Defence of the Modern Realm: Investigating British AI Integration in National Security as a Response to U.S. and Chinese Technological Advancements

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Introduction

Existing studies on the intersection between artificial intelligence and national security have, thus far, centred the United States, People's Republic of China and – occasionally – Russia as case studies (Hunter *et al.*, 2023). These studies have primarily considered the *military* applications of artificial intelligence alone as opposed to the national security applications of such within each state. This paper seeks to build on the existing literature in this area by considering the case of the United Kingdom – specifically, the degree to which its own implementation of artificial intelligence in its national security has been influenced by AI-related developments in the United States and China respectively. In doing so, this thesis aims to assess both an aspect *and a state* not yet covered by academic studies. Rather than being arbitrary, consideration of the British case in this context stems from its unique merits; Britain's 'special relationship' with the United States allows for a unique opportunity to explore the extent of American influence in the field of artificial intelligence on its closest ally. Sino-U.S. superpower competition – including in the field of artificial intelligence – has been considered in academia; by analysing Chinese influence in the British case, this thesis aims to provide insight into China's influence on the security-related thought processes of other states beyond that of its main competitor (Johnson, 2021). In so doing, this thesis asks – and seeks to answer – the following research question: *'How have American and Chinese AI-related developments influenced the United Kingdom's integration of artificial intelligence into its national security?'*.

This thesis begins with a four-stage literature review, which itself begins with a necessary grounding of the otherwise-subjective terms 'artificial intelligence' and 'national security'. This is followed by a detailed consideration of developments in artificial intelligence for both the United States and China respectively, including consideration of relevant applications in national security, national policies and strategic plans, and the distinct ethical considerations which both states face. This is then followed by a similar consideration of Britain's contemporary integration of artificial intelligence within its national security. While due consideration has been given to existing academic discourse in this literature review where possible, the contemporary nature of developments in artificial intelligence – and very limited body of work relating to the British case in this instance – have led to this literature review being notably empirical in nature, as a means to both outline the existing capabilities of all

three states and by which to provide context to my later analysis. While the lack of pre-existing relevant academia limits the degree to which critical insights can be provided, such critical insights have instead been levied at the broader spectrum of resources incorporated in the literature review. This literature review is followed by a brief theoretical framework, which considers neoclassical realism as a lens through which this work should be viewed, and offers a corresponding hypothesis in relation to my research question.

The subsequent section on research design and methodology provides explanation and justification for the means, tools and methodology utilised in pursuit of the answer to my research question, which I have sought to answer through a qualitative analysis of relevant parliamentary debates in the United Kingdom. Once provided, a section has then been dedicated to the presentation and explanation of data and results identified. This is then subsequently expounded upon in the 'commentary and discussion' section, in which the aforementioned results are interpreted and considered in relation to both the research question at hand and the theoretical framework provided.

Due to the tri-national – and, in some areas, bilingual – nature of this thesis and literature review, prior consideration must first be given to formatting. English language sources originating from the United States and China utilise American English spellings; as such, quotations stemming from both have been provided with original spellings intact. Outside of this exception, British English spellings are used throughout this thesis. Key terminology stemming from Chinese documentation has been used throughout; in such instances, English translations have been provided with original Mandarin terminologies provided immediately afterwards in brackets. In order to assist the reader, a glossary of all acronyms and Chinese translations listed within this thesis has been provided overleaf – segmented by relevant country where appropriate – prior to the initial literature review.

Glossary of Acronyms and Chinese Translations

Acronyms

China-Related

Short-Form	Full Form
BAIP	Beijing AI Principles
CCP	Communist Party of China
GGF	Government-Guided Funds
MCF	Military-Civil Fusion
MOST	Ministry of Science and Technology
MOT	Ministry of Transport
MSS	Ministry of State Security
NGAIDP	New Generation AI Development Plan
PIPL	Personal Information Protection Law
PLA	People's Liberation Army
PLAN	People's Liberation Army Navy
PLASSF	People's Liberation Army Strategic Support Force
SEI	Strategic Emerging Industries Strategy
STIP	Science, Technology & Intelligence Programme

U.S.-Related

Short-Form	Full Form
AI PfD	AI Partnership for Defence
CDAO	Chief Digital and Artificial Intelligence Office
CIA	Central Intelligence Agency
DAAIAS	Data, Analytics and Artificial intelligence Adoption Strategy (2023)
DIU	Defense Innovation Unit
DoD	Department of Defense
JAIC	Joint Artificial Intelligence Center
NAIA	National Artificial Intelligence Act (2020)
ODNI	Office of the Director of National Intelligence
US DAIS	Artificial intelligence Strategy (2018)
USAF	United States Air Force
USIC	United States Intelligence Community

UK-Related

Short-Form	Full Form
C	Chief of the Secret Intelligence Service (SIS/MI6)
CDT	Centre for Doctoral Training
DAIC	Defence Artificial Intelligence Centre
Dstl	Defence Science and Technology Laboratory
FOIA	Freedom of Information Act (2000)
GCHQ	Government Communications Headquarters
MOD	Ministry of Defence
NCF	National Cyber Force
NSI Act	National Security and Investment Act (2021)
NSTIx	National Security Technology Innovation Exchange
UK DAIS	Defence Artificial Intelligence Strategy (2022)
UKIC	UK Intelligence Community
UKRI	UK Research and Innovation

Miscellaneous

Short-Form	Full Form
AGI	Artificial General Intelligence
AI	Artificial Intelligence
AWS	Autonomous Weapons Systems
BMI	Brain-Machine Interface
C2	Command and Control
EW	Electronic Warfare
GDPR	General Data Protection Regulation (2016)
HOTL	Human-On-The-Loop
HOOTL	Human-Out-Of-The-Loop
ISIS ISIL	Islamic State of Iraq and Syria Islamic State of Iraq and the Levant
ISR	Intelligence, Surveillance and Reconnaissance
LAWS	Lethal Autonomous Weapons Systems
LLM	Large Language Model
NCR	Neoclassical Realism
IV	Intervening Variable(s)

Mandarin Chinese Terminology

Chinese Term	Translation & Notes
“互联网+”人工智能三年行动实施方案	"Internet+" Three-Year Action Plan of Artificial intelligence *(2018)*
AI 四小龙	The ‘Four AI Dragons’
交易信息化 2.0 行动计划	Education Informatization 2.0 Action Plan
人工智能	Artificial Intelligence
以多种方式	“By various means”
信息化	‘Informatized’/’Informatised’
党指挥枪	'The Party commands the gun' *(Mao Zedong slogan)*
关于扩大战略性新兴产业投资培育壮大新增长点增长极的指导意见	Guiding Opinions on Expanding Investment in Strategic Emerging Industries and Cultivating Strengthened New Growth Points and Growth Poles *(‘Strategic Emerging Industries’ strategy of 2018*
军民融合	Military-Civil Fusion
异国采花，中华酿蜜	“Picking flowers in foreign lands to make honey in China”
强敌	“Powerful adversary”
政府引导基金	Government Guidance Fund
新一代人工智能发展规划	New Generational AI Development Plan *(2017)*
智能化	‘Intelligentized’/’Intelligentised’
超英赶美	“Surpassing Britain and catching up to America” *(Mao Zedong slogan)*
金盾工程	Golden Shield *(Chinese surveillance programme)*
平安城市	Safe Cities *(Chinese surveillance programme)*
天王	Skynet *(Chinese surveillance programme)*
雪亮工程	Sharp Eyes *(Chinese surveillance programme)*
警务云	Police Cloud *(Chinese surveillance programme)*

Literature Review

Literature Review: Introduction

The relationship between Britain's AI-national security integration and AI-related developments in China and the United States cannot reasonably be considered without first examining relevant context. Initial due diligence must first, therefore, be done to establish the context of AI-based developments within these three countries insofar as they relate to national security. The following literature review aims to provide this context by outlining AI technological and policy-based development across the three countries and by outlining key terminology, with reference to governmental, private sector and policy documentation, as well as insights from existing academia.

This literature review begins by considering the concepts of 'artificial intelligence' and 'national security', and in doing so provides working definitions for each for the purposes of this thesis. The two sections thereafter outline AI development within the United States and China within the context of their respective national security. This is then followed by assessing the state of British integration of AI into its national security to date. Examinations of all three states include due consideration of the ethical considerations and operational challenges faced by each, noting that although some concerns are shared, others differ owing to differences in governmental structure and state ideology. Such examinations are critical owing to the potential impact differing ethical standards and state ideologies may have on a state's willingness to integrate AI into its national security infrastructure, and the extent to which such may impact the speed and extent of any implementation.

Following this, the three countries' approaches towards AI integration in national security are considered briefly in comparison to each other; this is in order to highlight the similarities and differences between them. This literature review concludes by highlighting gaps in existing literature, and thereby future directions that further research may take. This culminates in a justification of my own research question at hand, outlining the necessity for investigating the extent to which relevant Chinese and American AI-based developments have impacted Britain's AI pursuits in the context of its national security.

Considering Artificial Intelligence & National Security

The term 'Artificial Intelligence' was coined by John McCarthy in 1955, where he defined it as being *'the science and engineering of making intelligent machines'* (McCarthy, 2007; Manning, Rushdi and Shah, 2023). This definition has not been universally accepted; critiques highlight the lack of definition for 'intelligence' within this, and as such many further definitions have been proposed for the term – none of which have been universally accepted (Toosi *et al.*, 2021; Verdegem, 2021). For the practical purposes of this essay, AI will be considered within the contexts of how it is defined by the three states in focus: the United Kingdom, the United States and China.

Britain's Engineering and Physical Sciences Research Council defines AI as pertaining to *'...the reproduction or surpassing of abilities (in computational systems) that would require intelligence if humans were to perform them'* (UKRI, 2024). For public sector purposes, the British government defines AI as *'...the use of digital technology to create systems capable of performing tasks commonly thought to require intelligence'* (HM Government, 2024a).

The United States government enshrined its definition of AI in law in its National Artificial Intelligence Act of 2020 ("NAIA"), defining AI *as '...a machine-based system that can... make predictions, recommendations or decisions influencing real or virtual environments'*. The NAIA also notes that '[AI] systems' utilise machine and human-based inputs for the real and virtual environmental perception, automated analysis of information perceived, and the creation and enaction of options through inferences made (Rep. Johnson, 2020; Government of the United States, 2024).

Whereas the Chinese government does not utilise a uniform definition of artificial intelligence, the New Generation Artificial Intelligence Development Plan of 2017 (新一代人工智能发展规划) ("NGAIDP") does point to its characteristics and potential as including *'deep learning, cross-domain integration, man-machine collaboration, the opening of swarm intelligence [and] autonomous control'*, and further considers these areas as key 'focuses' of contemporary AI (State Council of the People's Republic of China, 2017; Webster et al., 2017).

As the scope of this thesis intends to incorporate AI development within these three states as referred to by the states themselves – and the topic does not have a globally-accepted definition - all three definitions are considered valid for the purpose of this thesis. In instances where one state may not consider its technology to be 'AI' but another state would, then these definitions will *inclusively overlap* in order to allow for broader assessment.

The term 'national security' also lacks a standardised definition, and there is ongoing debate as to whether the term should simply refer to matters of 'traditional security' – namely military in nature – or whether 'non-traditional security' elements such as political, economic, environmental, and food security should also be incorporated in the term (Saltstone, 1991; Anwar *et al.*, 2018). For efficacy, 'national security' is considered herein in the Copenhagen School sense of 'security as a speech act'; that is, a matter becomes one of national security when so presented by a government and accepted by a designated audience (Buzan, Wæver and Wilde, 1997). This allows for the assessment of AI-based integration with national security on the terms set by the nation states in focus themselves.[1]

The United Kingdom, United States and China are all attempting to integrate AI with aspects of their national security. In order to refine the scope of this thesis, AI integrations within national security will be considered where the AI serves a 'dual use' – defensive and offensive – purpose. Specifically, this thesis will consider AI within cybersecurity, autonomous weapons and defence systems, surveillance and intelligence gathering, decision support systems and counterterrorism. These have been chosen due to their relevance to both national security and the five operational domains of warfare,[2] thus covering both defensive and offensive metrics. Other aspects of national security, such as economic stability and public health, are beyond the scope of this thesis and as such will only be considered insofar as they directly relate to the aforementioned areas.

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[1] It is noted that, due to the authoritarian nature of government in the People's Republic of China, there is limited capacity for the public to accept or reject speech acts as imposed by the government. This raises a possible critique of the 'speech act' theory, as such states seemingly allow securitisation without the need for an audience. For the purposes of this thesis, the 'audience' in the case of China is considered its public, and their acceptance of securitising speech acts is tacitly – but not universally – implied through lack of protest. Rare instances of protest have been known to occur in Mainland China in response to securitising events (Pollard and Goh, 2022).

[2] As considered by NATO, of which the UK is a member: Maritime, Land, Air, Space and Cyberspace (Giordano, 2023).

AI Advancements in U.S. National Security

Introduction

The United States is considered the global leader in AI usage and development, a status and advantage recognised by its government (Executive Office of the President, 2019; Cesareo and White, 2024). It deems continued supremacy in this field as vital for maintaining its 'first-mover advantage' in any potential conflict, and thereby sees recent AI-centred technological gains by China and Russia as a threat to both its supremacy and national security (ODNI, 2019; Konaev *et al.*, 2020; DoD, 2023)**.** As emphasised by former Secretary of Defense Mark Esper in 2019, "*Whichever nation harnesses AI first will have a decisive advantage on the battlefield for many, many years. We have to get there first"* (Esper and McFarland, 2019). Seemingly successful in its attempts to *'get there first'*, U.S. AI-related discourse now predominantly focuses on maintaining the advantages conferred through this technological supremacy.

Historical Background & Strategic Documents

American advancements in AI began in the mid-1960s with ELIZA, a pattern-matching chatbot intended to simulate therapy (Ireland, 2012). Such technology was tested for national security purposes in 1983, when the CIA conducted experiments with an adapted version - codenamed ANALIZA – for interrogation purposes (CIA, 1983; McAllister, 2017). The utilisation of AI for national security purposes reemerged in 2019 and 2020 as a result of the Trump-era Executive Orders 13859 and 13960, which mandated the Department of Defense ("DoD") and Office of the Director of National Intelligence ("ODNI") to spearhead AI technological and policy-based development and integration with national security infrastructure within their relative branches of government – military and intelligence – respectively (Executive Office of the President, 2019, 2020)**.** This led to the creation of the DoD's 2018 Artificial intelligence Strategy ("US DAIS") and 2023 Data, Analytics and Artificial intelligence Adoption Strategy ("DAAIAS") and the ODNI's AIM Strategy (DoD, 2018, 2023; ODNI, 2019). These strategies led to the establishment of the Joint Artificial Intelligence Center ("JAIC") in 2018 and its later absorption into the modern-day Chief Digital and Artificial Intelligence Office ("CDAO") (Gill, 2022). The CDAO now enacts JAIC's former functions – assessing potential enhancements AI

can provide within combat – and serves as the primary organ for DoD AI strategy and policy creation and implementation throughout the DoD umbrella (CDAO, 2022).

AI Applications in U.S. National Security

The United States has sought to leverage AI in projects across the national security spectrum and warfighting domains. Notable cybersecurity implementations are the Defense Innovation Unit ("DIU")'s Project VOLTRON served to identify computer weaknesses and then to automatically patch or exploit them and the CIA's 'CylancePROTECT' serves as AI-enabled malware and phishing detection and protection across the United States Intelligence Community ("USIC") (Roth, 2019; DIU, 2021). The US has focused on leveraging AI to tackle 'data smog' by automating the collection and analysis of large volumes of data to ultimately increase decision making speed, of which notable examples include American use of Palantir in the hunt for Osama bin Laden, DARPA's Squad X programme, and Project Maven – the latter of which as used in operations against the Islamic State of Iraq and Syria ("ISIS")[3] in 2017 (DARPAtv, 2019; Davis, 2019; CSET and Bipartisan Policy Center, 2020; Moran, Burton and Christou, 2023). This later led to the development of America's first autonomous weapons system ("AWS") – the Valkyrie 'loyal wingman drone' – being flight tested in 2019, and the United States Air Force ("USAF") *'[deploying] AI algorithms for the first time to a live operational kill chain'* in 2021 (USAF, 2019; Hambling, 2021; Rickli and Mantellassi, 2023). Studies indicate such technologies could save an all-source intelligence analyst 45 working days per year (Fitzgerald, 2021). The United States also perceives benefits to be gained in automating 'dull, dirty and dangerous' work through AI, such as administrative and logistics-based tasks and munitions detection (Konaev *et al.*, 2020). Cognizant of its vulnerabilities to online disinformation campaigns, DARPA has collaborated with Primer and spearheaded two projects – Media Forensics ("MediFor") and Semantic Forensics ("SemaFor") – to identify false news narratives and 'deepfake' content respectively (Tucker, 2020; DARPA, 2024b, 2024a).

[3] Also known as the 'Islamic State of Iraq and the Levant' ("ISIL") or 'Daesh'.

Ethical Considerations and Operational Challenges

The DoD became the first military entity to implement ethical principles for artificial intelligence ("DoD AI Principles") in 2020, ostensibly following concerns of international AI norms being shaped by authoritarian states (Cohen *et al.*, 2020; Stanley-Lockman, 2023). These require AI integration to be responsible, equitable, traceable, reliable and governable respectively – although critically not *fair*, as the military is actively attempting to pursue an unfair military advantage through it (Defense Innovation Board, 2019; JAIC, 2020; Stanley-Lockman, 2023). These ethics do not cover the USIC, which adopted their own distinct set of ethical principles in 2020 (ODNI, 2020). Although the adoption of such principles is framed as part of a moral opportunity to shape AI development, their adoption can also be viewed as the response to an imperative; the United States is more likely than either China or Russia to require collaboration with international partners in the name of security, and as such democratically-aligned AI principles allow for improved interoperability between allied states. This logic is reflected by the implementation of bloc-wide AI principles, such as those adopted by the OECD (OECD, 2019).

