Left in the Dark

How a lack of understanding of national power generation threatens our way of life

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His education includes an undergraduate degree in Arabic (with Islamic Studies and History) from Oxford University and a master’s degree in Military Art and Science from the US School of Advanced Military Studies. He attended the Higher Command and Staff Course at the UK’s Defence Academy.

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All views expressed are the author’s own.
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Why the UK needs a National Power Net Assessment capability

While there has been some thinking on Net Assessment in the UK, including the MOD’s announcement in July 2018 of a Strategic Net Assessment capability (analysed by Policy Exchange’s Gabriel Elefteriu in his paper, A Question of Power), the predominant focus of this has been on hard power alone. There has been insufficient consideration of what national power is in a broader sense; and how it is generated in pursuit of the national interest.

A National Power Net Assessment (NPNA) would provide more accurate assessment of both the soft and hard resources required to generate national power – and the resulting value they bring – so that these are not merely seen as a cost or overhead. This would enable evidence-based political choice and help the government of the day to explain potentially unpopular public spending decisions. A well-founded NPNA would better enable an understanding of relative balances of power, which will in turn improve strategy-making in pursuit of our national interest. It would also contribute to our understanding and exercise of Modern Deterrence, which relies on latent capability (and perceived political will to use it). This is particularly relevant given the ‘era of constant competition’ in which the nature of deterrence is evolving.

Specific proposals in this research paper include:

- **The appointment of a Senior Responsible Owner** to guide a NPNA process. Careful thought would need to be given to this appointment – in particular whether it should be held by a government official, for example the Cabinet Secretary, or whether the job would be better performed by an independent commissioner.
- **A reappraisal of the constituent elements of national power**, using those outlined by the Fusion Doctrine as a starting point.
- **The development of tools to better measure national power**, exploiting modern science and technology including Artificial Intelligence, Big Data and Machine Learning.
- **Re-consideration of the process of assessment**. For example, whether a NPNA would be better as a cross-government exercise (like a Strategic Defence and Security Review), through the offices of an independent inquiry (the Royal Commission model), or
perhaps embedded in a permanent structure similar to the National Audit Office. Another option would be to develop the MOD’s Net Assessment tool – the capability it offers would at least need to be aggregated into one of the other models.

Other ideas for consideration discussed in this paper include:

• The establishment of a National Security University.
• The establishment of a National Security Fund.
Introduction
Since the end of the Napoleonic Wars, the UK has been a leading world power with diplomatic, economic and military strength that has allowed us to shape our own destiny. This secure position has enabled successive governments to focus more time and resources on domestic agendas – spending on health, education and welfare have increased, while spending on the instruments of national power has declined in relative terms.¹ For the purposes of this paper, I consider national power as the capability of a state to secure its interests in relation to other states.

Let us consider this issue in context. Among changes over the last few decades in the balance of power across the world, the UK’s international leverage has diminished. Examples include: the slowing of economic growth (under 2% for the first time in living memory in the UK); the UK’s move from being a creditor to a debtor nation due to the post-Second World War Anglo-American Loan Agreement, which set the course for a Dollar-led global economy rather than one based on the Pound; broader dependence on the US on many issues of defence and foreign policy since the Suez Crisis in 1956; and the UK’s declining economic and military standing relative to the BRIC nations.² This trend looks set to continue,³ alongside uncertainty about the long-term effects of Brexit.

The impact of recent political and economic turbulence is exacerbated by the pace of change associated with escalating technological revolution and the return of Great Power rivalry. We are at a point where internationalism, and with it the benefits of cooperation between states, is being questioned, including by the US, which has underpinned the rules-based international system for the past century. The consequences of this are particularly acute for the UK, a country among the most internationalised in the world.⁴ As former rule-makers in the international system, we have much to lose as those rules are questioned; we would do well to be more aware of our history and how others see us as benefitting from the status quo.⁵ It is perhaps time that we were more forceful and explicit in making the case for international frameworks and cooperation as a proven way of creating a safer and more prosperous country. This, in turn, would draw attention to a key element of national power generation.

While the recent advent of Fusion Doctrine⁶ is beginning to bring greater coherence to the marshalling of the elements of national power in support of the national interest, the application of the approach will only be as effective as the resources that it can call upon. As it stands, insufficient

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⁴. It is worth noting that the strength of the Pound (always a theme in major discussions on national security from the late 18th century) has depended on the international order functioning in a specific way (with free trade) and it is often forgotten that Britain went to war with Revolutionary France in 1793 because it violated free navigation agreements on the River Scheldt in the Netherlands.
thought has gone into how this power is generated. In the same vein, if strategy making “is about getting more out of a situation than the starting balance of power would suggest. It is the art of creating power,” then it follows that it is important to have an accurate measure of the power that a nation has at hand and an understanding of how to increase it, or where a diminution can be afforded, in order to make good strategy. In short, we can only enable genuine and responsible political choice on public spending by understanding how national power is generated and maintained, and its benefits to our way of life. There is currently no comprehensive tool or approach to enable this. This paper aims to stimulate work to allow policy makers to address this issue.

It will first consider the nature of national power, arguing that current definitions are too narrow. It will then set out the global context in which the UK is losing out to increasingly powerful rivals, and the national context in which political priorities are focused on domestic programmes, with spending on the instruments of national power often viewed as discretionary or dispersed for political expediency. Next, it will examine the current approach to the generation of national power, arguing that it is ad hoc, insufficiently scientific and stove-piped; and the potentially detrimental implications for our way of life. In the final two sections, the paper sets out some initial thoughts as to how better understanding might be achieved and how improvements could be made to the generation of national power.

