are weakened, the diagnosis of state erosion becomes far less convincing. Changes in the organisation of power do not necessarily imply a reduction in state authority; in fact, they often reflect shifts in how that authority is exercised. Analysing state power through its modes of operation rather than static policy domains allows for a more accurate assessment of contemporary governance. From this perspective, the state appears as an adaptive institution that remains structurally central to the regulation of economic, digital, and political life.

### **Coercive Authority and the Persistence of State Power**

Coercive authority remains the most irreducible mechanism of state power. Following Weber's definition of the state as 'the entity that successfully claims a monopoly over the legitimate use of physical force' (Roth & Wittich, 1978, p. 54), coercion constitutes the baseline condition for all other forms of governance. While the ways through which force is exercised have generally evolved, no alternative actor has replaced the state as the primary organiser of legitimate violence in the contemporary political order.

Observationally, states continue to dominate the means of coercion. Governments account for the overwhelming majority of global military expenditure and retain exclusive control over standing armies, police forces, intelligence services, and border enforcement agencies (SIPRI, 2023). These capacities are not merely symbolic. They are the backbone of law enforcement, the maintenance of territorial integrity, and the credibility of regulatory authority. Even where states

rely on private actors for security functions, coercive power remains legally and operationally subordinated to state command.

The expansion of private military and security companies continues to conform to this pattern. Such firms operate through state contracts, lack sovereign prerogatives such as conscription or criminal jurisdiction, and remain legally accountable to national authorities (Singer, 2003). Their existence reflects the outsourcing of specific functions rather than the transfer of coercive sovereignty. Similarly, non-state armed groups may exercise *de facto* control over territory, but they do not replace states as internationally recognised holders of legal authority. Diplomatic recognition, treaty participation, and access to international institutions continue to be organised around the state as the central unit, even in cases of internal conflict or institutional collapse.

Digitalisation, furthermore, has extended state coercive capacity. Cyber commands, biometric border controls, satellite surveillance, and financial monitoring systems allow states to project coercive power beyond the traditional physical spaces. Asset freezes, sanction enforcement, and financial surveillance are a few examples of how coercion increasingly operates through informational and monetary infrastructures, not solely through physical force (Brooks & Wohlforth, 2008). These developments may complicate traditional understandings of violence, but they do not weaken the state's monopoly over its legitimate use.

Cases of state failure do not invalidate this argument. Fragmentation in contexts such as civil war or fiscal collapse reflects the breakdown of specific institutions, not the emergence of an alternative institutional form capable of combining coercive force with legal sovereignty. Even in these cases, international actors continue to treat the state as the relevant locus of authority, reinforcing its status as the default political unit. The persistence of coercive authority, therefore, is a display of the continued absence of any viable substitute to the state.

### **Infrastructural Power and Administrative Reach**

Infrastructural power refers here to the state's capacity to implement decisions through administrative, fiscal, and informational systems that

regulate society (Mann, 1993, pp. 59-61). Contemporary evidence indicates that infrastructural power has, in many contexts, expanded instead of decreased. Digital systems have become key instruments through which states extend their administrative reach, coordinate policy implementation, and extract resources.

Digital identification systems, interoperable government databases, and e-governance platforms, to name a few, have significantly enhanced states' ability to monitor populations, collect taxes, and deliver public services. National digital infrastructures such as Estonia's X Road, India's Aadhaar system, Singapore's SingPass, and Brazil's Cadastro Único illustrate how administrative coordination is increasingly dependent on state-managed data architectures. These systems reduce informational fragmentation, increase compliance, and lower the transaction costs of governance. As a result, administrative authority is exercised more continuously and at a greater scale than under analogous conditions.

The global diffusion of national identification systems further exemplifies this expansion of infrastructural reach. Over 160 states now maintain some form of national ID system, significantly increasing governments' informational capacity and ability to link individuals to legal, fiscal, and welfare institutions (Casher, Clark, and Metz, 2021). This trend indicates the consolidation of administrative power through data standardisation and population legibility. Increased informational capacity strengthens (rather than substitutes for) state authority by enabling enforcement, coordination, and policy targeting.

International administrative cooperation strengthens infrastructural power. Regimes governing automatic exchange of tax information, financial transparency, and regulatory coordination extend state capacity beyond national borders by immersing it in transgovernmental networks (OECD, 2021). These arrangements operate through national tax authorities, legal systems, and enforcement agencies, so cross-border governance amplifies domestic administrative power rather than eroding it.