The enshrinement of AI principles across the DoD and USIC highlights their recognition of ethical concerns, but critically leaves several unaddressed. The algorithms underpinning AI technologies are not easily understood or explainable, and this lack of explainability - known as the 'black box' problem – leads to broader ethical concerns across AI's implementation in national security (Ding *et al.*, 2022). It is not clear how defence personnel can verify the rationale behind any decisions taken by AI-integrated systems, nor how USIC personnel can verify whether and how all information in data sets too large for humans has been considered in providing automated analyses. These problems are greatly exacerbated in cases of 'algorithmic warfare', where decisions and actions are made and taken at faster-than-human speeds – despite its inclusion in the DoD AI Principles, it is not clear what parties should be responsible for AI decision-making in such a scenario. AI-based decision-making at superhuman speeds also risks forgoing non-military methods for crisis resolution – namely diplomacy – by eliminating the time window allowed by present-day human decision-making (Scharre, 2018; Davis, 2019).

Despite its resources, the U.S. faces operational challenges in implementing AI in its national security. Its key hurdles are constraints and risks inherent to collaborating with the private

sector and the risks and vulnerabilities inherent to AI systems. The DoD and USIC have collaborated with private sector entities since the establishment of RAND Corp in 1948, and this is not without reason; such collaborations allow for a *'double wall of secrecy'*, with public sector entities seeking confidentiality for national security, and private sector entities seeking confidentiality to protect intellectual property and competitiveness (Moran, Burton and Christou, 2023; RAND, 2024). However, it is not without risk; private enterprise companies and employees are not ideologically hegemonic, and internal disputes have impacted such collaborations before - in April 2018, over 3,000 Google employees protested the company's involvement with Project Maven over fears regarding AI weaponisation, resulting in Google's withdrawal from the programme and its CEO announcing the firm's adoption of internal ethical AI principles (Business & Human Rights Resource Centre, 2018; Oberhaus, 2018; Tiku, 2018; Wakabayashi and Shane, 2018).

At an individual level, the DoD and USIC both struggle to attract AI talent when competing against the lucrative U.S. private sector. The ideologies of talent they do employ also represent risks; Pierre Blais, Joshua Schulte and Edward Snowden, former USIC employees, were each responsible for leaking classified information in the wake of their employment. This leaves the public sector in a 'Catch-22' – in need to attract top talent, but in doing so, taking on the risk of employing 'landmines'; employees that may cause serious internal harm (Moran, Burton and Christou, 2023). By adopting AI as an asset for national security, American institutions also adopt its risks and vulnerabilities; both algorithms and the datasets on which they are trained can be subject to adversarial attacks and data poisoning respectively in order to cause misidentification, with the potential for lethal consequences in human-off-the-loop systems as seen in the 2003 Patriot missile incident (Piller, 2003; Singer, 2005). Such concerns and low public trust in AI may continue to fuel public-sector and individual employee distrust of AI integration, and may ultimately stifle U.S. ambitions to fully integrate AI with national security apparatus (Moran, Burton and Christou, 2023).

AI Advancements in Chinese National Security

Introduction

Mao Zedong proclaimed an overarching goal for the Chinese government of *'Surpassing Britain and Catching up to America'* (超英赶美) during the 1950s as part of the Great Leap Forward (BBC, 2019). This goal has continued to underpin Chinese technological strides since, including the 863 and 973 Programs of the Deng Xiaoping era (Luong and Fedasiuk, 2022). This goal is reflected in modern Chinese attitudes to AI's implementation in national security, most notably with America being framed as the 'powerful adversary' (强敌) whom China must match. By observing a prevailing military trend of exploratory AI implementation – particularly that of America – China has made strides in attaining parity through following suit (Kania, 2020a). China first began signalling its intention to pursue AI ambitions in 2013, but is understood to have commenced active research and implementation since 2016, realising the potential for AI following the 'Sputnik moment' victory of AlphaGo over Lee Sedol (Roberts *et al.*, 2019). This potential has been explicitly acknowledged by President Xi Jinping, who proclaimed AI to be 'a vital driving force' that China must keep in *'[its] own hands'* in 2018 (Xi, 2018).

The autocratic nature of China's government has implications for any analysis of its intentions and capabilities in warfare. Unlike the United States, the Chinese government maintains full control over its private and academic sectors and actively adapts and incorporates their developments for national security purposes. As a result, any such analysis must consider activities in these domains in order to provide insight into the pursuit and application of AI in China's national security.

Strategic Plans & National Policies

China's State Council first began to reference 'Artificial Intelligence' (人工智能) in governmental plans in 2015 (Government of the People's Republic of China, 2015). Its first major seminal document – the 'Internet+ Three-Year Action Plan of Artificial Intelligence' (互联网+"人工智能三年行动实施方案) ("Internet+ Plan") – was published the year after, which

outlined goals to grow domestic AI-related firms to $15Bn in total value, alongside the rapid development of intelligent vehicles and unmanned systems. (Government of the People's Republic of China, 2016; Luong and Fedasiuk, 2022). These goals were drastically built upon by the 2017 NGAIDP, which outlined aggressive targets for domestic 'AI core industries' and 'AI related industries' to achieve valuations of $150Bn and $1.48Tn by 2030 respectively, with an overarching goal of making China *'the world's primary AI innovation center'* by this time (Webster *et al.*, 2017). The Strategic Emerging Industries Strategy (关于扩大战略性新兴产业投资培育壮大新增长点增长极的指导意见) of 2018 ("SEI") further expanded upon this by listing AI as a key investment domain, and by introducing AI development plans and policies at the provincial and city level across China (NDRC, 2020; NDRC and Center for Security and Emerging Technology, 2020). This prioritisation was most recently cemented through the Communist Party of China's ("CCP") 14th Five Year Plan (十四五"国家信息化规划), in which it designated AI as the top priority for science and technology research – ranking it first amongst 'frontier industries' in which the state wishes to progress through to 2035 – and in doing so, highlighted its importance in both national development and national security (Creemers *et al.*, 2022; Luong and Fedasiuk, 2022).

While these plans may not seem directly related to the People's Liberation Army ("PLA"), they are directly relevant due to China's policy of 'Military-Civil Fusion' (军民融合) ("MCF") by which all private and academic entities of China cooperate and engage with the branches of the Chinese military. This renders China's AI firms as *"hybrid players… [operating] as commercial entities, but… subject to the influence, guidance and control of the Chinese state"*, and as such state actions affecting its domestic AI market and research capabilities hold the potential to translate into direct military progress and advantage (Sutter and Arnold, 2022). The progress of private domestic firms is considered critical by the state for its national development and technological innovation efforts, and their commitments to the state are enforced through internal CCP committees, who typically hold senior management or board roles (Sutter and Arnold, 2022; MOT and MOST, 2023).

Firms are expected to cooperate with both the PLA and Chinese security services, such as the Ministry of State Security ("MSS"). The PLA is reported to have tested its AI algorithm on Baidu and iFlyTek's large language models ("LLMs") respectively in 2024 to *'teach military AI how to face unpredictable human enemies';* an example serving to illustrate the implications

of this policy (Chen, 2024). Tencent, Bytedance and Alibaba are all reported to have engaged in similar collaboration with Chinese government entities (Shu, 2015; Dorfman, 2024). The Chinese state has also been known to allocate' research focus areas for certain major companies in the AI sphere; those within its 'National Team' have had such areas allocated to them in order to avoid a duplication of research efforts (Sutter and Arnold, 2022). This is not without benefit; in exchange for collaboration, China actively invests in and incentivises the development and growth of its domestic AI environment through preferential tax rates and the promise of industry dominance. It has leveraged 'Government Guidance Funds' (政府引导基金) ("GGFs") as a means by which to fund domestic firms whilst simultaneously shielding them from international competition, and supported domestic competition as a means of allowing it to 'pick winners' fit for purpose. China's four 'AI dragons' (AI 四小龙) – Yitu, SenseTime, Megvii and Cloudwalk – were each recipients of Guangdong Province's local GGF (Luong and Fedasiuk, 2022). It has also leveraged domestic prize-based competitions as a means of identifying technologies and firms for usage and investment respectively (Kania, 2020a).

China complements its domestic progress in AI through securing technology developed overseas, which the Chinese State Council encourages 'by various means' (以多种方式) (Chang and Hannas, 2022a). Technology transfer to China is facilitated through the recruitment of AI-trained personnel, acquisition of foreign firms via opaque limited partnerships, the efforts of Chinese NGO and expatriate organisations abroad, inter-university collaboration programmes and the use of 'transfer offices' in collaboration with China's Science & Technology Intelligence Programme ("STIP"), which is responsible for the identification and transfer of core technologies from overseas to the PRC (Chang and Hannas, 2022a). Such practices are often referred to by the PLA as 'picking flowers in foreign lands to make honey in China' (异国采花，中华酿蜜) (Joske, 2018).

The acquisition of overseas technology and firms is not only done to secure technology, but also to secure AI talent. This has been made a priority under Xi Jinping, and bolstered by the creation of the Thousand and Ten Thousand Talents programmes, designed to incentivise highly-trained AI talent to relocate to China (Chang and Hannas, 2022a; Weinstein and Stoff, 2022). China's drive for AI talent expands to its domestic education environment; AI has featured on primary and secondary school curricula since 2017, and both university-level and

vocational courses in AI have been prioritised since 2019 as part of the government's 'Education Informatization 2.0 Action Plan' (交易信息化 2.0 行动计划), designed to bolster its AI-capable talent base and thus long-term technological development (Weinstein and Stoff, 2022).

The PLA itself has sought to bolster and integrate its AI-related capabilities beyond the broader Chinese policy initiatives outlined above. Academic research has highlighted China's pursuit of AI-enabled systems and autonomous capabilities across all warfighting domains, and analyses of PLA military purchasing trends have indicated a particular focus on autonomous vehicles, intelligence, surveillance and reconnaissance ("ISR"), electronic warfare ("EW") and command and control ("C2") elements – with further research indicating a growing conventional interest in AI-enabled offensive cyber and 'adversarial AI' capabilities (Kania, 2020a; Fedasiuk, Melot and Murphy, 2021; Stokes, 2024). The PLA's implementation of AI has been framed in their official publications as a paradigm shift from 'informatised' (信息化) warfare to 'intelligentised' (智能化) warfare, intended to both secure parity with the United States through a growth in capabilities and improve efficiency through the automation of logistics and maintenance (Kania, 2020a; Fedasiuk and Weinstein, 2022). Prevailing academic consensus suggests the PLA is preparing for 'systems-of-systems' confrontation – warfare centred on disabling an adversary's C2 capabilities – but empirical spending records may cast doubt on this claim; a CSET analysis of PLA AI- and automation-related purchasing contracts dated April - November 2020 highlighted just 4% of expenditure going towards C2 systems, with the bulk of spending earmarked for automated 'swarming' technology for EW and target identification purposes (Engstrom, 2018; Fedasiuk, Melot and Murphy, 2021; Fedasiuk and Weinstein, 2022). It is unknown to what extent these datasets are complete, nor to what extent April – November 2020 is representative of PLA purchasing trends over a broader period of time; it is also highly likely that the majority of records pertaining to C2 purchases are classified and outside of the public domain, thus casting important doubt on the value of such analyses as a critique of PLA priorities (Nelson and Epstein, 2022). Publications by PLA-affiliated universities, such as the 'Seven Sons of National Defense' (国防七子),[4] do appear to have

[4] The 'Seven Sons of National Defense' are a group of public universities affiliated with the People's Liberation Army. It includes: Beihang University; Beijing Institute of Technology; Harbin Engineering University; Harbin

focused research on the integration of ISR with automated 'swarms', and research has indicated the PLA Navy ("PLAN") as actively conducting tests on AI-enabled guided missiles, robots and unmanned systems (Kania, 2020a). This combination of domestic and international academic publications and PLA purchasing records may help adjust somewhat for the uncertainty otherwise faced in understanding this domain (Fedasiuk and Weinstein, 2022). In practical terms, the PLA has centralised its AI modernisation efforts through the creation of a distinct wing – the PLA Strategic Support Force ("PLASSF") in 2015. Although debate exists as to whether it actively *develops* AI-based technologies for PLA use, it is understood as being the primary organ by which it the PLA identifies and secures AI technologies for military applications in order to fulfil its role of '[obtaining] information dominance for decision superiority' (Fedasiuk and Weinstein, 2022; Nelson and Epstein, 2022).

Chinese government strategies, the actions of the PLA and development trends in the Chinese private and academic sectors serve to provide insight into China's overall AI ambitions and progress towards them; however, these should rightly be considered as 'known knowns' at best. This is particularly true in the case of the PLA. As noted Kania, we are only able to access PLA documentation that has entered the public domain – be that unintentionally or by deliberate PLA intent (Kania, 2020a). The PLAN's '912 Project' , intended to develop AI-enabled *'new generation military underwater robots'*, is only known due to the project's leader conducting an interview with the South China Morning Post (Chen, 2018; Glass, 2018). Whereas purchasing records may provide the greatest insight into PLA insights and intentions, the restricted and classified nature of the PLA's true capabilities is a necessary shortcoming in any attempted evaluation.

Ethical Considerations and Operational Challenges

China's authoritarian nature renders it ethically asymmetrical to democratic states. This offers it a distinct advantage by removing certain barriers to progress, but also raises a fresh set of ethical questions in regards to overall control.

Institute of Technology; Nanjing University of Aeronautics and Astronautics; Nanjing University of Science and Technology; Northwestern Polytechnical University (Joske, 2019).

The state's broad surveillance apparatus[5] has culminated in the modern-day collection of data unparalleled in the world – an activity bolstered by both the size of its population and differing ethical standards to democratic states (Kania, 2020b; Arnold and Puglisi, 2022). That does not mean the state is an ethical black hole; notably, China published the Beijing AI Principles ("BAIP") in 2019, outlining that AI development should focus on *'[doing] good', '[being] responsible'* and being *'for humanity'* and enacted the Personal Information Protection Law ("PIPL"), a Chinese equivalent to Europe's General Data Protection Law ("GDPR"), two years later (*Beijing Artificial Intelligence Principles*, 2022; Bloomberg, 2023). While these developments may seem positive, this appears Potemkin when contrasted with AI's role in Uyghur repression in Xinjiang province and monitoring across the state (Peterson, 2022). This contradiction highlights the ranked priority of ethics in under an authoritarian system, or 'ethics with Chinese characteristics' - valued by the state, but only applicable to those whom the state *chooses* to apply them to; they are a tool over which the state remains ultimate control (Kania, 2020a).

This prioritisation of state control *is itself* a core ethical question within both the PLA and broader CCP regarding the degree to which AI development is pursued. Western analysts have noted vague definitions of lethal autonomous weapons ("LAWS") by Beijing as potentially signalling their development, and the pursuit of Artificial General Intelligence ("AGI") in Beijing as being 'the same as any other advanced technology', raising the question of 'human-out-of-the-loop' ("HOOTL") systems capable of not just supporting CCP decision-making, but acting autonomously (Chang and Hannas, 2022a). However, the risk of this leading to a loss of party control – placing algorithm above authority – has raised sincere doubts as to Beijing's willingness to implement such technologies, indicating the pursuit of 'human-on-the-loop' ("HOTL") AI technologies with which human control is retained seemingly more likely (Kania, 2020a). Such developments would be in line with Xi Jinping's 2014 missive on PLA control, quoting Chairman Mao: *'The Party commands the gun'* (党指挥枪). (Hui, 2014).

Beyond ethical considerations, China faces considerable operational challenges in the development and realisation of integrating AI into its national security efforts. An increasing

[5] Chinese state projects and apparatuses of note facilitating mass surveillance include Golden Shield (金盾工程), Safe Cities (平安城市), Skynet (天网), Sharp Eyes (雪亮工程) and Police Cloud (警务云) (Arnold and Puglisi, 2022; Peterson, 2022).

understanding of MCF by Western governments and institutions has led to reduced rates of cooperation with China-based firms and institutions. Whereas Western-Chinese academic collaboration had once been perceived in some quarters as an 'absolute good', the risk calculus for collaboration now incorporates the prospect of the PLA adapting research for military purposes (Fedasiuk and Weinstein, 2022; Nelson and Epstein, 2022). Talent recruitment and retainment also remains a core problem; China routinely loses out to the United States and Europe as destinations for domestic and international talent, and education schemes designed to train domestic researchers are yet to prove sufficient; as of 2021, China is understood to have a shortfall of five million 'AI workers' necessary to achieve the goals laid out in domestic AI policy (Zeng, 2021; Weinstein and Stoff, 2022). Access to hardware necessary for AI development – most notably semiconductors – also remains a significant problem. Although efforts to develop domestic industries and skirt sanctions through novel firm creation have borne some success, the governmental approach of 'throwing money at the problem' has found itself prone to fraud; the collapse of Wuhan Hongxin Semiconductor Manufacturing Ltd (HSMC) in 2021 leading to the loss of $2.4Bn in investment by local government, and raising questions concerning the safety of GGF investments (Gan, 2021; Su and Qiu, 2021). A 2024 investigation identifying PLA missiles as being filled with water rather than rocket propellant has also raised questions of Chinese military readiness, and local and rural AI plans have been noted as having deliberately unrealistic goals intended as policy-based 'lip service' to the CCP (Hine and Floridi, 2024; Martin and Jacobs, 2024). Although Chinese AI funding is estimated to be on par with the United States, the impact of fraud has both caused – and is likely exacerbated by – increasing competitiveness for government AI funding, which itself is likely to further affect Chinese ambitions for talent retention and increased domestic research (Fedasiuk, Melot and Murphy, 2021; Luong and Fedasiuk, 2022; Hine and Floridi, 2024).

Current State of AI Integration in British National Security

Introduction

The United Kingdom's relationship with AI originates with mathematician and cryptanalyst Alan Turing, who first conceptualised computer-related intelligence – and the eponymous 'Turing Test' - in 1950 (Turing, 1950). In the modern era, Britain has expressed its desire to become *'a global AI superpower',* and to this end has proactively funded significant R&D and innovation initiatives across the country since 2019 - most notably with the AI Sector Deal of that year (HM Government, 2019). These efforts have been rewarded with some success; Britain typically ranks third in the world on the Global AI Index, and ranked fourth in the Global Innovation Index in 2023, in which it surpassed China and was only narrowly surpassed by the United States (WIPO, 2023; Cesareo and White, 2024).

The UK has sought to translate its domestic AI strengths into operational military advantage, with the Ministry of Defence ("MOD") listing it as a 'priority technology' and predicting that *'future conflicts may be won or lost on the speed and efficacy of the AI solutions employed'* (Ministry of Defence, 2021a; HM Government, 2023a). Policy documents by the British government ("HM Government") and the MOD have framed development as necessary to safeguard against 'potential adversaries' and 'hostile [non-]state actors'; policy documents in question routinely name Russia, China, Iran and North Korea as specific actors of concern in this regard, with China framed as an *'epoch-defining challenge to the type of international order [Britain wants] to see'* (Ministry of Defence, 2022; HM Government, 2023a).

Key Agencies, Policies & Strategies

AI's role in British national security has featured extensively in policies and strategies published by HM Government and the MOD respectively, with the latter noting the potential value of its adoption – and the associated costs of failing to do so – in 2018 (Ministry of Defence, 2018). HM Government policies and strategies have served to outline the adoption of AI as being in response to 'potential adversaries' and 'threats', and have increasingly named China in both contexts since 2021, emphasising the risk of authoritarian states outlining international norms for AI usage (HM Government, 2021a, 2023a). Core British strategies and

documents have repeatedly designated AI as a 'priority technology' capable of 'generating strategic advantage' (HM Government, 2023a).

To facilitate this, publications by both entities have focused on establishing novel units and research entities within the MOD. They have also increased funding to existing AI infrastructure, most notably the Alan Turing Institute, with an emphasis on funding relating to defence and security-related R&D (HM Government, 2024c). This led to the development of Strategic Command ("StratCom")'s JHub and the Defence Science and Technology Laboratory ("Dstl")'s AI Lab in 2018 – intended for funding AI-based technology and conducting AI R&D for national defence purposes respectively. The 2021 Integrated Review and National AI Strategy both served to establish entities intended to facilitate cross-domain collaboration between the MOD, private sector and academia; namely the Defence Artificial Intelligence Centre ("DAIC") and National Security Technology Innovation Exchange ("NSTIx") respectively (HM Government, 2021a, 2021b). Publications have emphasised the development of AI across warfighting domains; the DAIC highlighted each core branch of the British military[6] conducting research for AI-implementation for land, sea and air respectively, and HM Government's 2022 National Cyber Strategy highlighted AI as a 'technology vital for cyber power'. This assessment was shared by intelligence agency GCHQ in its assessment of AI's potential uses in the cyber domain a year prior (GCHQ, 2021; Ministry of Defence, 2022).

British strategic documents have placed an emphasis on collaboration with allies in AI development, noting that *'the fastest route to mastering these technologies is to work closely with allies and partners*', and that collaboration is necessary for ensuring AI interoperability amongst allied nations; such claims are reinforced by Britain's first military usage of AI being during a 2021 NATO exercise (HM Government, 2021b; NATO, 2021). The 2022 Defence Artificial Intelligence Strategy ("UK DAIS") noted the prioritisation of AI development in coordination with defence-based multinational institutions, namely NATO, Five Eyes and AUKUS, and emphasised collaboration with the United States as the UK's *'most important international partner*', namely through establishing a bilateral cooperation between Britain's DAIC and America's CDAO. This development can be seen as a deepening of a pre-existing AI partnership through the U.S.-led AI Partnership for Defence ("AI PfD") and a prior bilateral AI R&D agreement (HM Government, 2020a, 2021b; Ministry of Defence, 2022). Britain has

[6] The British Army, Royal Air Force and Royal Navy respectively.

also sought extensive international collaboration for the creation of standardised norms regarding AI usage; it hosted the 2023 AI Safety Summit in 2023 which resulted in the Bletchley Park Declaration of that year – an agreement centring on international cooperation on AI safety, responsibility and risk management – which was signed by the United States, China and the European Union (HM Government, 2023b).

Britain's focus on international collaboration is not absolute. The enactment of the 2021 National Security and Investment Act 2021 ("NSI Act") has made the controlling sale of British firms operating in 17 'strategic' domains – including 'Artificial Intelligence', 'Defence' and 'Military' affairs – subject to mandatory government notification (HM Government, 2020b). This legislation has been used since 2022 to block the sale of AI-related intellectual property and technology to Chinese firms; comments in the UK DAIS and National Cyber Strategy - both published in the same year – strongly indicate this as being an attempt to counteract the risks of Chinese collaboration through MCF (BBC, 2022; HM Government, 2022b; Ministry of Defence, 2022; Reuters, 2022). Interestingly, the law has also been used to block the sale of technologies to American-based firms on national security grounds, indicating that – extensive though U.S.-UK collaboration may be – limits to shared interest stop both countries short of complete lockstep (HM Government, 2022c). Britain's stance on LAWS is also strategically ambiguous in order to protect its self-interests; the state has provided an official definition of AWS since 2011[7], and in the context of LAWS has clarified that *"operation of weapons systems will always remain under human control*" (House of Lords, 2013). Under that definition, Britain has ruled out their development, stating that *"the UK does not plan to develop LAWS"* and that *"such systems do not, and may never, exist"* (Ministry of Defence, 2011; HM Government, 2023c). However, subsequent British government discourse has labelled 'meaningful human control' an 'emergent concept' not yet fully developed, and the government failed to rule out the development of LAWS in 2021 – indicating that British international diplomacy is also being balanced with military protectionism (Article36, 2016; UNA-UK, 2021).

[7] British definition of AWS: *"An autonomous system… capable of understanding higher level intent and direction. From this understanding and its perception of its environment, such a system is able to take appropriate action to bring about a desired state. If is capable of deciding a course of action, from a number of alternatives, without depending on human oversight and control, although these may still be present. Although the overall activity of autonomous unmanned aircraft will be predictable, individual actions may not be."*

Current Applications: AI in British National Security

Assessment of British AI applications in national security are limited by their confidential nature. As with China, information can only be assessed *insofar as it is publicly made known*, which largely limits analysis to information published by HM Government, the MOD or related bodies. This is not without exception: a 2019 Freedom of Information Act ("FOIA") request seeking a roster of MOD AI projects revealed that the 'over 200 AI-related programmes' referenced in the UK DAIS dated from 2019. However, the response named only 75 of these programmes, redacting the remainder under qualified exemption laws and thus emphasising the limitations in analysing such data (Ministry of Defence, 2023).

Publicly-available information has shed some insight on British AI implementation in national security thus far, such as its implementation in decision-making. The British Army first experimented with AI to assist in C2 in its 'Digital Readiness Experiment' of 2022, following MOD publications identifying the benefits of *'machine-speed response [times]'* to threats and the benefits of AI in devising *'optimal responses'* (Ministry of Defence, 2021b; British Army, 2022). ISR is also a focus; Dstl's Project SAPIENT has cantered on developing and implementing AI-enabled ISR capabilities across the MOD since 2021, allowing for terrain analysis through swarming drones to both 'flag dangers' to soldiers during training exercises and make 'low-level decisions' when needed. ISR has also been bolstered by AI-enabled satellite imagery analysis via Projects SPOTTER and SQUINTER (Dstl, 2021; Ministry of Defence, 2022, 2024). GCHQ also experimented with 'AI-enriched intelligence'[8] in 2023 in order to tackle data smog and further improve domestic decision making capabilities (Hughes *et al.*, 2024).

AI implementation has also been implemented in automation and autonomous vehicles for the completion of 'dull, dirty and dangerous' tasks; the Royal Navy has developed AI-enabled 'Autonomous Surface Vessels' under its Unmanned Warrior project for minesweeping purposes, and has established 'NavyX' – its 'autonomy and lethality accelerator' – for continued development of automotive capabilities (Ministry of Defence, 2024; Royal Navy, 2024). AI-enabled automation is actively being implemented across the MOD for spare failure prediction,

[8] 'AI-enriched intelligence' is defined by the Alan Turing Institute as *"intelligence insights that have been derived in part or in whole from the use of machine learning analysis or generative AI systems"*

the simplification of policies and career management in order to realise gains in efficiency and overall sector value – the MOD itself envisioning such automation as offering '60% operational advantage, 40% business efficiency' (Ministry of Defence, 2024).

While it remains unclear to what extent the British state has implemented AI in the cyber domain, it is of note that they have defined such as falling under the auspices of national security; GCHQ has highlighted cyberattacks, human trafficking and disinformation by foreign states as threats to national security likely to be amplified by AI (GCHQ, 2021). Britain established the National Cyber Force ("NCF") as its offensive cyber wing in 2020, which incorporates staff from across the British intelligence community ("UKIC") and MOD; given GCHQ's aforementioned testing of AI for 'AI-enriched intelligence', the possibility of AI being utilised in British cyber efforts cannot be ruled out; however, information confirming or refuting such is not currently in the public domain (National Cyber Force, 2021).

Ethical Considerations and Operational Challenges

Britain's efforts to implement AI into its national security-related operations significant ethical challenges. The risk of algorithmic biases disadvantaging and harming certain groups throughout the UK is of particular concern, especially in the context of historical counter-terrorism efforts. Britain's implementation of 2018 CONTEST 3.0 counter-terrorism has been argued as disproportionately targeting its Muslim population through 'Prevent' referrals, resulting in the cultural 'othering' of a segment of the population and ultimately *increasing* radicalisation rates (HM Government, 2018; Taylor, 2020). Responsibility and accountability also remain a problem. Despite British claims that there will be *'no deployment or use [of AI-enabled systems] without clear lines and responsibility',* it remains to be seen how such responsibility could be assigned in practice (Saltini, 2023). Even if appropriately assigned, there are ethical concerns with human decision-making being predicated on AI-generated suggestions; it is unclear whether such actions would truly be considered borne of human agency – and thus warrant personal responsibility – or whether choosing from a pre-determined, AI-generated *selection* of choices would merely create the 'reassuring illusion' of human control (Cook, 2020; Balis and O'Neill, 2022). Both of these ethical concerns risk slowing down the pace at which Britain adopts AI in a national security context; a concern seemingly

supported by GCHQ staff, who have recognised the desire and value for GCHQ to utilise *"AI tools like ChatGPT – as soon as safety issues can be addressed"* (Powell, 2024).

Britain's primary operational challenge is financial. Although the country has the third largest AI sector globally – behind the United States and China – its investment capability is significantly behind both, and its financial strengths in the AI arena are broadly relegated to the private sector (International Trade Administration, 2023). This has limited its ability to recruit AI talent and develop AI-related technologies for national security-related purposes, with MI6 chief Sir Richard Moore ("C") noting that *"[the public sector] cannot match the scale and resources of the tech industry, so we shouldn't try. Instead, we should seek their help"* (Powell, 2024). Although the JHub, DAIC and NSTIx have been formed precisely to address this weakness, it is unclear to what extent they are successful; as with the United States, British AI talent may resist calls to develop AI for defence-related sectors. This problem is exacerbated by not having U.S.-sized purse strings – United States spending on AI outstripped British spending by 5,000% in 2019, rendering it more attractive for both companies and personnel as a result (Ministry of Defence, 2018; Bughin *et al.*, 2019).

Contrasting U.S., Chinese and British Approaches to AI Integration in National Security

American and Chinese approaches to AI integration appear designed to both mirror *and counter* each other; Chinese military AI applications, such as DataExa's Sati Knowledge Map, explicitly provide ISR in the context of American military vehicles and infrastructure (Fedasiuk, Melot and Murphy, 2021). In turn, American sanctions and export controls explicitly target Chinese semiconductor supplies in order to limit the speed of its AI development, and in turn, its military modernisation (Shivakumar, Wessner and Howell, 2024). In this context, Chinese strategy has focused on broad AI capability development, whereas American strategy has sought both development to ensure its first-mover advantage and to simultaneously frustrate Chinese development attempts; these developments seemingly reflect the often-referenced superpower competition between the two, and the potential for AI developments to disrupt the geopolitical status quo (Doshi, 2021). Britain – standing outside of this superpower competition – has pursued AI development seemingly as a response to the threat posed by nation states *with* AI, most notably Russia and China, and due to the implicit risks of failing to adopt it (Burt, 2021). As noted by GCHQ, failure to adopt 'AI-enriched intelligence' may risk *'trends and anomalies [going] unnoticed… [contravening] the principle of comprehensive coverage in threat intelligence'* (Hughes *et al.*, 2024). All three states are attempting to leverage their private sector to support AI implementation in national security apparatuses, although China's autocratic nature has made its efforts in this regard far more successful than the United States or Britain through MCF.

Although the rationale underpinning AI strategies and policies appears to differ for the three countries, development priorities appear broadly similar, with each nation focusing on AI advantages in C2-based decision making, 'dull, dirty and dangerous' task automation, efficiency gains and ISR capabilities. Each country has also taken a similar stance on LAWS – seemingly providing a public-facing definition at international fora designed to assuage concerns regarding their development, but carefully permitting loopholes to not rule out their creation or use (Article36, 2016; Kania, 2020a; Bächle and Bareis, 2022). As such, is it noteworthy that all three states have attempted the development of autonomous 'loyal wingman' drones – technology which has the potential to be adapted for LAWS research in future (USAF, 2019; HM Government, 2022d; Stokes, 2024).

Literature Gaps & Future Research Directions

My literature review has covered a significant body of research concerning national security-centred applications of AI in the Chinese and American contexts, with a substantially smaller body existing in the British case. AI is not the only advanced technology pursued by these three states, however; each state has actively expressed an interest or begin the pursuit of Brain-Machine Interface ("BMI") technologies within the context of national defence, but the literature surrounding its impact on national security policies or thinking remains sparse (Ministry of Defence, 2021c; Chang and Hannas, 2022b; Stinchfield, 2023). This is particularly of note in the Chinese case; the PLA's likelihood of avoiding 'HOOTL' technologies may make BMI an attractive alternative prospect, a consideration given credence by PLA Lt. Gen. Liu Guozhi's reference to BMI as the *"highest form"* of future intelligence (Kania, 2020b). This warrants future research to unearth the impact of this emerging field in a national security context, and – owing to parallel Chinese and American projects – an assessment of its significance in U.S.-Chinese superpower competition.

Within the context of AI, the existing body of work regarding British applications of AI in national security remains remarkably small – literature has, thus far, predominantly focused on the American, European and Chinese cases (Raska and Bitzinger, 2023). This is somewhat surprising given Britain's AI credentials earned through spearheading the 2023 AI Safety Summit and its role as Europe's leading state in AI development. What little literature currently exists has framed Britain as a state implementing AI due to the risks of failure to do so; either through becoming vulnerable to AI-enabled threats, or to being left behind on the global stage, and thus losing influence (Burt, 2021; Powell, 2024). This existing corpus has not examined the *extent* to which British AI development and integration in national security has been influenced by other nations' developments in this sphere.

British policy and strategy documents have explicitly named China as a threat, but it is not clear *to what extent* AI developments have been pursued solely as an effort to mitigate risks posed – nor to what extent *public British claims* of China as a threat are sincere transparency or a means to secure broader geopolitical goals. Similarly, Britain's use of the NSI Act to block both Chinese *and American* purchases of sensitive companies and intellectual property lend credence to Hine and Floridi's observation of American allies having their own ambitions

beyond an American-aligned umbrella bloc (Hine and Floridi, 2024). Britain's bi- and multilateral partnerships with the United States on AI-related matters has clearly established its desire to collaborate as a means to unlock AI proficiency at speed, but its use of the NSI Act may indicate limits to this partnership – particularly in the strategically-competitive private sector, which both Britain and America are trying to leverage for their respective defence industries. The limited existing corpus has largely focused on public-facing strategy and policy documents published by HM Government and the MOD; this can – and should – be expanded through analysis of publication rates in the field of AI from MOD-aligned university partnerships, such as MOD-funded Centres for Doctoral Training ("CDTs") – and an examination of the democratic debates underpinning relevant legislation, policy and strategy in both Houses of Parliament (Dstl, 2024). Examinations of CDT funding and research may more clearly outline British focus areas for defence-related AI by 'following the money'; comparisons of focus areas with technologies shared – and *not* shared – with allied states and blocs may more clearly outline the extent to which British cooperation extends before being subsumed to self-interest. This paper focuses on the latter literature gap; analysing relevant political debate in both the House of Commons ("the Commons") and the House of Lords ("the Lords")[9] permits an understanding of the rationale behind existing stances and publications regarding Britain's AI development and integration in national security in the context of Chinese and American AI development.

Britain's AI-related economy is projected to reach a value of $1Tn by 2035, emphasising its significant role as an AI-enabled state on the global stage. An investigation of how its AI development is influenced by American and Chinese technological advancements is critical in understanding its likely future relationship with both states, understanding the limits to both its independence and cooperative efforts in domestic AI development, and in understanding what role Britain's own ambitions impact its AI-enabled national security rationale outside of U.S.-Chinese superpower competition.

[9] Both houses are collectively henceforth referred to as "the Houses" hereon.

Theoretical Framework

My research is guided by the theoretical framework of neoclassical realism ("NCR"). This theory incorporates the traditional realist concept of the balance of power – the securing of state survival through either the pursuit of strength or denying adversaries the same – whilst similarly accounting for the seemingly-irrational actions of states or leaders by incorporating the concept of 'Intervening Variables' ("IVs"). IVs are variables within a state that may impact its decision making, such as human fallibility, state (mis)perceptions of external affairs, and matters internal to the state such as societal actors, economic considerations and state institutions (Lobell, Ripsman and Taliaferro, 2009).