The COVID-19 pandemic provides further demonstration of infrastructural centrality. States retained the capacity to impose nationwide restrictions, coordinate health systems, procure vaccines, and deliver large-scale fiscal support. Where responses failed, these

failures reflected uneven administrative capacity rather than replacement by private or transnational actors (Peters, 2021). Crisis conditions revealed that large-scale coordination remains dependent on state-controlled administrative infrastructures, particularly in areas involving coercion, fiscal redistribution, and public legitimacy.

Taken together, these developments indicate that infrastructural power has not diminished under conditions of globalisation and digitalisation. Administrative systems have become denser, more data-driven, and more deeply blended in everyday life. The state's ability to implement decisions now operates through digital infrastructures that structure access to markets, services, and legal recognition. Infrastructural power has therefore been strengthened through institutional transformation.

### **Regulatory Power in a Transnational Economy**

Regulatory power refers here to the capacity of the state to set, enforce, and revise binding rules governing economic activity, financial flows, and information infrastructures. This feature of state authority is often presented as the most vulnerable under conditions of globalisation, probably because firms operate across borders and digital services appear to evade territorial jurisdiction. However, taking a closer look reveals that regulatory power has simply been unevenly reallocated and, in some domains, intensified.

The idea of regulatory decline rests largely on the transnational mobility of capital and data. Multinational corporations and digital platforms are frequently painted as operating beyond effective state control, exploiting jurisdictional arbitrage and regulatory gaps. This interpretation overlooks the structural leverage states maintain through market access, legal enforcement, and control over critical financial and legal infrastructures. Regulation does not require omnipresence; it requires reasonable points of intervention.

This leverage is most visible in cases where access to national or monetary systems is indispensable. The United States sanctions policy provides a clear example. Because global trade and finance remain deeply integrated into the dollar-denominated financial system, regulatory decisions taken by US authorities force compliance from firms well beyond US territory. Losing access to dollar clearing,

correspondent banking, or US markets imposes costs that most global firms cannot afford. Regulatory authority operates out of territories through infrastructural dependency.

China's approach to digital and data regulation shows a similar dynamic. Through cybersecurity, data security, and localisation requirements, the Chinese state conditions market access on compliance with domestic regulatory schemes (Creemers, 2016). Even the largest global technology firms adapt their operations to meet these standards if they wish to operate in China. These adjustments demonstrate that regulatory power persists where states can credibly threaten exclusion from critical markets or infrastructures. What varies here is the relative bargaining power of different states.

Inequality in regulatory capacity across states is indeed real and significant. Smaller or lower-income states often adopt standards set by larger economies, rely on external regulatory templates, or lack the administrative capacity to enforce complex rules independently. This asymmetry, though, only reflects a hierarchy within the state system. Regulatory power continues to be exercised through states, even when rules are diffused or externally generated.

Digital platforms also illustrate the continued centrality of state regulation. While platforms possess substantial "agenda-setting" power and technical control over digital environments, they remain legally incorporated within national jurisdictions, subject to domestic courts, licensing regimes, taxation, and fines. Content moderation obligations, transparency requirements, and political advertising rules imposed in jurisdictions such as the United States, the United Kingdom, Germany, India, and Australia exemplify how states shape platform behaviour through law (Gillespie, 2018; Gorwa, 2019; Law, 2024). Platforms may influence regulatory outcomes while remaining subject to state authority.

Regulatory power, therefore, operates through a combination of legal enforceability, market access, and infrastructural control. Its effectiveness depends on state capacity and systemic position. Corporations and platforms can exert influence within regulatory processes, but they ultimately operate within frameworks that states construct, maintain, and enforce. The continued ability of states to

exclude, penalise, or condition participation confirms that regulatory authority remains a core mechanism of state power.

### **Discourse-Cognitive Power and Infrastructural Control of Meaning**

Discursive-cognitive power is defined here as “the state’s capacity to shape the categories, narratives, and epistemic conditions through which political reality is interpreted.” Traditionally, this form of power has been associated with education systems, official statistics, and state-constructed narratives that render populations and problems legible (Foucault, 1991, pp. 87-88). Contemporary accounts often suggest that this capacity has eroded as digital platforms fragment public discourse and decentralise information production. Nevertheless, this diagnosis underestimates the extent to which discursive power has gone from content control to infrastructural governance.

The key transformation is the reconfiguration of state influence over meaning. States increasingly regulate the systems through which information is ordered, amplified, and rendered credible. Laws governing content moderation, platform transparency, political advertising, and disinformation structure the conditions under which certain forms of speech become visible, authoritative, or actionable (Gillespie, 2018; Gorwa, 2019; Law, 2024). Discursive power thus operates upstream of discourse itself, shaping informational environments before substantive arguing occurs.