This theory has been selected to contextualise the nature of British AI implementation in its national security as being a response to a perceived threat from other states; either by other states *in general* through the perceived loss of security (and opportunity) through failure to develop and implement AI capabilities, or specifically from China as outlined in strategies and policies highlighted in the literature review. *Neoclassical* realism, as opposed to alternative theories, also holds explanatory power for otherwise curious decision-making by the British state. Britain's approach to labelling China as an *'epoch-defining threat'* whilst similarly calling for confident and direct engagement with China *'bilaterally and in international fora'* may not initially appear sensical, nor may extensive partnership and cooperation with the United States on AI R&D whilst simultaneously blocking technology sales to U.S. firms on national security grounds (HM Government, 2023a). NCRs allowance for IVs permits these to be seen as a consequence of differing perceptions of threat (for instance, the perception of the American AI private sector as a threat to independent British growth) and for human fallibility in the subject nature of AI-based debate in the Houses. Previous instances of MPs 'repeating conspiracy theories' in the Commons raise the prospect of such fallibility impacting debate concerning British AI implementation, and thus must be accounted for (Harvey, 2024).

NCR holds analytical value in analysing Chinese and American developments of AI as part of a superpower-focused competition for hegemony between them, most notably in America's dual attempts to outpace Chinese growth in AI whilst simultaneously denying China growth opportunities through exporting restrictions and sanctions – extensive realist analyses have been conducted on this matter, particularly concerning the 'Thucydides Trap' (Er, 2016; Mastro,

2019; Boros, 2021). While outside the context of superpower competition, NCR also holds analytical value for the British case; Britain's labelling of China as a threat has been coupled with increased R&D for AI and implementation in its national security infrastructure, alongside the utilisation of laws in an attempt to limit the threat posed by MCF. In the American case, Britain has utilised bilateral and multinational partnerships to expedite its AI growth – increasing its own standing in the world – whilst again utilising legislation to protect its private-sector innovations.

NCR provides a strong basis to understand the rationale underpinning British parliamentary discussions regarding its AI-related policies, legislation and strategies, and offers analytical value in understanding the extent to which its adoption of such policies has been impacted by AI-based technological developments in the United States and China. Its inclusion of IVs not only allows for fallibility in British thinking, but offers a lens through which to understand why seemingly-illogical decisions may have been made – further offering critical value for my exploratory analysis of debates in both Houses, and as such providing a solid hypothetical basis on which to approach my research question.

Research Design & Methodology

Research Question

My research and methodology detailed herein is framed around the following research question, which my resulting analysis seeks to answer:

'How have American and Chinese AI-related developments influenced the United Kingdom's integration of artificial intelligence into its national security?'

Chosen Research Method & Software

I elected to employ qualitative analysis as my primary research method. I selected this research method following a consideration of viable data sources from which I could analyse. As highlighted by my literature review, many potential sources of information that may indicate thought processes behind government action are likely confidential, as highlighted by the FOIA response presented earlier herein (Ministry of Defence, 2023). This is particularly true of numerical data – most notably ruling out quantitative analysis of governmental and military procurement data as a viable research path. However, HM Government maintains an extensive, 'verbatim' record of all parliamentary debates from both houses, publicly accessible via its online Hansard service (HM Government, 2024b). I selected Hansard as my primary data source due to its completeness, as it contains records of all debates held in both Houses during the period of interest as outlined in my scope. As the debates therein are recorded in literary form, I chose qualitative analysis in order to best analyse the literature therein. This has the distinct advantage of allowing me to analyse *expressed sentiments* despite potential variances in word choice selections and written notations by lawmakers and record-keepers selectively; this also allows for the analysis of *implicit* statements rather than relying on the objective presence of a certain word. During my analysis, as I discovered written debates stored on Hansard would employ various written forms of acronyms – for example, *'the US'* versus *'the U.S.'* – which may have caused issues if analysing word frequency through quantitative analysis. By utilising *qualitative* methods, I was able to account for this variance such that it did not impede analyses conducted. Despite the benefits hereto presented, this method of analysis is not perfect; the ability to analyse implicit and expressed sentiments is coupled with subjective

nature on which qualitative analysis is based. In the case of my research, sentiments labelled are sentiments *as I have identified them*; although I believe my reasoning for such selections to be sound, it cannot be ruled out that another researcher may analyse elements that I have not, or neglect elements that I have chosen to include.

I used ATLAS.ti, a qualitative data analysis software, to conduct my analysis. ATLAS.ti is specifically designed for qualitative analysis, and allows for the bulk importing of documents for manual, individual analysis. I selected ATLAS.ti as my tool of choice due to both this and my prior familiarity with its use (ATLAS.ti, 2024).

Document Selection, Reasoning & Sampling Method

Document Selection

I opted construct my corpus from parliamentary debates made available on Hansard as, with Britain having a Westminster-model parliament, debate between lawmakers represents the thought process behind decision-making at the executive level. Whereas Parliamentary debate is not the only source of such – public interviews and online blogs by Members of Parliament, for instance, also offer insight into decisions made at governmental level – Hansard offers a significant practical advantage in accessing information compared to other sources. The service includes a comprehensive search tool allowing for debates to be filtered by key word and House, and allows for individual debates to be downloaded as .txt files – advantages not identified through other potential sources.

Rationale in Corpus Selection

In constructing my corpus for analysis, I selected debates as made available on Hansard from both the Commons and the Lords. I did this to both incorporate a broader volume of debate concerning British AI integration in national security, and to allow for the assessment of potential differences between both Houses in their considerations.

Due to the nature of parliamentary debate, each debate analysed included a range of viewpoints from a plethora of British political parties. I elected to analyse relevant points raised regardless

of the political party of the speaker in question. I chose to do so as each speaker is able, by right of their position, to influence Parliamentary decision-making both inside and outside of HM Government. Such influence is expressed through their individual roles in parliamentary committees, statements given in debates, answers given in response to questions, and – above all – power conferred through their right to vote in the Commons and Lords respectively. Therefore, the potential influence of each speaker on executive decision-making warrants the consideration of points made *beyond* the party of government and opposition – the Conservative Party and Labour Party – respectively. Furthermore, not restricting debates collected by speakers of certain parties also serves to limit bias in my corpus, by ensuring viewpoints beyond those of a singular party line are included.

Sampling Method

I employed purposive sampling when collecting documentation to analyse; this was utilised over random sampling due to my interest in *specific elements* of parliamentary debate and its resulting value in qualitative analysis, as showcased by other qualitative narrative analyses (Li and Liao, 2023). In practice, this involved selecting a range of texts from Hansard that met one of three criterion that I had established for document selection. These criteria were designed to identify debates that contained points relevant to my research question, and to exclude debates that did not.

1. Debates that refer to British integration of AI in its national security.
2. Debates that refer to Chinese usage of AI, or Chinese-related AI developments, in the context of British national security.
3. Debates that refer to American usage of AI, or American AI-related developments, in the context of British national security.

Search Terms Used, Problems Faced & Applied Search Restrictions

I conducted searches on Hansard's online search portal in order to identify debates that matched any of the criterion as set out above. In doing so, I queried a series of search terms involving 'Artificial Intelligence', 'China', 'United States', 'National Security', 'Threat', and 'Ministry

of Defence'. I queried these search terms in a series of combinations, and utilised alternative forms of the terms where appropriate – for instance, 'Chinese' instead of 'China'.

When conducting my initial searches, I encountered difficulties with variances in how 'United States' was written on the platform. Debates where acronyms for the 'United States' were used in place of its standard name did not appear in results when searching for 'United States' alone. Debates recorded on Hansard often utilise the country's short form of 'US'; searches with this variant returned tens of thousands of matches owing to the lower-case variant, 'us', being a common English word. To circumvent this issue, I utilised a quoted search with a definite article and a space – "the US " – in order to ensure that the state itself was being referred to.

When conducting the searches, I employed two limiting factors of note. Firstly, I placed core terms in quotation marks to ensure that results included that specific search term – for example, "national security". This was not only to ensure that the query in question was present in results, but also that – if a query was longer than one word – results would only include debates where those words appeared sequentially. Secondly, I restricted the date range as being from 1st January 2021 to the date on which searches were conducted (25th June 2024). Choosing this start point allowed for the inclusion of major British AI-related developments as outlined within my literature review – such as the NSI Act and Artificial Intelligence Safety Summit – and also served to render result management more feasible, as volume reduction ensured that results shown were only those within my pre-defined scope.

In total, I conducted 36 unique searches on Hansard's portal, resulting in 515 results for debates in the Commons and 572 in the Lords, totalling 1087 query results. A full list of search terms employed and corresponding number of results can be seen in Appendix A.

Corpus Refinement

When conducting my searches as above, I briefly looked at each unique result to quickly assess relevance to the topic at hand. This allowed me to discard swathes of clearly irrelevant debates, and resulted in gathering 63 debates of potential use. I then downloaded each of these 63 debates as a .txt file.

Once downloaded, I then refined this corpus by having an in-depth read of each debate. To save time, I used the 'find' function to search for any of the terms outlined in Appendix A within those documents, and then read the debate surrounding those terms' inclusion. This allowed me to assess whether or not the debates in question truly referred to the criterion I outlined earlier, or whether reference to those terms was only made in passing. This resulted in me discarding 35 debates, leaving a text corpus of 28 debates that met any one of my three outlined criteria. This corpus represents a somewhat serendipitous even split; 14 of the debates identified took place in the Commons, and the remaining 14 in the Lords respectively. Once gathered, I imported all documents into ATLAS.ti and sorted them into two distinct document groups – 'House of Lords' and 'House of Commons' respectively – in order to allow for future analysis of debate by House.

Coding Approach & Process

I utilised a mixed approach to coding my corpus. My initial coding approach was inductive due to the nature of my research question. I knew certain aspects of information that I was looking for in my debate; notably references to British rhetoric and action regarding AI in its national security, and references to Chinese and American AI-related developments or viewpoints. This led to be creating five distinct code groups within ATLAS.ti – 'British Action on AI Implementation', 'British AI-National Security Implementation Motivations', 'Domains of Warfare', 'Influence of American AI-Related Developments' and 'Influence of Chinese AI-Related Developments'.

Once these groups were made, I began the coding process, and in doing so switched to deductive coding. Through this, I coded my text to incorporate any element that fit within any of the code groups outlined above. In order to allow for more objective analysis, I attempted to 'mirror' codes under the 'Influence of American…' and 'Influence of Chinese…' groups respectively in order to allow for direct comparison. For instance, both groups contained equivalent codes for positive and negative sentiment expression regarding cooperation and collaboration, and the perception of AI technology from those states being perceived as a threat by British parliamentarians. I also noted that each debate contained the date of which that debate was held; this led to me creating a separate code group for 'Years', spanning 2021-2024 inclusive, with a view of incorporating changing opinions over time into my analysis. While

finding references to domains of warfare, I also noticed one sub-section of cyberspace warfare – information warfare, predominantly disinformation – as repeatedly appearing. I elected to add this as a distinct 'sub-code' under 'Cyberspace', to assess to what extent information warfare was a primary concern in this domain.

During the coding process, I elected to code relevant sentences or paragraphs of text that made explicit reference to one of the groups identified above, insofar as they related to my three aforementioned criterion. If a following paragraph contained a continuation of the same idea – and ergo the same code – as another, then I chose to code these together. This was to ensure that each point made by a speaker was only captured once during an individual speech made; failing to do so would have given undue weight to points being rephrased in a single speech, and thereby would have disproportionately impacted my results. By coding in this manner, I sought to mitigate the inherent subjective nature of qualitative analysis in such a way that this methodology could be replicated in future studies. The only exception to this was coding for 'years'; for this, I highlighted all of the text within the debate file and applied a single code – 2021, 2022, 2023 or 2024 respectively. A full list of code groups and the codes created, alongside their respective descriptions, can be found in Appendix B.

Presentation & Analysis of Data

United States: Intersecting Parliamentary Narratives with AI-National Security Integration

Whilst coding my corpus, I identified three key recurring points when discussing the United States in the context of AI and British national security. I created a specific code for each of these three points, such that code could then be labelled appropriately by document. Two further codes were then created to mirror equivalent codes found when analysing references to China. All of these codes were later subsumed under one code group – titled '*Influence of American AI-Related Developments'* – for ease of data management and to facilitate subsequent broad data analysis. A list of U.S.-centric codes and their descriptions has been provided below for ease of reference:

Code Name	**Description**
American AI: Perceived as Threat	Perceptions of American AI as a threat to British national security. ***Created to mirror equivalent Chinese code.***
US: Accessing British AI Technology	Negative perceptions of American access to British AI-related technology or intellectual property.
US: Negative Cooperation & Collaboration	Negative perceptions of British cooperation and collaboration with the United States for AI-related matters in the context of British national security. ***Created to mirror equivalent Chinese code.***
US: Positive Cooperation & Collaboration	Positive perceptions of British cooperation and collaboration with the United States for AI-related matters in the context of British national security.
US: Technological Comparisons	Comparative references made between British and American progress and/or standings in the field of AI.

Of the codes created, each code was utilised – or referenced – the following number of times, with codes arranged by order of rank. It is of note that the two codes designed to mirror Chinese

equivalents – ‘American AI: Perceived as Threat’ and ‘US: Negative Cooperation & Collaboration’ – were not utilised, as no content within my corpus was identified as falling within either category.

Code Name	Number of References
US: Positive Cooperation & Collaboration	17
US: Technological Comparisons	10
US: Accessing British AI Technology	6
US: Negative Cooperation & Comparison	0
American AI: Perceived as Threat	0
Total Number of References:	**33**

Parliamentary House Comparative Analysis: Perspectives on U.S. AI-Related Developments

Comparing my U.S.-related codes against both document groups revealed that the United States was mentioned in the context of Britain’s AI-national security integration twice as often in the House of Commons (22 references) as in the House of Lords (11 references), as shown in the below analysis grid:

	House of Commons 14 71	House of Lords 14 74	Totals
American AI: Perceived as Threat 0			0
US: Accessing British AI Technology 6	6		6
US: Negative Cooperation & Collaboration 0			0
US: Positive Cooperation & Collaboration 17	11	6	17
US: Technological Comparisons 10	5	5	10
Totals	22	11	33

Figure A: U.S. Code Group Codes & Document Groups

As shown above, an equal number of comparisons were made by both Houses of British and American AI developments. Each of these comparisons raised the same sentiment; that the United Kingdom was a leader in AI, ‘just behind America and China’, or some variant thereof.

Of greater interest are the bicameral *differences*. The House of Commons made 83.3% more positive references of cooperation and collaboration with the United States than the House of

Lords; these positive references alone comprised 50% of relevant U.S.-related coding within the Commons. Despite positive appraisals, speakers in the Commons made repeated negative references to American access to British AI technology, most notably with Google's purchasing of DeepMind and NVIDIA's ultimate sourcing of ARM. In context, such sales to American firms were referred to as 'dangerous' and 'regrettable', with Conservative MP Tom Tugendhat specifically referring to *'the sale of DeepMind to Google [as] one of the worst strategic moves a UK Government [has] taken'* (House of Commons, 2021d). This negative sentiment of American private-sector access was entirely absent in the Lords, and neither house expressed negative sentiments of cooperation with the American government itself.

Domain of Warfare Analysis: References in Parliamentary Debate

Coding of my corpus identified only scant references to the different domains of warfare when discussing the United States. In all instances, they uniquely referred to Cyberspace as a domain of warfare, with information warfare specified once as a sub-domain within this. Equally, in all instances, mentions of Cyberspace in the context of the U.S. was exclusively done when positively referring to cooperation and collaboration between the U.S. and UK in the AI-national security sphere.

	American AI:... 0	US: Accessing... 6	US: Negative... 0	US: Positive... 17	US: Technological... 10
Domain: Air 8					
Domain: Cyberspace 24				3	
Domain: Cyberspace (Information Warfare) 11				1	
Domain: Land 1					
Domain: Maritime 5					
Domain: Space 5					

Figure B: U.S. Code Group Codes & Domains of Warfare

Two of the references highlighted referred to combined Cyber-AI capabilities borne of AUKUS, a military technology partnership between the United States, Britain and Australia. Although media concerning this partnership predominantly focuses on the joint development and acquisition of nuclear-powered submarines, parliamentary debates revealed this partnership to extend beyond that, and for AI and cyber-related aspects of this partnership to both be intertwined *and distinct* from the nuclear-powered submarine element (House of Commons, 2021b; Jackson, 2024). Due to this, and the focus of my research question being AI, the AI aspect of AUKUS-related documentation was not coded as 'Domain: Maritime'.

Intersectional Analysis: Parliamentary References with British AI Narratives and Actions Taken

I noticed numerous narratives of note pertaining to British motivations and actions taken during corpus coding. The codes created for both of these elements have been highlighted below:

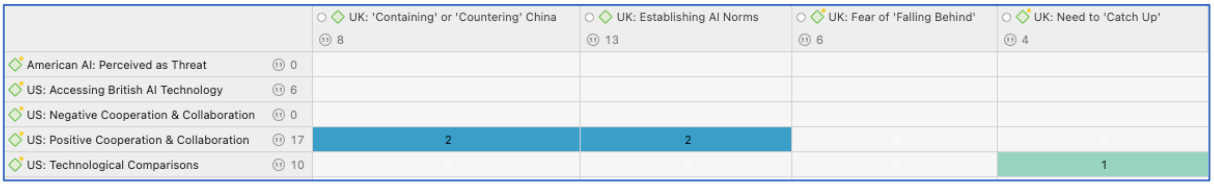
Code Names under Code Group 'British AI-National Security Implementation Motivations'	**Description**
UK: 'Containing' or 'Countering' China	Regarding AI implementation to 'contain' or 'counter' China.
UK: Establishing AI Norms	Regarding British desire to establish international AI 'norms'.
UK: Fear of 'Falling Behind'	Regarding British concerns of 'falling behind' compared to other states in the context of AI development.
UK: Need to 'Catch Up'	Regarding British imperative to 'catch up' to other states in the context of AI development.

Code Names under Code Group 'British Action on AI Implementation'	**Description**
UK Action: Intelligence	Regarding actions taken by Britain to develop AI within the UKIC.
UK Action: Inter/Multinational Collaboration	Regarding proactive British engagement in inter- or multinational collaboration to aid AI integration with its national security.
UK Action: Legislation	Regarding Britain as actively passing legislation to either support AI development or respond to perceived AI-related external threats to British national security.
UK Action: Military	Regarding British action to develop or integrate AI within its military.

In the context of America, British AI-national security integration and development-related parliamentary discussion has predominantly taken place when framing U.S.-UK collaboration in a positive light, specifically in 80% of instances. This serves to highlight British motivations

for cooperation and collaboration with the United States in this field as being equally to 'contain' and 'counter' China and to establish AI global norms.

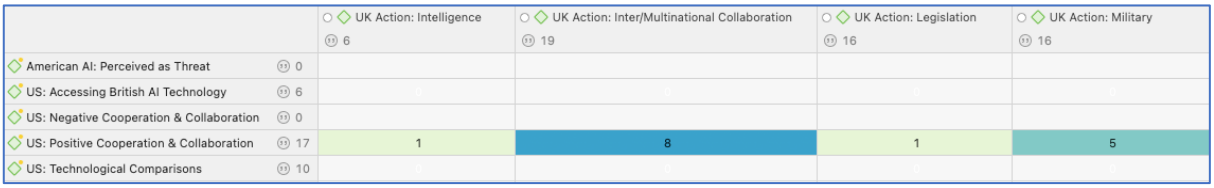
Narratives concerning 'containing' and 'countering' China were both related to the AUKUS programme. Narratives concerning a British desire to establish AI norms were expressed once in reference to AUKUS and once in reference to pan-Five Eyes cybersecurity cooperation. Outside of this, one isolated reference was identified reflecting a British desire to 'catch up' to *'long-standing AI investments in China and the US'* (House of Lords, 2021a). A tabulated heat map reflecting this intersection can be seen below.



	UK: 'Containing' or 'Countering' China (8)	UK: Establishing AI Norms (13)	UK: Fear of 'Falling Behind' (6)	UK: Need to 'Catch Up' (4)
American AI: Perceived as Threat (0)				
US: Accessing British AI Technology (6)				
US: Negative Cooperation & Collaboration (0)				
US: Positive Cooperation & Collaboration (17)	2	2		
US: Technological Comparisons (10)				1

Figure C: U.S. Code Group Codes & British Motivations for AI Development

My assessment of actions taken by the British in the context of U.S.-related narratives highlighted a strong correlation between positive references to UK-U.S. cooperation and collaboration and inter- or multinational collaboration. This in itself is not surprising; it simply reflects discussions regarding British inter- and multinational collaborative efforts, namely as part of AUKUS or Five Eyes, as being likely complimentary to the United States due to its leading role in both institutions. Similarly, all five correlating references to British military action were explicitly within reference to AUKUS. The one intelligence-related remark was in the context of Five Eyes.



	UK Action: Intelligence (6)	UK Action: Inter/Multinational Collaboration (19)	UK Action: Legislation (16)	UK Action: Military (16)
American AI: Perceived as Threat (0)				
US: Accessing British AI Technology (6)				
US: Negative Cooperation & Collaboration (0)				
US: Positive Cooperation & Collaboration (17)	1	8	1	5
US: Technological Comparisons (10)				

Figure D: U.S. Code Group Codes & British AI-Related Actions

Of particular interest is that, during debates where UK actions were discussed in the same context as the United States, all correlating references were done in positive relation to the U.S.

as opposed to any other coded metric. This is a neutral revelation in the two aforementioned 'mirrored' codes, as neither code was used in my U.S.-related code group. Considered more broadly, not mentioning British action in the context of accessing British AI technology or making AI-based technological comparison reinforces positive perceptions of the U.S. in HM Government through the complete exclusion of negative reference in this regard.

When considered together, my results highlight that American influence on British AI development and usage in national security is perceived as being overwhelmingly positive by HM Government. My results imply a British focus on leveraging the UK-U.S. bilateral and multilateral relationship to both promote international AI norms, and to pursue multinational military development to 'contain' and 'counter' China, which it perceives as a threat to its national security – the latter almost universally under the auspices of AUKUS, and partially within Five Eyes.

Temporal Analysis: Parliamentary References Over Time

British concerns regarding American private-sector access to British AI-based technology – exclusively through company and IP-based purchases – were strongly voiced in 2021, but were not repeated thereafter. This correlation is entirely in line with the then-National Security and Investment Bill, as debated that year (House of Commons, 2021d).

	2021 8	2022 5	2023 11	2024 (to June) 4
American AI: Perceived as Threat 0				
US: Accessing British AI Technology 6	6			
US: Negative Cooperation & Collaboration 0				
US: Positive Cooperation & Collaboration 17	5	2	6	4
US: Technological Comparisons 10	2	4	4	

Figure E: U.S. Code Group Codes & Year Codes

By contrast, Parliament has maintained consistent vocal support for cooperation and collaboration with the United States in the context of national security-based AI development and utilisation since 2021. This represents a consistently positive outlook on UK-U.S. collaboration in this area across differing elements of debate and legislation as reflected by the variance in my corpus. Although consistent technological comparisons were made between

2021 and 2023, these were almost entirely comprised of referencing Britain as being 'just behind' the U.S. and China in global AI standing, and only once in querying how the UK could seek to 'catch up' with American investment in this field. This trend over time appears to be continually positive, and represents a positive outlook; the four positive references to UK-U.S. collaboration in this sphere currently outpaces similar references from 2021-2023, raising the possibility of Britain making more positive references to such collaborations by the end of 2024 than in previous years.

China: Intersecting Parliamentary Narratives with AI-National Security Integration

During my deductive coding, I identified six key recurring points regarding British references to China in both Houses. As with the United States, I coded each of these points and put them within a code group titled *'Influence of Chinese AI-Related Developments'* to aid subsequent analysis and to structure my data. A list of China-centric codes and their descriptions has been provided below for ease of reference:

Code Name	**Description**
China: Accessing British AI Technology	Negative perceptions of Chinese access to British AI-related technology or intellectual property.
China: Establishing AI Norms	Negative perceptions of Chinese attempts to establish international 'authoritarian' norms for AI development and usage.
China: Negative Cooperation & Collaboration	Negative perceptions of British cooperation and collaboration with China for Ai-related matters in the context of British national security. ***Mirrored in American coding for comparison.***
China: Positive Cooperation & Collaboration	Positive perceptions of British cooperation and collaboration with China for Ai-related matters in the context of British national security.
China: Technological Comparisons	Comparative references made between British and Chinese progress and/or standings in the field of AI.
Chinese AI: Perceived as Threat	Perceptions of Chinese AI as a threat to British national security. ***Mirrored in American coding for comparison.***

The following table serves to highlight how many times each code was utilised in total, in order of rank:

Code Name	Number of References
Chinese AI: Perceived as a Threat	24
China: Negative Cooperation & Collaboration	15
China: Accessing British AI Technology	13
China: Technological Comparisons	13
China: Positive Cooperation & Collaboration	12
China: Establishing AI Norms	6
Total Number of References:	**83**

Parliamentary House Comparative Analysis: Perspectives on Chinese AI-Related Developments

Comparing Chinese-related codes against both document groups revealed 30.5% more references to them in the Lords than in the Commons (Figure F). The differing perceptions between both houses on the matters at hand is of interest; in particular, the Lords referred to the dangers of Chinese access to British AI technology more than twice as often as the Commons. Despite this, not only did debates in the Lords refer negatively to Chinese collaboration and cooperation 33.3% less, but debates therein also *positively* referred to UK-Chinese collaborations *twice as often.*

	House of Commo... 14 71	House of Lords 14 74	Totals
China: Accessing British AI Technology 13	4	9	13
China: Establishing AI Norms 6	4	2	6
China: Negative Cooperation & Collaboration 15	9	6	15
China: Positive Cooperation & Collaboration 12	4	8	12
China: Technological Comparisons 13	6	7	13
Chinese AI: Perceived as Threat 24	9	15	24
Totals	36	47	83

Figure F: Chinese Influence Codes & Document Groups

In spite of their apparent differences, Chinese AI being a threat to national security was the most-cited code for both Houses. Despite a seemingly-warmer reception from the Lords, closer examination of positive references to UK-Chinese collaborations reveals them to still made up a minority of references for each House; 17% for the Lords, and just 11% for the Commons respectively – thus illustrating views of China in this domain as being predominantly negative.

Domain of Warfare Analysis: References in Parliamentary Debate

References to domains of warfare were far more prevalent in discussions concerning China than the United States, with sixteen coded instances in comparison to America's four. As with the United States, debate focused entirely on Cyberspace as a warfighting domain and information warfare as a sub-section of it, albeit at a far greater rate; information warfare was referenced three times as much, and Cyberspace as a whole more than four times the U.S. equivalent.

	Domain: Air 8	Domain: Cyberspace 24	Domain: Cyberspace (Information Warfare) 11	Domain: Land 1	Domain: Marit... 5	Domain: Space 5
China: Accessing Britis... 13	0	0	0	0	0	0
China: Establishing AI... 6	0	1	0	0	0	0
China: Negative Coope... 15	0	2	1	0	0	0
China: Positive Cooper... 12	0	0	0	0	0	0
China: Technological C... 13	0	1	0	0	0	0
Chinese AI: Perceived a... 24	0	9	2	0	0	0

Figure G: Chinese Influence Codes & Domains of Warfare Codes

69% of total Cyberspace references in the context of China referred to British perceptions of Chinese AI as a threat to British national security. Debates surrounding this predominantly focused on the long-term strategic threat posed by China, of which AI-enabled cyberattacks are envisaged – most notably within the domain of information warfare. Debates revealed parliamentary concerns regarding the vulnerability of Britain's democratic processes – such as elections – to both broad cyberattacks and information warfare, and the risk of critical infrastructure being targeted. In one instance, reference was also made to Chinese AI-enabled cyber-espionage as a potential threat of the future (House of Lords, 2021b, 2022a, 2024b).

Intersectional Analysis: Parliamentary References with British AI Narratives and Actions Taken

British motivations in the context of China-related discussions have predominantly focused on two core areas: 'Containing' and 'Countering' China, or in regards to Britain establishing AI norms. Within the latter, a focus has permeated government debate on *'minimising cyber-security risks across critical national infrastructure'* in light of a *'China containment strategy'*; most notably in regards to telecommunications infrastructure within British government buildings (House of Commons, 2021e). The latter, highlighting a correlation between Britain's wish to establish AI norms and a positive perception of collaboration with China, is entirely within the domain of the UK's 2023 Artificial Intelligence Safety Summit. In discussing such, positive reference is made to China's attendance, which in turn is positively regarded in discussions of helping to develop global, China-inclusive AI norms (House of Commons, 2023a).

The correlation of Chinese AI being perceived as a threat and the UK needing to catch up highlighted a noteworthy instance; in such, Parliament referenced the threat of Chinese AI as representing impetus for Britain to *'develop the necessary responses'* to it due to their being *'decades ahead of our defences' (House of Lords, 2024b).* Whilst a solitary instance, this is still noteworthy for the explicit nature of the statement in regards to Chinese capabilities versus that of the British state.

	UK: 'Containing' or 'Countering' China 8	UK: AI Positive Impact on National Security 1	UK: Establishing AI Norms 13	UK: Fear of 'Falling Behind' 6	UK: Need to 'Catch Up' 4
China: Accessing British AI Technology 13					
China: Establishing AI Norms 6	1		1		
China: Negative Cooperation & Collaboration 15					
China: Positive Cooperation & Collaboration 12			2		
China: Technological Comparisons 13					1
Chinese AI: Perceived as Threat 24	2				1

Figure H: Chinese Influence Codes & British Motivations for AI Development

My analysis of British actions in relation to Chinese considerations has highlighted a predominant trend to inter- or multinational collaboration, both in response to elements it considers as a threat and as a way of building on aspects it perceives to be positive – the latter taking place solely in the context of the 2023 AI Safety Summit. Both instances of inter- and multi-national collaboration in the context of Chinese AI being perceived as a threat focused

on cybersecurity-related measures with British allies as a means to protect against Chinese capabilities. This cooperation was predominantly signalled as being through Five Eyes (House of Commons, 2024; House of Lords, 2024b).

	UK Action: Intelligence 6	UK Action: Inter/Multinational Collaboration 19	UK Action: Legislation 16	UK Action: Military 16
China: Accessing British AI Technology 13	1		1	
China: Establishing AI Norms 6				
China: Negative Cooperation & Collaboration 15		1		
China: Positive Cooperation & Collaboration 12		2		
China: Technological Comparisons 13				
Chinese AI: Perceived as Threat 24		2	1	

Figure I: Chinese Influence Codes & British AI-Related Action Codes

Outside of collaboration alone, Chinese access to British AI technology has been discussed in relation to advice sought from Britain's domestic intelligence agency, MI5 (House of Lords, 2022a). Of related interest is Britain's reference to legislation as a means of response to perceived Chinese threats; in the two instances above, British chambers have discussed two pieces of legislation – the National Security and Investment Bill and the Procurement Bill respectively – as a means to act in response to Chinese pressures (House of Commons, 2021d, 2023c). Both bills have since passed and are now enshrined in law. The perception of this should be twofold; Britain's use of legislation to counter perceived threats from China in the AI domain does signify its willingness to utilise its legal system as a means of self-defence. However, this should not be considered as a truly 'ground-breaking' development due to the nature of my corpus – as it is comprised entirely of debate *from within the British lawmaking body*, there is a natural propensity to discuss potential bills as a result of it being their inherent purpose.

Temporal Analysis: Parliamentary References Over Time

Parliamentary discourse on China within the context of British AI-national security integration has changed significantly in some aspects, and minimally in others. Of particular interest below is the increasing perception of Chinese AI as being a threat – very limited reference was made to China in this regard in 2021 and 2022, but such references have since spiked. References of this kind in 2024-to-date match those of 2023, and as such are likely to increase, indicating this trend as continually growing.

	2021 8	2022 5	2023 11	2024 (to June) 4
China: Accessing British AI Technology 13	4	6	3	0
China: Establishing AI Norms 6	3	0	3	0
China: Negative Cooperation & Collaboration 15	6	3	4	2
China: Positive Cooperation & Collaboration 12	0	3	9	0
China: Technological Comparisons 13	2	5	6	0
Chinese AI: Perceived as Threat 24	2	2	10	10

Figure J: Chinese Influence Codes & Year Codes

In relation to this, positive perceptions of cooperation and collaboration with China spiked in 2023, which coincides with discussions immediately before and after Britain's 2023 Artificial Intelligence Security Summit. Such positive overtures have since disappeared, whereas negative references remain, painting a comparatively darker forecast on British perceptions compared to the year prior. As such, whereas both 2022 and 2023 retained some degree of positive reference towards China, my analysis appears to indicate this as being in reference to British attempts to establish AI norms alone – most notably within the context of the AI Security Summit. With this now seemingly a matter of the past, British appraisal of China in the context of AI-national security integration is wholly negative.

United Kingdom: AI-National Security Integration Focus Areas and Key Themes

Parliamentary House Analysis: British AI-Related Narratives & Action Taken

Analysis of my corpus identified 88 instances in which either Britain's motivations for AI-national security integration or British actions in that regard were referenced. Of these, 57 action-related codes were applied in Lords-based debates, and the remaining 31 in Commons-based debates. This evidences a far greater propensity for discussion in the Lords to discuss actions taken by the UK compared to in the Commons, and a broader willingness to discuss AI in the context of British national security overall. A pie chart visualisation of this split can be seen in Figure K**,** and the precise numbers in Figure L**.**

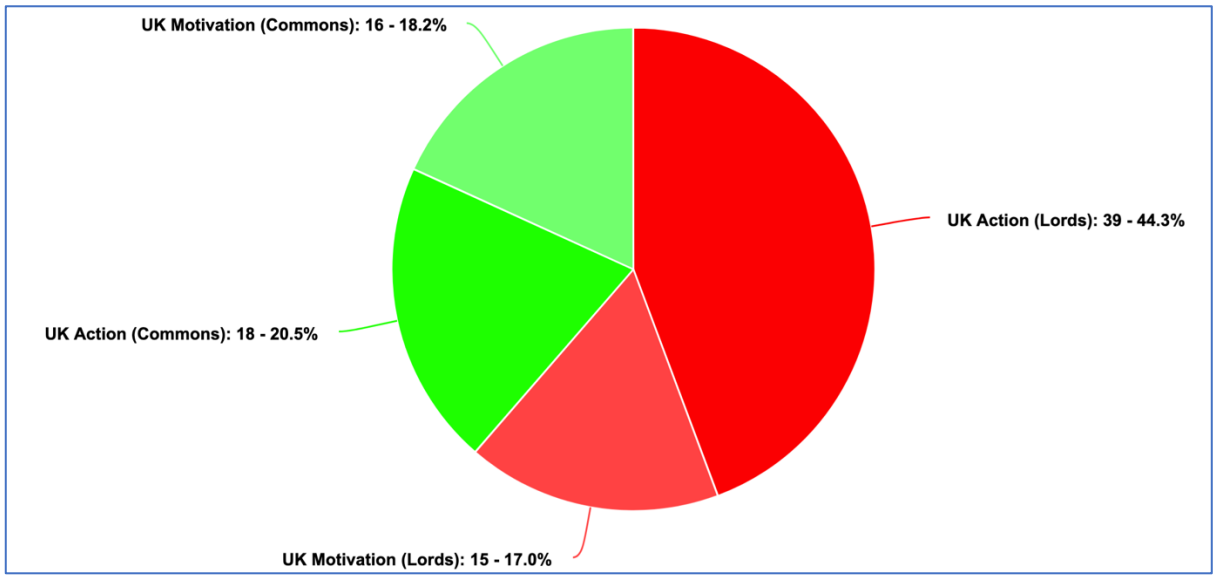


Figure K: Pie Chart of British Motivation-Based and Action-Based Codes by House

		House of Commons 14 71	House of Lords 14 74	Totals
UK Action: Intelligence	6	1	5	6
UK Action: Inter/Multinational Collaboration	19	5	14	19
UK Action: Legislation	16	6	10	16
UK Action: Military	16	6	10	16
UK: 'Containing' or 'Countering' China	8	2	6	8
UK: Establishing AI Norms	13	9	4	13
UK: Fear of 'Falling Behind'	6	3	3	6
UK: Need to 'Catch Up'	4	2	2	4
Totals		**34**	**54**	**88**

Figure L: British Motivation and Action-Based Codes & Document Groups

This also highlights that discussions of motivations and actions are not even between the two Houses. Commons-based debate showed clear prioritisation of discussing 'Establishing AI Norms' as a motivation for AI-national security integration, with 'Containing' or 'Countering' China being only made reference to twice. In contrast, 'Containing' or 'Countering' China was given far more significance in Lords-based discussions – more so than any other concern identified – with the establishment of AI-based norms considered less than half as often than in the Commons, despite the greater propensity for Lords-based debates to broach the subject of AI in national security overall.