This aspect of discursive-cognitive power constitutes a qualitative shift from earlier forms of state influence. Where traditional propaganda sought to persuade, contemporary governance seeks to stabilise epistemic order by defining procedural standards for information circulation. Decisions about ranking algorithms, verification requirements, takedown thresholds, and data access determine which claims are treated as legitimate contributions to public debate. By regulating these systems, states indirectly shape political cognition, without declaring an “interpretive monopoly”.

Importantly, this form of power works without requiring total control. Digital platforms continue to host multiple, and often antagonistic, discourses. However, during periods of crisis (public health emergencies, security threats, financial instability), state

institutions remain the primary reference point for authoritative interpretation (Peters, 2021).

Emergency powers, official guidance, and legally mandated information channels showcase that, when uncertainty is high, discursive authority recentres on the state, even within digitally mediated environments.

This reconceptualisation helps resolve a tension in existing literature. Platform governance arguments correctly identify the growing influence of private intermediaries over speech and visibility, but often treat this influence as a displacement of state authority. In practice, platform power is conditioned by legal obligations that states impose on informational structures. The result is the “hybridisation” of this discursive power: platforms operationalise classificatory systems, while states define the legal and normative parameters within which those systems operate.

Discursive-cognitive power has become more abstract. By governing the rules that organise knowledge production and circulation, states continue to shape political meaning without direct narrative control. This shift explains how states maintain cognitive authority in an environment characterised by abundance and decentralisation of information.

### **State Power as a Complementary System**

Coercive authority, infrastructural capacity, regulatory reach, and discursive-cognitive influence form a mutually reinforcing system through which the state exercises its power. Coercion provides the ultimate enforcement backbone that makes rules credible; infrastructural systems convert legal decisions into routine administrative practice; regulatory authority structures access to markets, information, and resources; and discursive-cognitive power stabilises the interpretative narrative that legitimates state action. Each mechanism amplifies the effectiveness of the others, and none is sufficient on its own.

This complementarity is most visible in the structures that organise everyday social and economic activity. Digital identity systems, payment networks, communication platforms, and logistics

infrastructures function as sites where these mechanisms converge. Regulatory rules determine participation, infrastructural systems enable implementation, discursive frameworks justify intervention, and coercive capacity maintains compliance. The result is an integrated architecture in which state authority is vital across multiple layers of social coordination.

Importantly, the integration of these mechanisms explains why what appear to be challenges to state power rarely are. Private platforms, transnational networks, and market actors may control specific functions or resources, but they work within environments structured by state-enforced legal standards, administrative systems, and legitimacy claims. Where one mechanism appears weakened, others compensate. Regulatory gaps invite infrastructural expansion; discursive contestation triggers legal or coercive intervention; administrative overload prompts regulatory simplification. State power persists because it is adaptive and systemically reinforced.

Understanding state authority as a set of complementary mechanisms, therefore, resolves the apparent paradox between global transformation and institutional persistence. Power is distributed through mechanisms anchored in state institutions. This perspective of the system clarifies why the state continues to function as the central organising unit of political order, despite profound changes in the scale, speed, and complexity of governance.

## **Conclusion**

This article has argued that contemporary claims of state decline rest on a misidentification of institutional transformation as institutional erosion. Separating state power into four complementary mechanisms (coercive authority, infrastructural capacity, regulatory reach, and discursive-cognitive influence), shows that the state remains a central organising institution in the twenty-first century. These mechanisms have been reconfigured and even strengthened through legal, administrative, and informational systems that increasingly structure social, cultural, economic, and political life.

The analysis demonstrates that challenges commonly interpreted as evidence of state retreat instead reveal changes in how authority is exercised. Coercive power now operates through financial

and digital paradigms as well as physical force; infrastructural power has expanded through data-driven administration; regulatory authority persists through control of market access and chokepoints in the system; and discursive-cognitive power has migrated toward the governance of epistemic infrastructures rather than direct narrative production. As explained, these developments, taken together, indicate institutional adaptation.

State resilience, however, is neither uniform nor commonly unproblematic. Significant variation in administrative capacity, fiscal resources, and position in the system produces uneven distributions of power across states. In some contexts, digital and infrastructural expansion may reinforce exclusion, surveillance, or even authoritarian governance. Nevertheless, these outcomes solely reflect differences in how state power is deployed.

The broader implication of this framework is that debates over the future of the state should move beyond zero-sum conceptions of power and focus instead on the configuration and interaction of governing mechanisms. As technological complexity increases and global crises proliferate, the demand for coordination, enforcement, and authoritative narrative is likely to intensify rather than disappear. Under these conditions, the state persists as an adaptive institutional system fixed within the infrastructures that organise contemporary governance.