References to British-based *actions* regarding AI integration in national security were overwhelmingly identified more in Lords-based debates than in the Commons. Of these, British inter- and multinational collaboration was referenced more than any other (24.6%), predominantly through references to AUKUS, the American-led 2024 Summit for Democracy, and discussions regarding Chinese inclusion at the 2023 Artificial Intelligence Safety Summit (House of Lords, 2023b, 2023c, 2024b). Equivalent references in the Commons similarly referenced AUKUS, but also made reference to both ANTO and Britain's Global Combat Air Programme treaty, with which it is engaged with Japan and Italy (House of Commons, 2021a, 2021c, 2023b).

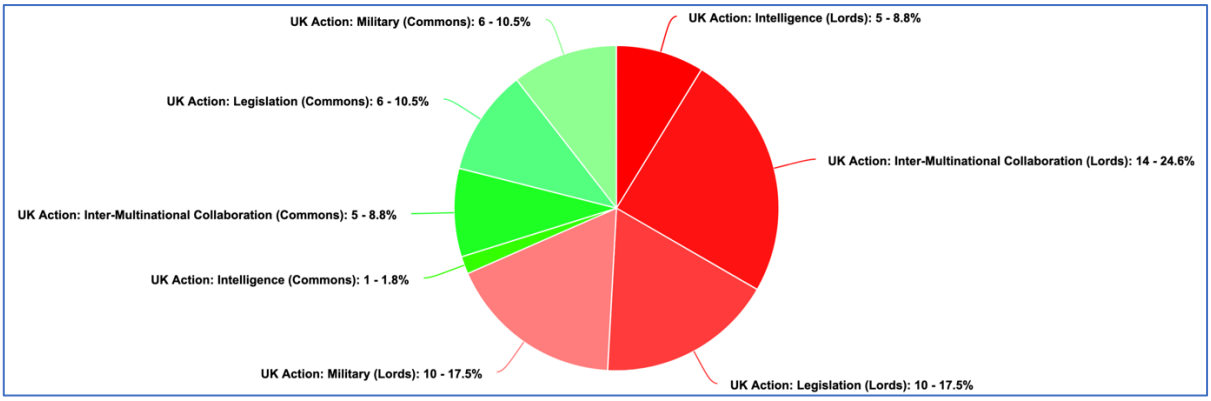


Figure M: British AI-Related Action Code Shares by House

British action-through-legislation strongly featured in both Houses, as is to be expected given their status as lawmaking bodies. Of these, both Houses made reference to the aforementioned NSI Act and Procurement Act as means to prevent Chinese procurement of British AI-based

technology and to limit Chinese technology's role in British national security-based infrastructure.

Domain of Warfare Analysis: British AI-Related Narratives & Action Taken

Parliamentary discussions pertaining to British motivations made heavy reference to the Cyberspace domain, with 33% of such references pertaining to information warfare within that. Reference to AI norms establishment were entirely encompassed in 2023 AI Safety Summit-related discussions. Outside of this, fears of 'falling behind' in this domain related British investments in its National Cyber Force – *'GCHQ's offensive cyber capability'* – and in tackling mis- and disinformation, where concerns were raised about Britain's ability to successfully do so (House of Commons, 2021c; House of Lords, 2023c).

One comment relating to Tempest – a British sixth-generation air fighter programme, later subsumed under the Global Combat Air Programme – was also made in the context of an implied fear of 'falling behind', with Conservative MP Jack Lopresti warning of British military forces encountering a *'tanks versus horses'* moment should investments in AI-enabled Tempest not be made (House of Commons, 2021f).

	UK: 'Containing' or 'Countering' China 8	UK: Establishing AI Norms 13	UK: Fear of 'Falling Behind' 6	UK: Need to 'Catch Up' 4
Domain: Air 8	0	0	1	0
Domain: Cyberspace 24	1	3	2	0
Domain: Cyberspace (Information Warfare) 11	0	1	1	0
Domain: Land 1	0	0	0	0
Domain: Maritime 5	0	0	0	0
Domain: Space 5	0	0	0	0

Figure N: Domain of Warfare Codes & British Motivation-Based Codes

References to British *actions* also predominantly regard the Cyberspace domain – albeit it exclusively. The vast majority of Cyberspace-related actions pertain to those in the context of inter- and multinational collaboration, most frequently in regards to AUKUS, NATO and Five Eyes, in order to tackle Cyberspace-based threats, the former two of which also related to British 'military' action in this regard (House of Commons, 2021c, 2024; House of Lords, 2022b). Air domain-related military actions pertained to aforementioned discussions regarding Tempest and the Global Combat Air Programme.

	UK Action: Intelligence 6	UK Action: Inter/Multinational Collaboration 19	UK Action: Legislation 16	UK Action: Military 16
Domain: Air 8	0	1	0	6
Domain: Cyberspace 24	2	7	2	4
Domain: Cyberspace (Information Warfare) 11	0	0	2	0
Domain: Land 1	0	0	0	0
Domain: Maritime 5	0	0	0	3
Domain: Space 5	0	0	0	4

Figure O: Domain of Warfare Codes & British AI-Related Action Codes

Of particular interest were discussions regarding Maritime and Space-related British actions; Maritime-based discussions highlighted AI-based funding and development in the Royal Navy, with Lord Stevens of Birmingham noting that *'it is obvious that [the UK] will need to use AI-enabled systems as an effective force multiplier'* in the Maritime domain (House of Lords, 2024a). Space-related discussions revealed British investment of *'£6.6Bn-worth of research, development and experimentation'* on AI-enabled ISR and automation-based capabilities within Space between 2021-2025, alongside positive references to the establishment of the UK's Space Command – a sub-section of the Royal Air Force (House of Commons, 2021f; House of Lords, 2021a; Royal Air Force, 2024).

Correlation Analysis: British AI-Related Narratives & Actions Taken

Code correlation between British motivations and British actions serve to identify the extent to which each motivation later informed British actions in the context AI-national security integration. This can be evaluated by contrasting the number of times each motivation correlated with an action in this regard, full statistics of which are visible in Figure P, and the percentage breakdown of which can be seen in Figure Q.

	UK: 'Containing' or 'Countering' China 8	UK: Establishing AI Norms 13	UK: Fear of 'Falling Behind' 6	UK: Need to 'Catch Up' 4
UK Action: Intelligence 6	1	0	1	0
UK Action: Inter/Multinational Collaboration 19	1	3	0	0
UK Action: Legislation 16	3	0	1	1
UK Action: Military 16	2	0	2	0

Figure P: British AI-Related Action Codes & British Motivation-Based Codes

These statistics reveal British motivations of 'containing' or 'countering' China as having the greatest correlation with actions taken, thereby suggesting it as being the most important China-based consideration when acting to integrate AI in British national security.

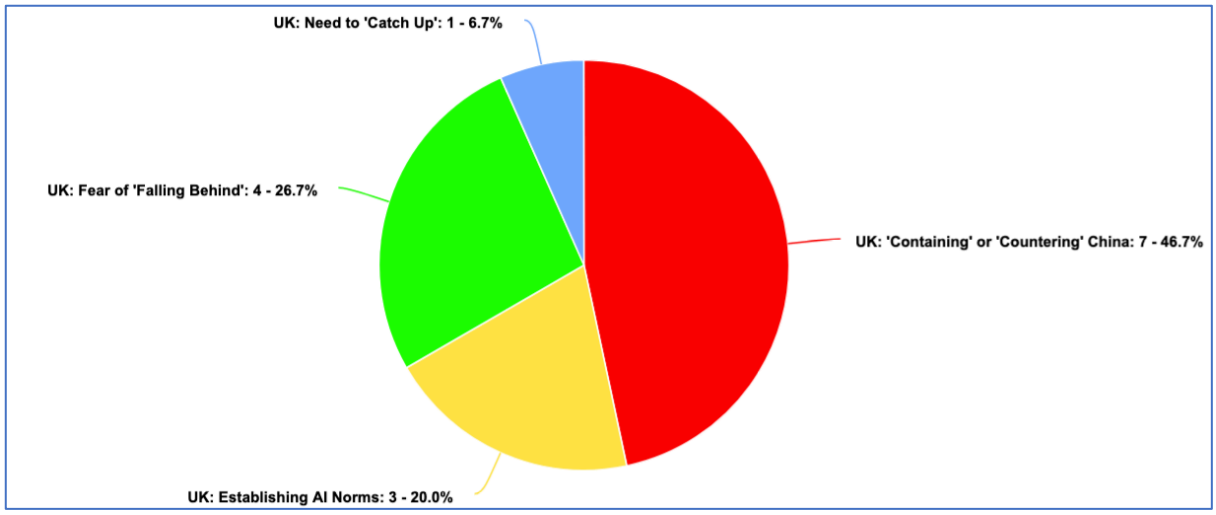


Figure Q: British Motivation-Based Code Percentages

Of the results identified, all correlated references to legislation referred to the NSI Act. Military actions stemming from this concern regarded the deployment of AI in space (noting that *'[Britain] must get [its] AI into space before China'*) and Britain's role in AUKUS as a means to *'contain and balance the growth of China's influence and power'* (House of Lords, 2023a, 2023b). One correlating reference to 'catching up' was identified, although this is certainly in the minority – most likely due to Britain's strong global position on the AI stage. This is contrasted, however, with Britain's fear of 'falling behind'; as evidenced above, references to such a fear correlated with British actions in developing its National Cyber Force, promoting legislation to tackle information warfare, and in Air and Space domain military investments (House of Commons, 2021f, 2021c; House of Lords, 2023a, 2023c). This highlights the fear of positional loss against others as statistically significant in the British decision-making process within the sphere of AI in national security.

Temporal Analysis: Changing Trends in British AI-Related Narratives & Actions Taken

References to 'containing' or 'countering' China as a motivation for AI-national security integration have remained constant from 2021-present, with potential for further references to be made in the latter half of 2024. References to establishing AI norms, whilst sparsely referenced in 2021, 2022 and 2024-to-date, skyrocketed in 2023; as with other such instances, this is entirely borne of references to the Artificial Intelligence Safety Summit of that year, as chaired by Britain.

	2021 (8)	2022 (5)	2023 (11)	2024 (to June) (4)
UK: 'Containing' or 'Countering' China (8)	2	2	2	2
UK: Establishing AI Norms (13)	1	1	10	1
UK: Fear of 'Falling Behind' (6)	2	0	4	0
UK: Need to 'Catch Up' (4)	2	0	1	1

Figure R: British Motivation-Based Codes & Year Codes

Inconsistent references to a fear of 'falling behind' over time is of note. Reference was not made to this concern in 2022 and has not been mentioned thus far in 2024, but significant reference to this fear was made in 2023. Analysis reveals a correlation between this element and the desire to establish AI norms; debate concerning the safety summit flagged concerns that the UK was 'lagging behind' its allies in establishing regulations for AI within social media, concerns raised in the context of the Artificial Intelligence Safety Summit (House of Commons, 2023a). References outside of this context otherwise broadly fell in line with reference rates in 2021, and referred specifically to AI's role within the British armed forces (House of Lords, 2023a, 2023b).

	2021 (8)	2022 (5)	2023 (11)	2024 (to June) (4)
UK Action: Intelligence (6)	3	2	1	0
UK Action: Inter/Multinational Collaboration (19)	5	2	8	4
UK Action: Legislation (16)	3	3	5	5
UK Action: Military (16)	8	2	3	3

Figure S: British AI-Related Action Codes & Year Codes

Analyses of code co-occurrence also point to differences in British actions over time. As highlighted in Figure S, the majority of British action focused on military domains in that year through a combination of British investment in the Air, Space and Maritime domains and references to AUKUS. Military-related efforts have continued at a comparatively limited pace since; action-based parliamentary references indicate legislation as having been a preferred tool since 2022. Actions relating to the UKIC have experienced a steady decline since 2021, and have not been referred to in Parliament in the year-to-date. Rather than indicating a comparative dwindling of AI integration within the UKIC, this is better considered as a dwindling *publicly-available parliamentary discussion* of such; the nature of UKIC-based work likely subject to confidentiality restrictions is likely to limit the dissemination of related information in the public domain.

Analyses of British actions over time identify inter- and multinational collaboration as Britain's most significantly and consistently-utilised means by which to integrate AI into its national security, with significant roles being played by AUKUS, NATO and Five Eyes in that regard. Although equal reference has been made to legislation and military-based action, legislative measures have been more consistent over time – although, as established earlier on, this may be influenced by the nature of Parliament as a decision-making body. These results suggest a more back-seat role for its military in AI-national security for its integration, but a continued prioritisation of utilising its international alliances and legislative tools to maintain and achieve security through AI integration.

Broader Themes & Key Trends

Group Code Analysis: Broader Narratives by Parliamentary House

In contrasting my pre-defined code groups to references in each House, my research has revealed slightly more *overall* references to areas of interest in the Lords versus the Commons. Analysis of code groups utilised highlighted Chinese AI-related developments as having been the most prevalent issue of those assessed for both Houses. Interestingly, consideration of American AI-related developments ranked second in the Commons, but last in the Lords – conversely, British actions regarding AI implementation ranked second in the Lords, yet last in the Commons. Full data of such has been provided in Figure T, with Figures U and V visualising differences in group-based rank for each respective House.

		House of Commons 14 71	House of Lords 14 74	Totals
British Action on AI Implementation	4 48	15	33	48
British AI-National Security Implementation Motivations	5 30	17	13	30
Domains of Warfare	6 41	20	21	41
Influence of American AI-Related Developments	5 33	22	11	33
Influence of Chinese AI-Related Developments	6 71	30	41	71
Totals		104	119	223

Figure T: Code Groups & Document Groups

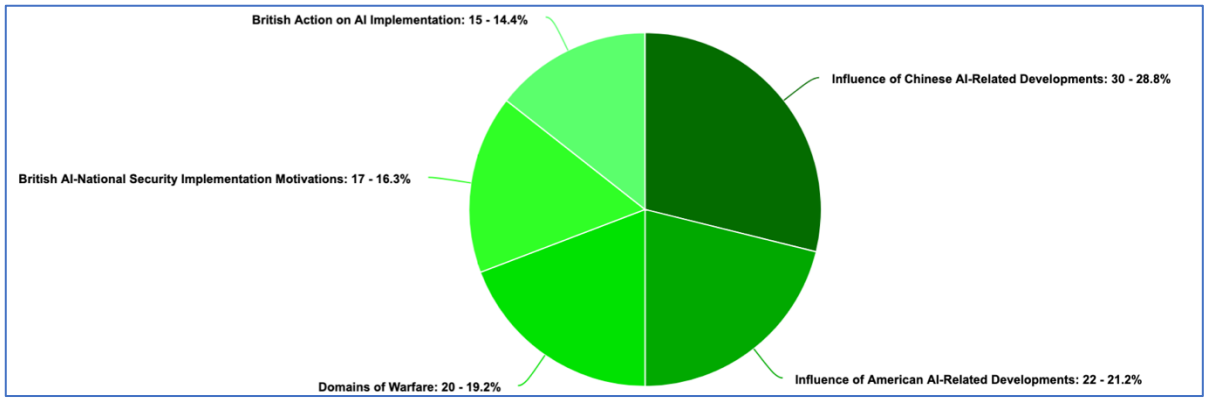


Figure U: Percentage Shares of Each Code Group in 'House of Commons' Document Group

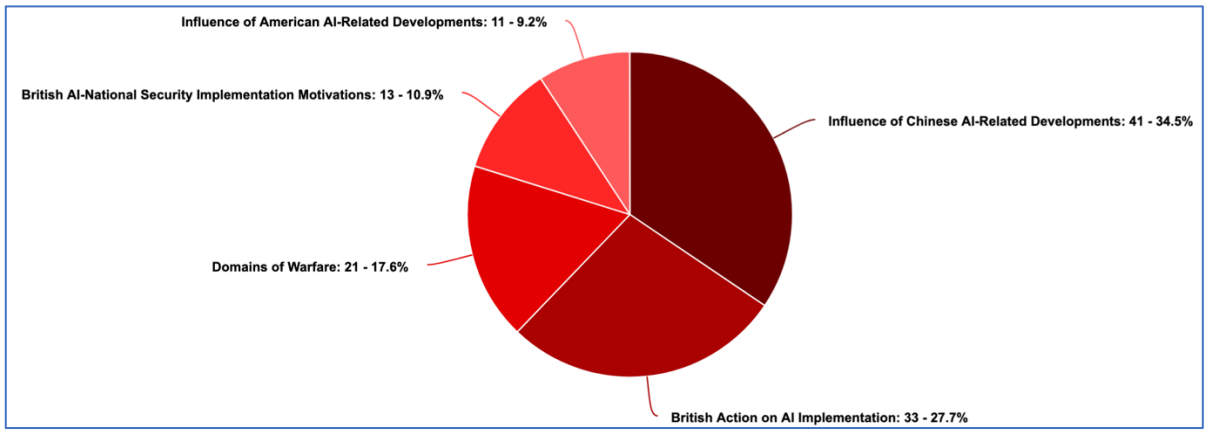


Figure V: Percentage Shares of Each Code Group in 'House of Lords' Document Group

These results highlight a significant difference in the consideration of American AI-related developments between both Houses, as well as significant differences in references made to British actions taken. Closer assessment of American-related coding revealed the surplus of Commons-based references to relate to both AUKUS and American private-sector access to British AI-related technologies and intellectual property; the latter point being mentioned six times in the Commons, compared to just once in the Lords. This appears to indicate the Commons as being more aware – or willing – to consider U.S. private-sector purchases of sensitive British technologies as a threat. This evidenced propensity for both Houses to have differing opinions also serves to reinforce the significance of their similarities; the prioritisation of Chinese AI-related development in both Houses' considerations evidences the weight of such in British decision-making.

Temporal Analysis: AI-National Security Debates Over Time by Parliamentary House

The prevalence of both Houses to debate AI in the context of national security has fluctuated over the time period defined in my scope, with significantly more fluctuation in the Commons than the Lords. Debates in the Commons spiked in 2021 and 2023, with minimal referencing in 2022 and 2024-to-date. By contrast, debates in the Lords have been largely consistent since 2022, with scope for references to match or exceed 2023 levels by the end of 2024.

Closer inspection of 2021 and 2023-based debates in the Commons revealed them to predominantly relate to the consideration of then-proposed legislation and events; for 2021, this included the Telecommunications (Security) Bill and National Security and Investment Bill. For 2023, debates concerned the AI Safety Summit and the Procurement Bill. This was not so in the Lords; none of the aforementioned legislation was debated by the Lords in 2021 or 2023. In fact, only one piece of legislation was the centre of debate in the Lords; the Data Protection and Information Bill, which was debated in that chamber in 2024 (House of Lords, 2024c).

	House of Commons 14 85	House of Lords 14 88	Totals
2021 8	6	2	8
2022 5	1	4	5
2023 11	6	5	11
2024 (to June) 4	1	3	4
Totals	14	14	28

Figure W: Year Codes & Document Groups

Group Code & Temporal Analysis: Chinese & American Influence on British Actions & Narratives Over Time

By constructing a line graph of total parliamentary references for each relevant code group (excluding 'Domain of Warfare'), we are able to assess correlating trend lines between references to Chinese and American AI-related developments and British AI-related motivations and actions. This line graph can be seen in Figure X.

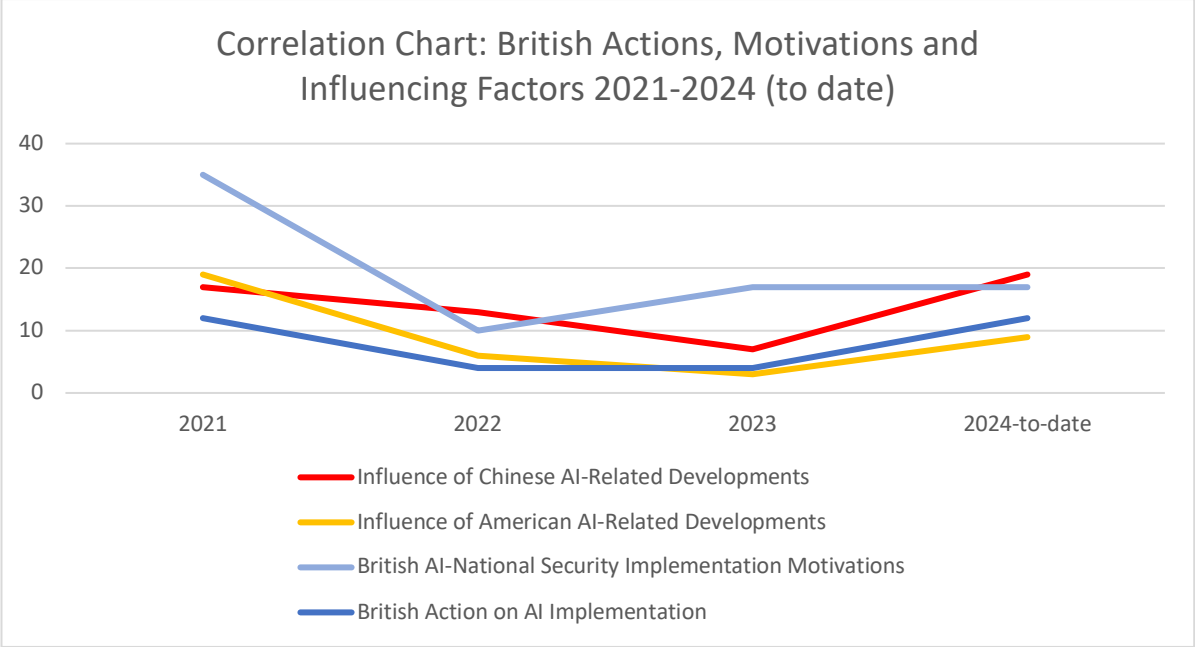


Figure X: American & Chinese Influence Code Group References by Year Code

This appears to show a broadly consistent trend between British actions taken and the influence of American AI-related developments; closer inspection revealed this to be closely linked towards inter- and multinational partnerships featuring America, predominantly through AUKUS, NATO and Five Eyes. With the exception of AUKUS, no specific American technologies were named by the British; potentially indicating the partnership with America – and American-led international partnerships – to be highly prized by British decision-makers in and of themselves. 2021 stands as a slight exception to this trend, where British motivations for AI-based integration was influenced by concerns of American private-sector access to British AI-based technologies and intellectual property.

Whereas American AI-based developments were considered more often by Parliament than China in 2021, Chinese AI-related factors received significantly more consideration by Parliament in 2022, 2023 and 2024-to-date. This serves to highlight the evolving impact and influence of Chinese AI-related development on British decision-making – particularly its outstripping of American influence in that regards – over time. It is of note that Chinese AI-related developments were referenced by Parliament more than twice as often than America in 2024; this not only indicates British AI considerations as growing, but also suggests an increasingly-widening gap between the influence of Chinese and American AI-based developments on British integrations of AI in its national security.

Analysis: Commentary & Discussion

Commentary

The results of my research indicate that both Chinese and American AI-related developments have had a significant impact on Britain's motivations for, and actions in, implementing AI into its national security. This section starts by considering the intertwined nature of Chinese and American influence on Britain's AI-national security integration, before considering aspects highlighted by British discourse as potentially falling outside of Sino-U.S. influence. This section then examines the core findings of my analysis through the lens of NCR, highlighting both the strengths and weaknesses of utilising this theoretical perspective.

Observable Influence of Chinese & American AI-Related Developments on British AI-National Security Integration

Rather than revealing clearly-distinct elements of Chinese and American influences on Britain's AI-national security integration, my research has revealed both states' influence on British parliamentary considerations as being interlinked. This can be observed by assessing the intersection of Britain's positive perceptions of America and its perception of Chinese AI development as a threat.

Positive parliamentary perceptions of U.S.-UK AI-based collaboration were predominantly made in reference to AUKUS and NATO – two military alliances – in the context of Cyberspace as a warfighting domain, and shared an observable correlation with narratives regarding 'countering' or 'containing' China. My analysis on Chinese-related narratives highlighted a very strong correlation between British perceptions of Chinese AI as a threat and Cyberspace *alone*; Chinese AI was not referenced as a threat in any other domain. This seemingly indicates a British perspective of AI – when used collaboratively in organisations spearheaded by the United States – as being protective to British national security; specifically, as a means for Britain to ensure its security against a non-aligned state equipped with the same technology. Britain's UK DAIS noted that *'the fastest route to mastering [AI-based] technologies is to work closely with allies and partners'*; in this instance, the data appears to support Britain's statement

of intent regarding collaborating with allies in the AI sphere – most notably through alliances led by the world's foremost AI-enabled state (HM Government, 2022a).

This protective perception of collaborative, American-led AI is seemingly given influence due to the perceived threat of Chinese AI. However, by comparing both states' attempts to access British AI-related technologies and the *absence* of negative British perspectives of collaboration with the U.S. state, we can understand this threat perception as existing due to China's policy of MCF. Debates surrounding the NSI Act took aim at both American and Chinese private-sector attempts to purchase AI-related technologies. However, whereas this seemingly bled into negative British perceptions of cooperation with the Chinese state, equal sentiment was not applied in this American case. The American private sector, viewed on occasion as a threat to British private AI enterprise, is distinct *and not beholden* to the American state; as highlighted by my literature review, the same cannot be said of the Chinese state, for whom all elements in the private sector are subject to both CCP diktat and PLA adoption. This interpretation appears to be supported by references to the threat of MCF as noted in the UK DAIS and National Cyber Strategy, and as considered in the literature review section (HM Government, 2022b; Ministry of Defence, 2022). Curiously, this also implies inversed perceived threats of China and the U.S. by HM Government. The perceived threat from China stems from the Chinese state itself, with its private sector simply a vehicle for state interests. In the American case, however, U.S.-UK collaboration is *positively* viewed – its private sector, however, is viewed as a potential threat to Britain's own. Private sector concerns alone evidence the intersection between Chinese and American influence; access to British technologies from both were mentioned in parliamentary discourse relating to the NSI Act 2021, thereby highlighting a core British AI-related development in response to concerns stemming from both states.

The intertwining of American and Chinese influence raises an important question: would U.S. AI developments influence British considerations of the same if Britain *did not* perceive a threat in the same domain from China? The correlation between AI-based technological comparisons with the United States, British fears of 'falling behind' and the positive perspective of U.S.-UK collaboration do not seem to rule out the possibility of cooperation in its absence; existing collaborations between the UKIC and USIC through Five Eyes, and the MOD and DOD through the DAIC and CDAO respectively indicate such collaboration as likely to continue regardless. This appears supported by the identification of AI-borne national

security benefits as sought by both states; namely efficiency gains, and the automation of 'dull, dirty and dangerous' tasks. However, it must also be noted that China is not the *only* threat mutually identified by the U.S. and UK in identified literature. Both Russia and Iran were extensively cited in strategies published by both states, and the former remains a primary concern for NATO, in which the U.S. and UK are both founding – and leading – members. As such, although it appears likely that both states would continue AI-national security-based collaboration in the absence of a perceived Chinese threat, it remains unclear to what extent this would be, nor to what extent collaboration in this area is exclusively dependent on mutual threat perception.

By highlighting an intersection between Chinese and American influences on its AI-national security integration, my results provide insight into Britain's perspective *of AI itself.* China's adoption of AI – and Britain's fear of such – reveal concerns about the potential militarisation of AI *in general* against the British state. Britain's extensive collaboration with the United States and other allies through NATO, AUKUS and Five Eyes further also indicate the *value* Britain perceives in integrating AI into its national security. As such, AI appears to represent a Pandora's 'Black Box' to HM Government; whilst potentially inert in and of itself, the adoption of AI by other actors is likely to amplify either the benefit of threat they pose to the United Kingdom depending on whether they are deemed allied or adversarial. In the case of China, this particular concern is amplified by its authoritarian nature leaning away from democratic norms – and thus likely British interests. This interpretation – of Britain realising the opportunity and threat inherent in AI, and the risk of authoritarian usage becoming the norm – holds significant explanatory value when considering Britain's Artificial Intelligence Safety Summit of 2023, and China's inclusion. Hosting such – and including China, despite perceived threat – can be understood through my analysis as a sincere attempt to mitigate the inherent risks posed through AI development by states through differing ideologies.

Elements Not Explained by Sino-American Influence

Not all elements identified in my results have correlated with influencing factors from China or the United States – potentially, though not conclusively, indicating independent British motives for AI development or external motivations not considered within the scope herein. Analyses of Chinese and American-related discourse in Parliament identified Cyberspace as

the prevalent contextual warfighting domain for both states, and only one instance of British actions as taking place in a different domain. British *motivations* for AI development tell a different story; equal or near-equal consideration was given to the Space and Maritime domains, and greater emphasis was given to Air as a domain over Cyberspace. This is reflected by developments across the Royal Navy and Royal Air Force as considered within my literature review, and my analysis does not seemingly indicate such developments as being related to Chinese or American AI-based developments. However, this is not conclusive; the lack of related discourse in Parliament does not preclude the existence of such a correlation being found in other data sets. While my analysis does not confirm what may have influenced these developments, it does at least confirm such considerations as not relating to Chinese or American AI-related developments in Parliamentary debates, which may serve as a springboard for future research.

Discussion of Findings

Consideration of Findings: The National Realist Perspective

NCR frames states as existing in an anarchical international order, and their actions in such as being in either the pursuit of strength or attempts to deny the same to adversaries. The results of my analysis appear broadly, but not entirely, compatible with this perspective.

Most notably, Britain's extensive collaboration with the United States through inter- and multinational partnerships can be viewed as an attempt to pursue strength for itself. As referenced earlier herein, Britain recognises collaboration with its allies as the fastest route to develop its own AI-based capabilities, and doing so with the global leader in AI – and global hegemon – stands to offer significant benefit to Britain in this regard. Furthermore, this collaboration also functions to *deny* strength to its adversaries; Britain has extensively labelled China as an 'epoch-defining' threat – an assessment shared by Parliament in the context of AI development – and its multinational partnerships have served as a vehicle to 'contain' or 'counter' China, most prominently through AUKUS. Furthermore, Britain's NSI Act 2021 – whose implementation was debated in the context of both Chinese and American private sectors – can be viewed as a means to deny strength to both the Chinese state *and* American private sector, both of which it deems threats. Conversely, parliamentary touting of Britain's AI

prowess highlights the perceived *strength* of Britain's AI industry – and thus a vehicle by which to pursue future strength for the state – which it is seeking to protect from external actors accordingly.

A critical report to this point must be considered; limiting U.S. private sector purchases of British technologies through the NSI Act may be considered an 'illogical' move to make; that sharing AI technology with the United States, deemed Britain's most important ally, may be in Britain's ultimate interest if otherwise pursuing broad, multinational collaboration in the field. This relies upon the assumption that U.S. state institutions and the American private sector are symbiotically aligned, with matching interests and goals. This assumption, by dismissing the NSA Act as an 'illogical' development in U.S.-UK relations, would fail to consider Britain's perception of the American private sector as a threat to British interests. As a result, greater analytical value is to be gained by considering U.S. state institutions and the American sector as separate entities – one of which the UK stands to strengthen itself through state-to-state and multinational collaboration, the other of which may jeopardise its current and future pursuit of strength. This perspective seemingly raises a contradiction – that the American state and private sectors are distinct entities, whereas Britain's state and private sectors are not. This could arguably be mitigated through earlier considerations of private-and-public sector integration in the United Kingdom via JHub and NSTIx, but this does not offer a perfect explanation. As such, this must be considered as a limitation in the explainability of such phenomena from an NCR perspective.

Whereas multinational partnerships can be viewed with some success through an NCR lens, the same cannot be said with all; most notably Britain's pursuit of international AI norms through the Artificial Intelligence Safety Summit. Parliament's positive framing of collaboration with China – otherwise extensively deemed a threat – around the summit indicates British pursuits of AI norms as neither being for the pursuit of strength nor to deny strength to China. Labelling this pursuit of norms establishment as an IV – NCR's explanatory failsafe – also appears unconvincing; the pursuit of norms does not appear to be an illogical move to make, nor does it appear based on a misperception of any actor. Indeed, if Britain *had* misperceived the value in launching the Artificial Intelligence Safety Summit, then China may not have attended at all.

NCF's limited insight in regards to this norms-based pursuit is perhaps better replaced with an understanding of mutual interest. As explored earlier herein, Britain recognises the benefits of early AI development in relation to adversaries, and conversely the threat of AI if weaponised by them; a sentiment shared by the United States (Esper and McFarland, 2019). British attempts to establish AI-based norms with multinational partners – including its adversaries – stands to reduce the potential threat of weaponised AI by, and for, all adhering states. In doing so, this stands to reduce the danger – and perceived threat – of Chinese AI to Britain. In the case of China, this may serve to address concerns regarding American AI developments in the military sphere, and vice-versa. This is not completely immune from realist response; reduced threat from weaponised AI, if otherwise likely to be destructive to a state, may be explained as a means to ensure a state's survival and thus future growth. However, this in itself is problematic in this instance; if such norms limit the weaponisation of AI, then state survival has been pursued through the *abandonment* of potential strength. This, as it stands, does not appear inherently compatible with NCR discourse.

Summary & Conclusion

Summary of Key Findings

Through the qualitative analysis of relevant British parliamentary debates, my research has identified several *actions* Britain has taken to integrate AI within its national security and, correspondingly, the aspects within Chinese and American AI-related development that have influenced those actions.

My research indicates that Britain's most prominent action in this regard is to pursue inter- and multinational collaboration for AI-national security-related development. In my corpus, this was most notably expressed through membership AUKUS, NATO and Five Eyes. This decision was influenced by Britain's positive perception of cooperation and collaboration with the United States in the field of AI, and equivalent *negative* perceptions in the Chinese case, including the perception of Chinese AI as a threat. Indeed, my research strongly indicates that these two elements are inter-related; that Britain's negative perceptions of Chinese collaboration – and Chinese AI – have in turn reinforced its desire to cooperate more extensively with the United States in international fora to 'contain' or 'counter' an AI-enabled China.

My research also indicates that Britain's attempts to establish AI-related norms, most notably through the 2023 Artificial Intelligence Safety Summit, have been done with both Chinese and American AI in mind. While this seems potentially illogical from a neoclassical realist perspective, my results lend credence to this being viewed as an honest attempt to secure mutual benefit for all nations involved; principally by recognising *militarised* AI as a threat to national security regardless of the state actor, and thus the establishment of norms beneficial to the security and survival of each considered state.

Lastly, my findings identified an area not clearly explained by the influence of Chinese and American AI-based developments. The analysis of my corpus identified Cyberspace as being the primary context in which both Chinese and American AI-related developments were discussed, and thus corresponding British motivations and actions to them; however, this *did not* account for references made in parliamentary discourse to the Air, Maritime and Space

domains. While this does not preclude such developments as taking place without consideration of Chinese and U.S. elements, this surprising lack of correlation would warrant further consideration in future studies.