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## **AI-Supported Co-Teaching and Educational Inequity: A Comparative Exploration of Sub-Saharan and High-Infrastructure Contexts**

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*The rise in school enrolment stands in contrast to the persistent global shortage of teachers, the effects of which are particularly noticeable in the Sub-Saharan context. In an era marked by the integration of AI in education, AI-supported co-models aim to support teachers' professional practice. Yet, while promising across varied educational contexts, they remain disproportionately applicable in Sub-Saharan Africa, due to the available infrastructure and resources, acute teacher shortages, and overcrowded classrooms. Although several initiatives have attempted to address the issue in the region, they have achieved limited success due to the lack of teacher involvement and insufficient consideration of local infrastructure. This paper presents a comparative analysis of AI-supported co-teaching tools in high-infrastructure contexts and Sub-Saharan Africa, drawing on postdigital, ethics and datafication, and entangled pedagogy frameworks. Through the synthesis of the scholarly literature and the practice-informed insights in the United Arab Emirates and Zanzibar, the current paper examines how contrasts between high- and low-infrastructure contexts highlight the essential conditions for equitable implementation. This study emphasises that equitable and effective implementation of AI in co-teaching is determined by context-sensitive design, in which culture, infrastructure, and human agency are fundamentally intertwined.*

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## **1. Introduction**

Research findings indicate the urgent need for teachers globally, with 44 million needed worldwide, of which Sub-Saharan Africa is the most affected, requiring 15 million teachers by 2030 (UNESCO, 2024). Despite the growing number of schoolchildren globally, the significant shortage of teachers in Sub-Saharan nations affects the quality of teaching and learning (UNESCO, 2018).

The introduction of AI-supported co-teaching systems highlights the cooperation of teachers and AI, with AI augmenting teacher skills and competencies, such as personalised instruction, assessment, and classroom management (Micheal, 2025a), allowing teachers to address the human aspects of learning (Micheal, 2025b).

While the COVID-19 pandemic acted as the catalyst for the integration of educational technology (EdTech), it also hindered learning in certain low-infrastructure areas and amplified disparities. This highlights the need for context-responsive approaches, such as AI co-teaching, that exacerbate the digital divide when implemented in Sub-Saharan African countries (Salimi, 2025).

This study draws on comparative research in both high- and low-infrastructure countries, alongside professional experience in the UAE and voluntary experience in Zanzibar, Tanzania. This comparison leads to the focus of the current project:

*How can AI-supported co-teaching be adapted for Sub-Saharan African education systems, and what do the contrasts with high-infrastructure contexts show about equitable implementation?*

The paper first analyses the three theoretical lenses: post-digital perspective, ethics and datafication, and entangled pedagogy. Building on these frameworks, it provides an outline of AI-supported co-teaching in practice in both high- and low-income countries, examines the possible adaptations of practices based on the context, and discusses the potential limitations.

## **2. Theoretical Engagement**

AI-supported co-teaching has been approached and analysed through various theoretical lenses, including post-digital approaches, ethics and datafication, and entangled pedagogies. These lenses are particularly

useful for examining this topic, since this paper focuses on how the same concept applies to support teachers in contrasting socioeconomical contexts.

### **2.1. Post-digital perspective**

Post digital theory supports that digital technology and media are not separate units anymore (Jandrić *et al.*, 2018). Fenwick (2015, as cited in Fawns, 2019) argues that learning occurs neither online nor offline; it is a process that involves the learners, the educators, and the sociomaterial and digital world. It is hard to distinguish between online and offline modes, since learning might extend beyond the physical classroom context through digital media, or beyond the digital world through interactions with peers, colleagues or other participants (Fawns, 2019). This lens challenges the notion that AI is neutral in co-teaching, implying that it cannot be a standalone solution but an additional support for alleviating teachers' workload. The concept of AI-supported co-teaching aligns with the postdigital framework, since it proposes a mutually beneficial relationship between the AI systems and the human educators and promotes optimal performance (Lin *et al.*, 2023, as cited in Ishaq *et al.*, 2025).

However, in accordance with Fawns' (2019) theoretical perspective, applying the same AI tools in distinct sociomaterial contexts may be problematic. For example, an AI-supported tool might be proven to be effective for educators in high-resourced contexts, such as the UAE, but it may fail to achieve the intended outcome in a low-infrastructure context, such as Zanzibar. This suggests that AI co-teaching results can depend on external factors, such as the socioeconomic background, the infrastructure, and the teachers' readiness.