Discussion of Theoretical Implications

Viewing my analysis and findings through a neoclassical realist lens has offered analytical value, but has also highlighted a potential fault. Framing my findings through NCR portrays Britain as electing to implement AI into its national security in order to pursue strength, and through such, ultimately secure its survival. This is compounded by the perception of China – and Chinese AI – as an explicit threat, which in turn offers explanatory value in British attempts to 'contain' and 'counter' China. This also succeeds in explaining Britain's inter- and multinational collaboration in the AI domain – most notably with the United States – as being both a means to ensure its safety and a means to secure strength, specifically by allowing it to develop and integrate AI within the context of national security faster than if pursued alone.

NCR's explanatory value hits a potential stumbling block when considering both Britain's negative perception of U.S. private sector access to British AI-related technology and intellectual property and British attempts to establish AI norms. Negative perceptions of U.S. private sector purchases and access to such technologies – coupled with *positive* perceptions of collaboration with American state institutions in AI-related development – raises the prospect of Britain seemingly perceiving threat from a non-state element to its own security despite that element not being within the anarchical international order inherent to realist perspectives. Similarly, British attempts to establish AI norms would necessitate limiting the extent to which not just China, but also Britain and its allies could develop AI for national security purposes. This abandonment of potential strength appears to stand against neoclassical realist thought, but does not seem to be an irrationality or misperception requiring explanation through IVs. Furthermore, if establishing norms is to be viewed as a means of ensuring the security and survival of the states that adopt them, then Britain's *positive* response to Chinese engagement and collaboration in the matter may appear tantamount to defending an explicitly-perceived threat from a neoclassical realist perspective. These elements are not clearly explained through NCR, and as such require further consideration – either of alternative

sources to complement the findings of this analysis, or of NCR's explanatory power in considering AI-related integration in state-based national security.

Addressing the Research Question & Objectives

Revisiting the Research Question

My research question, formulated as '*How have American and Chinese AI-related developments influenced the United Kingdom's integration of artificial intelligence into its national security?'* has been reasonably well-answered through my analysis. Namely, American AI-related developments have influenced British AI-national security integration through inter- and multinational partnerships in the field, culminating in Britain being able to integrate AI development into its national security at a quicker pace, and through offering a collaborative means to control the threat it perceives from Chinese AI and China writ large. Conversely, Chinese AI-related developments – actively perceived as a threat, alongside potential Chinese state and PLA access to British AI technologies – have played a significant, though not one-sided, role in Britain's decision to implement the NSI Act. Furthermore, as aforementioned, China's predominant AI-related influence has been through its 'perceived threat' status, which has further incentivised Britain's collaboration and cooperation with the United States - the global hegemon and leader in AI - as a means to protect itself from the Chinese threat.

Achievement of Objectives

The main objective of my research question as outlined above has been predominantly achieved, and legitimate insight has been discovered regarding the influence of Chinese and American AI-related developments within the national security domain. However, the intertwined nature of the influence exerted by China and the United States was not originally accounted for by my research question. The question was formed on the hypothesis that such influences would likely be distinct. Rather than a failure of foresight, however, this intertwined nature of influence should be viewed as a *supplementary benefit* to the original research question, and certainly as a potential tool of use by future researchers considering external influences on British national security-related decision-making.

Limitations of Analysis

Methodological Limitations

I elected to utilise qualitative analysis as the primary methodology in my study. This was selected due to the nature of my corpus – parliamentary debate – being based on spoken prose as opposed to quantitative data. While this research methodology was replete with benefits – most notably providing the ability to code implicit statements and account for variations in spellings – the subjective nature of such coding is, ultimately, a limiting factor inherent in quantitative analysis. I attempted to account for this in my analysis through the establishment of clear criterion for document inclusion in my corpus, and by outlining a clear, replicable rationale for the coding of relevant discourse. I do concede, in spite of this, that subjective variations may – and likely will – persist in future qualitative studies in this field.

Scope Limitations

The scope of my analysis was limited to records of parliamentary debate listed on *Hansard*, and dated 1st January 2021 to 25th June 2024. This date-based scope was chosen in order to allow for an analysis of relevant debates that took place *prior* to most contemporary British publications relating to AI-national security integration as identified in my literature review, such as the NSI Act. This also served as a means by which to reduce the quantity of debates analysed to a reasonable level. This research, if replicated in future, could be built upon by expanding the date range beyond the aforementioned 2021 cut-off date. Chinese active AI development, as mentioned in my literature review, is believed to have commenced in 2016 following AlphaGo's 'Sputnik moment'; expanding the scope to 2015, therefore, would allow would-be researchers to capture all parliamentary debate regarding AI-national security integration since China's nascent steps within the field.

Similarly, this thesis also utilised a limited conception of 'national security' in order to refine the subject matter considered herein to the five aforementioned domains of warfare. While suitable for the purposes of this thesis, other conceptions of 'national security' – for instance, incorporating public health or environmental protection – may reveal alternative British

perspectives on Chinese and American AI-based influence. This can, and should, be considered as an avenue for potential future scholarship.

Recommendations for Future Research

Future Research Directions

By highlighting the areas in which Chinese and American AI-based developments have influenced Britain's AI-national security integration, this thesis hopes to serve as a runway for future research that may build upon it. Most notably, while information regarding *areas* of influence has been uncovered by this work, this has not covered *specific details* within those areas. The most prominent example of this is highlighting AUKUS, NATO and Five Eyes as being Britain's go-to inter- and multinational entities by which it seeks to collaborate. While it is clear that Britain has prioritised collaboration within these entities, it is not clear *on what projects* the UK is seeking explicit collaboration, or *what technologies* the UK is actively developing or utilising. While AUKUS may *appear* obvious in terms of its content – namely nuclear-powered submarines – this only relates to the *maritime* element of the AUKUS deal, and does not cover the AI-related element of the agreement as referenced in Parliament. Unfortunately, it is not immediately clear how a future researcher would gain access to project-specific data from these three entities; the military nature of AUKUS and NATO, and clandestine nature of Five Eyes, make it unlikely that such information would be in the public domain. The earlier-referenced FOIA request to the MOD, however, did secure partial results in obtaining project information – as such, the *present* unavailability of such data should neither dissuade would-be researchers from exploring methods of obtaining such, nor preclude the possibility of such data becoming available in future.

Furthermore, future research focusing on British decision-making in this context may consider the analysis of lawmaker discourse beyond parliamentary debates. Parliamentary publications, such as those by All-Party Parliamentary Groups, may offer more specific insight into rationale later expressed within the confines of Parliament, and through such allow for more specific *coding* regarding external influences. Such analyses may also benefit from the reflection considered in my earlier assessment of scope – that is, by broadening the date range of qualitative analyses beyond 2021 to permit analyses of a wider set of data, or by considering

alternative conceptions of ‘national security’. By combining alternative sources of lawmaker discourse with an all-encompassing date range, for instance, such analyses may identify influencing factors not noted within this study and would also allow for a broader analysis of changing thought processes over time.

Lastly, my earlier research identified British military-based actions in the Air, Space and Maritime domains as not being influenced by AI-based developments in China or the United States. This inherently offers an avenue for further research; specific investigations into British actions within these domains may serve to reinforce the prospect of Britain acting independently from other states, reveal a yet-unconsidered Sino-U.S. influencing factor leading to those actions, or highlight influence from a state not considered within the scope of this thesis.

Each of these potential avenues for future research – by broadening the scope of this study, analysing alternative data sources, or pursuing specific elements of information revealed by the work herein – offer a means by which to improve existing understanding of state-based rationale in adopting AI for national security purposes. Despite state perceptions of AI as a potential threat if weaponised, the analysis herein has shown AI-national security integration to be continuing to the present day (at time of writing). If the proverbial AI genie is well and truly out of the bottle, then such analyses may serve to illuminate the future trajectory, implications and consequences of its adoption by states for national security purposes – for better or worse.

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Appendices

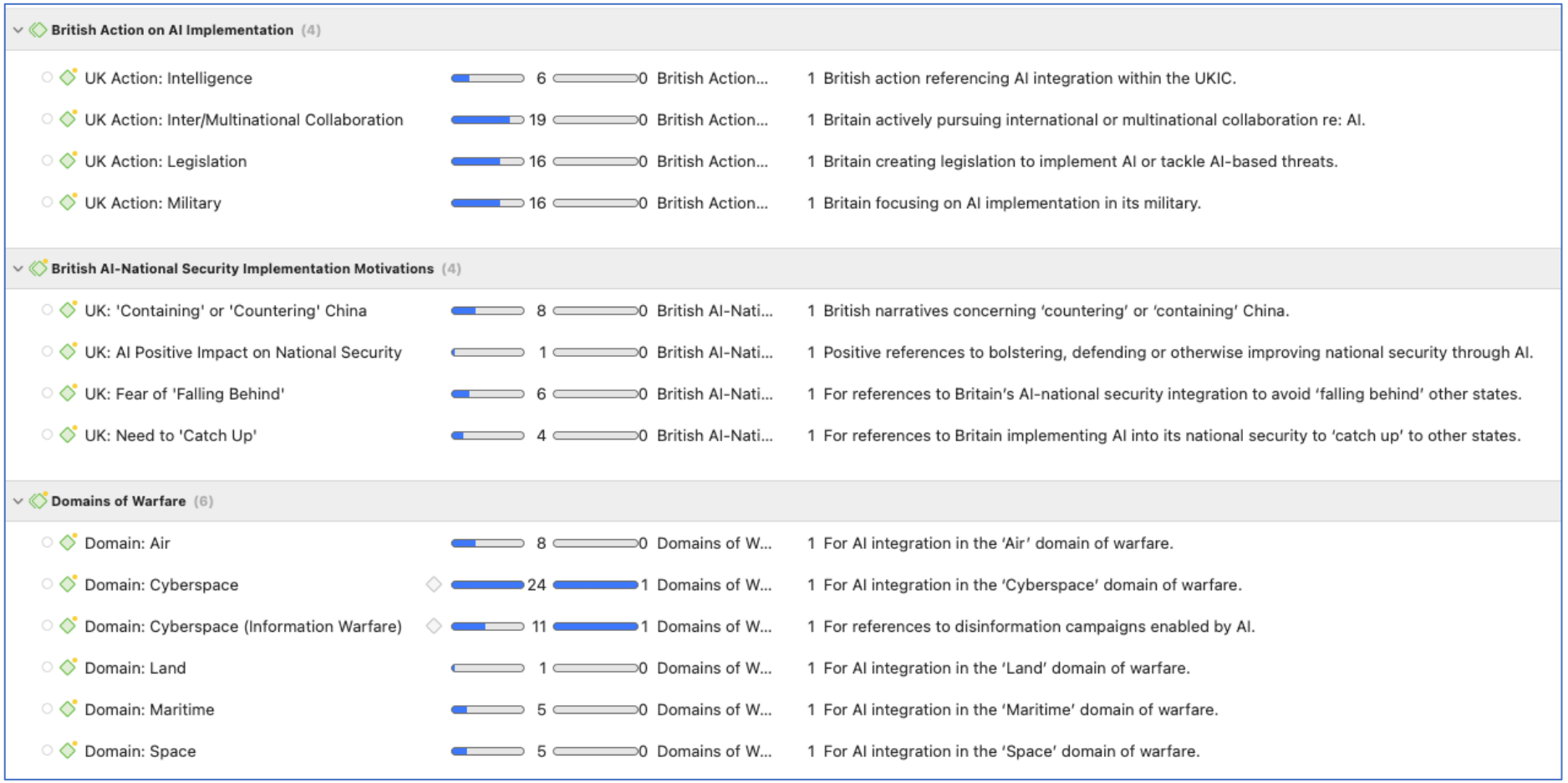
Appendix A: Table of Hansard Search Terms

Appendix B: Table of ATLAS.ti Codes & Code Groups

Appendix A: Table of Hansard Search Terms

Core Search Elements	Exact Search Terms	Number of Results (Commons)	Number of Results (Lords)	Number of Results (Total)
AI + China	"Artificial Intelligence" "China"	56	44	100
	"Artificial Intelligence" "Chinese"	23	19	42
	" AI " "China"	37	57	94
	" AI " "Chinese"	13	25	38
AI + China + National Security	"Artificial Intelligence" "China" "national security"	15	15	30
	"Artificial intelligence" "Chinese" "national security"	11	8	19
	" AI " "China" "national security"	7	19	26
	" AI " "Chinese" "national security"	3	12	15
AI + China + National Security + Threat	"Artificial Intelligence" "China" "national security" "threat"	8	10	18
	"Artificial intelligence" "Chinese" "national security" "threat"	7	5	12
	" AI " "China" "national security" "threat"	2	10	12
	" AI " "Chinese" "national security" "threat"	1	7	8
AI + The US	"Artificial Intelligence" "the US "	54	32	86
	"Artificial Intelligence" "United States"	47	32	79
	" AI " "the US "	44	66	110
	" AI " "United States"	25	37	62
AI + The US + National Security	"Artificial Intelligence" "the US " "national security"	13	11	24
	"Artificial Intelligence" "United States" "national security"	8	5	13
	" AI " "the US " "national security"	4	12	16
	" AI " "United States" "national security"	5	1	6
AI + The US + National Security + Threat	"Artificial Intelligence" "the US " "national security" "threat"	7	4	11
	"Artificial Intelligence" "United States" "national security" "threat"	3	0	3
	" AI " "the US " "national security" "threat"	1	5	6
	" AI " "United States" "national security" "threat"	3	0	3
AI + National Security	"Artificial Intelligence" "national security"	47	37	84
	" AI " "national security"	28	46	74
AI + National Security + Threat	"Artificial intelligence" "national security" "threat"	17	13	30
	" AI " "national security" "threat"	7	12	19
AI + National Security + Ministry of Defence	"Artificial Intelligence" "national security" "ministry of defence"	4	4	8
	"Artificial Intelligence" "national security" " MOD "	4	4	8
	" AI " "national security" "ministry of defence"	2	5	7
	" AI " "national security" " MOD "	1	5	6
AI + National Security + Ministry of Defence + Threat	"Artificial Intelligence" "national security" "ministry of defence" "threat"	4	2	6
	"Artificial Intelligence" "national security" " MOD " "threat"	2	3	5
	" AI " "national security" "ministry of defence" "threat"	2	2	4
	" AI " "national security" " MOD " "threat"	0	3	3
	Total Number of Results:	**515**	**572**	**1087**

Appendix B: ATLAS.ti Codes & Code Groups



British Action on AI Implementation (4)					
UK Action: Intelligence	6	0	British Action...	1	British action referencing AI integration within the UKIC.
UK Action: Inter/Multinational Collaboration	19	0	British Action...	1	Britain actively pursuing international or multinational collaboration re: AI.
UK Action: Legislation	16	0	British Action...	1	Britain creating legislation to implement AI or tackle AI-based threats.
UK Action: Military	16	0	British Action...	1	Britain focusing on AI implementation in its military.
British AI-National Security Implementation Motivations (4)					
UK: 'Containing' or 'Countering' China	8	0	British AI-Nati...	1	British narratives concerning 'countering' or 'containing' China.
UK: AI Positive Impact on National Security	1	0	British AI-Nati...	1	Positive references to bolstering, defending or otherwise improving national security through AI.
UK: Fear of 'Falling Behind'	6	0	British AI-Nati...	1	For references to Britain's AI-national security integration to avoid 'falling behind' other states.
UK: Need to 'Catch Up'	4	0	British AI-Nati...	1	For references to Britain implementing AI into its national security to 'catch up' to other states.
Domains of Warfare (6)					
Domain: Air	8	0	Domains of W...	1	For AI integration in the 'Air' domain of warfare.
Domain: Cyberspace	24	1	Domains of W...	1	For AI integration in the 'Cyberspace' domain of warfare.
Domain: Cyberspace (Information Warfare)	11	1	Domains of W...	1	For references to disinformation campaigns enabled by AI.
Domain: Land	1	0	Domains of W...	1	For AI integration in the 'Land' domain of warfare.
Domain: Maritime	5	0	Domains of W...	1	For AI integration in the 'Maritime' domain of warfare.
Domain: Space	5	0	Domains of W...	1	For AI integration in the 'Space' domain of warfare.

Influence of American AI-Related Developments (5)						
American AI: Perceived as Threat	0	0	Influence of A...	1	Explicit references to American AI developments being perceived as a threat by HM Government.
US: Accessing British AI Technology	6	0	Influence of A...	1	References to American attempts to access British AI technology.
US: Negative Cooperation & Collaboration	0	0	Influence of A...	1	Negative references to collaborating and cooperating with the United States on AI matters in some form (i.e. bilaterally or via multinational institutions)
US: Positive Cooperation & Collaboration	17	0	Influence of A...	1	Positive references to collaborating and cooperating with the United States on AI matters in some form (i.e. bilaterally or via multinational institutions)
US: Technological Comparisons	10	0	Influence of A...	1	Comparing our technological prowess in AI to the United States.
Influence of Chinese AI-Related Developments (6)						
China: Accessing British AI Technology	13	0	Influence of C...	1	References to American attempts to access British AI technology.
China: Establishing AI Norms	6	0	Influence of C...	1	Reference to concerns of China spearheading international norms in AI.
China: Negative Cooperation & Collaboration	15	0	Influence of C...	1	Negative references to collaborating and cooperating with China on AI matters in some form (i.e. bilaterally or via multinational institutions)
China: Positive Cooperation & Collaboration	12	0	Influence of C...	1	Positive references to collaborating and cooperating with China on AI matters in some form (i.e. bilaterally or via multinational institutions)
China: Technological Comparisons	13	0	Influence of C...	1	Comparing our technological prowess in AI to China.
Chinese AI: Perceived as Threat	24	0	Influence of C...	1	Explicit reference to Chinese AI developments being a threat by HM Government.
Years (4)						
2021	8	0	Years	1	Debate from 2021.
2022	5	0	Years	1	Debate from 2022.
2023	11	0	Years	1	Debate from 2023.
2024 (to June)	4	0	Years	1	Debate from 2024 (up to June 2024, inclusive)