### **2.2. Ethics and Datafication**

Although AI in education has the potential to enhance the educators' performance and personalise learning experiences, it raises ethical considerations, such as bias, fairness, and inclusion. Specifically, while AI co-teaching offers significant support to teachers by personalising experiences and ensuring equitable participation, it foregrounds ethical concerns about the users' data privacy, data ownership, algorithmic bias, safety, and over-reliance on tools (Micheal, 2025b; UNICEF, 2021).

This lens underscores the prevalence of such issues, especially in countries or areas in which there is an absence of data protection laws. For example, across diverse African contexts, there is a lack of sufficient AI-specific laws, which entails “the processing of sensitive and confidential data by AI tools and systems” (Van der Meer *et al.*, 2025, p. 23).

AI tools have been instrumental in assisting teachers by undertaking tasks, including providing personalised feedback and additional content for students. However, an emerging ethical concern in this context is that AI tools may exacerbate existing inequalities, since a large proportion of the AI content is created in Europe or North America, and it is available in English (UNESCO, 2023c). As a result, some of the generated content might not apply in low-resourced contexts and educators whose first language is not English might encounter difficulties when using the assistive tools.

These approaches appear promising even in low-resourced settings, yet there is a lack of acknowledgement of substantial barriers, such as the low infrastructure. The challenges are more pronounced in some countries; in particular, various schools in Africa experience persistent difficulties with electricity shortages and internet connectivity. Research in 2021 illustrated that 89% of learners in Africa did not have access to computers at home, and the region recorded a digital non-readiness score of 56.6% (Google, SAND Technologies, & African Leadership University, 2025). Through an ethical lens, this study examines the unfolding challenges, and it highlights the responsibility of designers to consider all the applicable contexts, and of governments and policymakers to invest in accessible systems and infrastructure.

### **2.3. Entangled Pedagogy**

Entangled pedagogy (Fawns, 2022) criticises both the ‘Pedagogy first’ approach and the ‘technological determinism’, implying that educators and technology are intertwined. This aligns with the theoretical principles of AI-supported co-teaching, since it is an autonomous approach that does not aim to replace teachers. On the contrary, the central focus remains on the educator, who acts as a guide across emotional and pedagogical practices, while AI manages the administrative tasks and monitors students’ progress (Micheal, 2025a).

The same study also notes that developing countries can gain access to a more inclusive education, not only by utilising AI effectively as a collaborative partner, but also through teachers receptive to this practice.

However, similar to the ethics lens, entangled pedagogy asserts that teachers are not the only stakeholders responsible for implementing teaching practices successfully (Fawns, 2022). Institutions and other involved stakeholders are critical for prioritising training and constantly supporting educators. While several developed countries have launched capacity-building programmes (Ocampo, 2023, as cited in UNESCO, 2023b), only 64% of primary school teachers and just half of the secondary teachers in sub-Saharan Africa received the foundational training in the use of AI tools until 2023 (UNESCO, 2023a).

Furthermore, through this lens, the current study challenges both instrumentalism and essentialism perspectives, which assume that technology has pre-established functions that apply in all contexts (Hamilton & Friesen, 2013, as cited in Fawns, 2022). Although AI co-teaching has supported numerous educators effectively in many regions, especially after the pandemic, the financial expenses of such tools represent a barrier in low-resourced regions. This highlights the importance of understanding the local challenges at under-resourced schools, and of acknowledging that “[t]ailored solutions are more likely to succeed and scale” (EdTech Hub, 2025).

All in all, the lens of entangled pedagogy emphasises the importance of teacher agency and humans’ capacities in AI co-teaching. In essence, it promotes that “[t]ech must be paired with pedagogy, teacher support, and curriculum alignment”, and it contradicts the theory that this approach can be a generic solution (EdTech Hub, 2025).

#### **2.4. Comparative Analysis of Lenses**

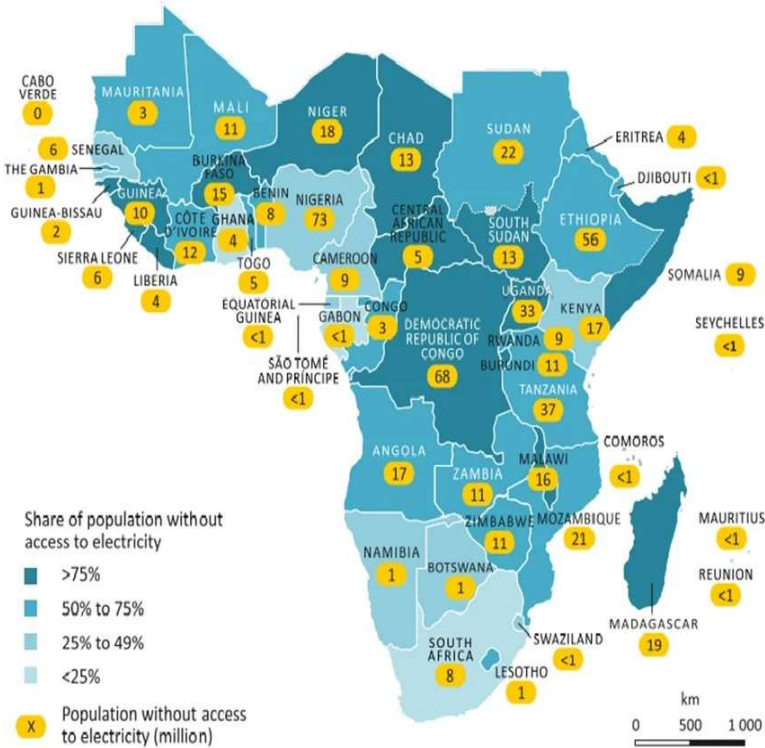
The combination of the three lenses facilitates a more holistic view of the current practice in these contrasting contexts. The postdigital framework investigates the importance of human agency and extends to sociomaterial contexts, such as the infrastructure, while the lens of entangled pedagogy is not limited to the teachers and involves other

key stakeholders too. Whereas the previous two lenses address the actors and the tools, the ethical lens focuses on values and moral principles, such as fairness, bias, and inclusion. The study compares two contrasting contexts, and while the ethical lens highlights equality and inclusion, the postdigital theory analyses the significant resource obstacles in Sub-Saharan countries. This can cause tensions since materials and infrastructure may enhance existing inequalities. However, the three lenses can still present a comprehensive view and assist in suggesting some adaptations in context instead of a universal approach.

### **3. Application to Context**

#### **3.1. Introduction to the Context**

Sub-Saharan countries share numerous features, yet numerous disparities exist between these countries and even among regions within a country. As shown in Figure 1, electricity distribution remains uneven across Sub-Saharan Africa (Ofozor *et al.*, 2024). According to the World Bank, only 47% of the population in Sub-Saharan Africa is connected to electricity, and this figure is unlikely to reach full coverage before 2081 (UNICEF, 2021). Direct observation in Zanzibar in 2022 revealed that, although a relatively small country, households near more developed and more tourist-oriented areas, such as Nungwi, had access to electricity, and a few had access to the internet too a few had access to the internet too.



**Figure 1:** Population without electricity across Sub-Saharan Africa. The figure illustrates uneven distribution of electricity across the region, which subsequently creates major infrastructural disparities. Credit: Oforor *et al.* (2024).

On the contrary, the majority of households in more remote or rural areas, such as Kibele, which is only 60-70 km away, were not connected to electricity. A further crucial issue in the region is the scale of teacher shortages, with Sub-Saharan Africa facing the largest gap universally (Micheal, 2025a). The result of this deficit is overcrowded classes with learners of different abilities and ages, and overwhelmed teachers who teach multiple subjects without the necessary tools (Varuvel Dennison *et al.*, 2025). In contrast, schools and households in resource-rich countries have stable electricity and internet connectivity. Based on professional experience in the UAE, teachers are provided with devices, and blended-learning classes are relatively common. Educators may benefit from device-based monitoring, small class sizes,

and constant professional development to implement individualised pedagogies. Awareness of the two contrasting contexts is essential to understanding the rationale for adjusting and modifying AI co-teaching based on the context.

### **3.2. AI-Supported Co-Teaching in Practice**

Resource-rich countries such as the UAE are committed to implementing AI, exemplified by the Ministry of Education's Adaptive Learning Framework (ALEF). Based on first-hand experience, ALEF offers valuable assistance to teachers and significantly reduces their workload. Drawing on direct observation, it is particularly useful in terms of formative and summative assessment, since it simplifies the process of learning analysis by evaluating the performance of individuals in various exercises and offering diagnostic information on areas of improvement. Consensus among educators in the country demonstrates the positive effects on students' progress as well as its effectiveness in alleviating teachers' workload (Alshamsi *et al.*, 2025; Alyammahi, 2019).

Unlike other e-learning educational approaches that disproportionately favoured economically advanced countries, AI co-teaching appears to be a promising, context-adjusted solution (Micheal, 2025a). From an ethical standpoint, while a growing number of assistive tools are being trialled in well-resourced countries, their effectiveness in Sub-Saharan countries depends on careful consideration of the existing infrastructure and the students' needs. Through a postdigital lens, offline AI-supported tools address concerns emerging due to the insufficient digital devices, internet connectivity, and unstable electricity, using mobile phones to deliver lessons even to remote regions (Google, SAND Technologies, & African Leadership University, 2025). For example, in Kenya, established platforms, such as M-Shule, deliver individualised lessons via text messages to areas with limited or no network access, thereby also addressing the issue of overcrowded classes. Such adaptive learning platforms address the ethical considerations affecting learners residing in marginalised areas, as well as learners whose native language is not English. For instance, several locals in tourist-oriented areas in Zanzibar demonstrate effective communication skills in English; however, the majority in remote areas only speak Swahili. Natural Language Processing (NLP) is instrumental

in these instances, since it can provide real-time translations. Representative examples include Foondamate in South Africa and the Mahlahle app, which make African languages more accessible (Google, SAND Technologies, & African Leadership University, 2025).

Despite the considerable benefits of the AI-supported tools, the primary objective is to assist educators rather than replace them by managing repetitive tasks and tailoring lesson plans. Some AI use cases in the African education include: Hodari, which is a mobile app that supports teachers with grade management and lesson planning, New Globe with real-time feedback and constant support, Schoolinka in Nigeria by offering high quality course contents, and the Rising Academies Network in Rwanda, Sierra Leone, Liberia and Ghana by enhancing their understanding of the content (Van der Meer, *et al.*, 2025). Teachers form the foundation of education in every country; therefore, guided by the postdigital framework, their training is central for the effective integration of AI co-teaching tools to optimise pedagogical outcomes (Google, SAND Technologies, & African Leadership University, 2025). The leveraging of AI assistive tools along with the acknowledgement of the importance of human agency align with the principles of both the postdigital perspective and the entangled pedagogy.

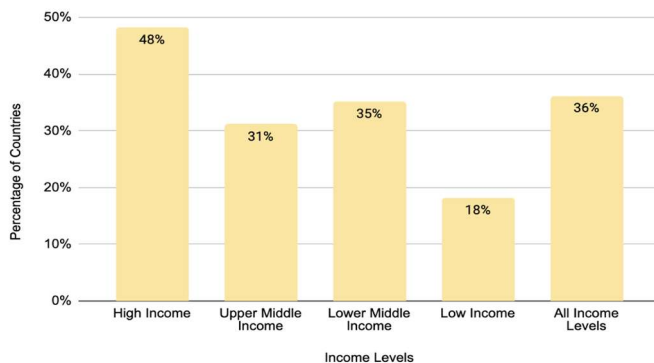
### **3.3. Challenges and Adaptations**

Despite its immense potential, AI-supported co-teaching continues to face multiple challenges in Sub-Saharan Africa. Scholars acknowledge that complete digitalisation is not the target objective, since teachers serve as the central focus (UNESCO, 2023a). For instance, initiatives such as the 'One Laptop Per Child' (OLPC), undertaken by MIT, have targeted education in developing countries, including Africa, and distributed millions of notebook computers in several communities. Despite their potential to enhance the quality of education in these countries, in practice, the devices were used for non-educational purposes, showing that excluding teachers can negatively affect the results (Facer & Selwyn, 2021; Varuvel Dennison et al., 2025). Within postdigital discourse, failing to include teachers may affect getting the optimal results and raise concerns among teachers about the devaluation of their role (Ishaq et al., 2025). The absence of teacher supervision might also lead to the ethical challenge of students'

overreliance on these devices, which can subsequently distract them from their learning tasks.

A comparable initiative was undertaken by the American organisation Innovations for Poverty Action (IPA) in Kigoma, Tanzania, in which two tablet-based learning programs were used as assistive tools and proved that tablet-based teaching can have impactful results in low-infrastructure settings (UNESCO, 2023a). From an ethical standpoint, such initiatives usually benefit those who already have access to technology or connectivity, thereby amplifying inequities among individuals and across educational institutions (Facer & Selwyn, 2021; Kamaghe, 2025; Van der Meer et al., 2025). More precisely, providing teachers with devices or the necessary technology may not yield sustainable results if they do not have the financial means to maintain them.

As shown in Figure 2, low-income countries are the least likely to offer offline functionality platforms, which highlights the necessity of accessible and low-cost approaches. The case of Foondamate in South Africa and M-Shule in Kenya can offer an important lesson for adaptation: to begin with basic and low-cost platforms or apps already in use to ensure accessibility and inclusion instead of assuming that more devices lead to improved quality of learning (EdTech Hub, 2025; Google, SAND Technologies, & African Leadership University, 2025; Van der Meer, *et al.*, 2025). Viewing through entangled pedagogy, the initiatives show the implications of assuming that generic approaches in education can be effective regardless of the context. Effective digital technology approaches take into consideration the sociomaterial context and are adjusted accordingly (Facer & Selwyn, 2021).



**Figure 2:** Countries with one or more platforms that offer offline functionality across income-level groupings. (Rui et al., 2023).

Lastly, although research has indicated the lack of data trained in the African context and highlighted the necessity of personalised content that addresses the needs of the continent and its educational needs (Google, SAND Technologies, & African Leadership University, 2025), from a datafication lens, this could jeopardise the security of data and personal information. Numerous adaptive learning systems and tools have been supporting educators across Sub-Saharan Africa through personalised solutions. Nevertheless, it is crucial to highlight that successful AI systems rely on data; consequently, data privacy, security, and ethical concerns emerge due to the lack of governance framework and the appropriate data infrastructure (Google, SAND Technologies, & African Leadership University, 2025). From an entangled pedagogy framework, this signals the need for a broader ecosystem in which educators, technology, and policy cooperate to promote ethical AI use. While developed countries have established a rigorous data protection framework, the Malabo Convention is not sufficiently robust (Van der Meer et al., 2025).

#### 4. Position and Implications

Comparing the established use of AI-supported co-teaching in both high-infrastructure and low-infrastructure contexts reveals that the approach can be significantly constructive, provided the key adaptations take place. To begin with, countries with a progressive approach to AI, such as the US, the UAE, and China, have invested

heavily in their projects and their educators' literacy. In particular, the UAE envisages dominating globally in the sector of AI by 2031, and one of its main initiatives is to constantly support the professional development of teachers through hands-on workshops and certification courses (Alshamsi et al., 2025). However, statistics show that only 30-40% of teachers in Sub-Saharan Africa meet the minimum criteria for digital competency (UNESCO, 2023, as cited in Dzidzornu & Xu, 2025). Non-existent or limited digital literacy among teachers represents a crucial postdigital concern that needs to be addressed by policymakers in the region. Even ambitious tools and initiatives cannot be implemented successfully without the right investment in teachers.

The majority of tools developed in the region, such as M-Shule, Schoolinka, Foondamate, and Rising Academies, are either initiatives undertaken in the private sector or outcomes of public-private partnerships (Van der Meer et al., 2025). This implies the necessity of further cooperation between sectors and the development of a broader ecosystem in the area. While they may benefit from the experiences of more advanced nations, in multinational development projects in education, "there is no one-size-fits-all solution" (UNESCO, 2018, p. 24). In terms of design and implementation, it might be necessary to implement adaptations regarding the digital infrastructure, especially in marginalised areas. One recommendation is to adopt approaches operating with the existing technologies, such as smartphones, since the vast majority of Sub-Saharan Africans (88%) are expected to own a smartphone by 2030 (In On Africa, 2025). Thus, even existing co-teaching tools can be modified to function in offline mode for local educators. Another important modification in the current assistive tools that addresses ethical concerns is the addition of local languages. On the whole, tools developed in the Global North do not include minority languages, and this poses a challenge for Sub-Saharan Africans.

In summary, AI-supported co-teaching can offer significant benefits for teachers in various contexts. While numerous of these approaches can be implemented in both high-infrastructure and low-infrastructure countries, it is critical to consider the limitations of the region and introduce adjustments and constant revisions of the tools.

## **5. Conclusion**

This article explores the ways in which AI-supported co-teaching methods can be adapted in Sub-Saharan nations, and what the contrasts with high-infrastructure settings indicate about equitable implementation. Taken together, the findings show that AI can meaningfully assist educators and positively affect the region, provided that ethical considerations, datafication, bias, and human agency are addressed.

Drawing on entangled pedagogy, this study argues that generic approaches are inadequate in education, and since existing literature focuses on data from developed countries, additional study is required to collect data on the use of AI in education in Sub-Saharan Africa. Since the incorporation of AI in these nations is relatively new, longitudinal investigation is warranted to examine the sustainability of any approaches and initiatives.

Empirical studies indicate that the effectiveness of AI in education depends on the availability of data reflecting the specific population (Google, SAND Technologies, & African Leadership University, 2025). Through the lens of postdigitalism, future research could investigate more isolated settings, since findings from specific African countries may not be generalisable throughout the continent.

Taken as a whole, AI co-teaching tools provide educators with opportunities and tools different to previous co-teaching approaches. Nonetheless, to implement them effectively and without exacerbating global disparities, cultural and educational backgrounds, infrastructure, human agency, and digital literacy are central to the design, assessment, and implementation stages.

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