Pragmatism

In setting out this proposal, the political as well as practical challenges associated with a more scientific approach are recognised. In Politics Among Nations, Hans Morgenthau, while acknowledging that evaluating national power is necessary, argues that the endeavour is futile as there will be “unknown factors to spoil their calculations” such as natural disasters and unforeseen actions of individuals and states. Nonetheless, technological advances since the latest edition of Morgenthau’s work in 1978 must give hope that a more complete and objective analysis of factors is possible. Establishing a baseline understanding, accepting that the situation might change or that the relative weighting of factors might be flawed, at least provides a reasonable starting point for evaluating national power. Without this analysis, the basis for strategy making is simply what Morgenthau terms “the right and wrong hunches made by those responsible for a particular foreign policy of a particular nation, as well as by those who conduct the foreign affairs of other nations.”

We might also question whether this degree of calculation and control is achievable in a liberal democracy as some proposals might not be politically palatable. Indeed, we might question why this approach has not been tried or, if it has, succeeded before. But it is important to set out the arguments and not just second guess the politics.

Finally, we could question how much discretion or agency we actually have in terms of the decisions we make in pursuit of the national interest. For

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example, our commitments to alliances, multilateral treaties, international organisations and the rules-based international system often tie our hands. On the other hand, while many recognise the historic value of collective security for the UK, speaking of it as a “spiritual union” (as Ernest Bevin did of NATO) or a higher shared purpose, such unexamined assumptions are being challenged as never before (in a pincer movement from the nationalist right and the hard left). Balancing values and interests is always challenging for a power that has invested much in sustaining the system it played a significant part in establishing and it may be that we have little choice but to continue this balancing act. But there are other methods including one of hard-nosed realpolitik. In describing Israel’s pragmatic approach to foreign policy, Daniella Peled writes that “a founding principle of its realpolitik was, understandably, that the country was too isolated to be terribly choosy about potential alliances”. Perhaps the UK would benefit from just a small dose of such unsentimental pragmatism when thinking about its medium to long-term future.

The nature of national power

This understanding must start with a re-appraisal of what constitutes national power. Typically, the instruments of national power are considered: Diplomatic, Information, Military and Economic. But this “DIME” formula is outdated given the rapidly changing world and the nature of the tools that a nation now has at its disposal; the equation is much more complex and nuanced. This paper will not dwell on the natural elements that cannot be controlled by the state in the short term: geography, natural resources and population; or national character or morale; or quality of government, all of which Morgenthau reasonably argues must form part of the calculation.

It will, instead, focus on the factors that we have greater control over and can generate in shorter order to further our interests. A starting point is the instruments embedded in Fusion Doctrine – if these will be considered in the application of national power, they should also form the basis of its generation. They are: Security (armed forces, law enforcement, covert operations, border control); Economic (economic levers, international institutions, regulation, the private sector); and Influence (development, diplomacy, soft power). There are probably others that could be added to this mix, including: freedom of manoeuvre in space; defensive and offensive cyber capabilities; and control of technology (noting, for example, the potential Chinese ownership of the 5G network).

The context/current approach

What then of the context and current approach?

While it can be argued that changes in the balance of power mean that we are less able to control our destiny, domestic considerations regularly trump the levers of national power when it comes to resource allocation (and the case for Grand Strategy) because a convincing argument is yet to be made as to how the latter enable the former.

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13. JDP 0-01. UK Defence Doctrine.
The voting public often view spending on the instruments of national power as discrete and therefore it becomes a low priority for government spending. This may be partly because of a growing complacency or ignorance about the threats we face coupled with an increasing disinclination for military engagement. In any case, a greater understanding of the interconnectedness of domestic considerations and the instruments of national power would enable a convincing explanation of their relative importance.

While accepting the difficulty of measuring national power given the influence of non-state actors and the impact of rapid technological progress among other developments, current methodologies are inadequate and based on coarse metrics, generalities and truisms. We need hard facts and compelling evidence to inform our understanding. Furthermore, we too often focus on the cost rather than the value of the instruments and place disproportionate emphasis on quantitative rather than qualitative assessment.

We are unable to produce a convincing argument, in part, because we do not properly understand the relationships between the instruments. For example, how does the security element contribute to or depend on the economic or influence ones?

The issue was exemplified during the Queen’s Speech of 2010 which, even while it declared that the new government’s “first priority is to reduce the deficit and restore economic growth”, there did not appear to be consideration of how national security could contribute to a healthy economy other than in the most general terms. No such connection was made in the 2010 Strategic Defence and Security Review (SDSR) either. By 2015, in his foreword to the National Security Strategy, Prime Minister David Cameron noted: “Our strong economy provides the foundation to invest in our security and global influence, which in turn provides more opportunities at home and overseas for us to increase our prosperity.”

But it does not appear that any detailed analysis was done to understand the value of defence and security to the economy or vice versa. The same document asserts the security and economic value of elements including alliances such as NATO, soft power, energy and the creative industries, but it is not clear that this was supported by an evidence base or that the correlations between the various elements were understood in any detail. Morgenthau highlights the difficulties of finding these correlations: “… questions referring to changes in one particular factor are not the most difficult to answer. There are others which concern the influence of changes in one factor upon other factors, and here the difficulties increase and the pitfalls multiply.” But it is only by properly understanding them that we can accurately appreciate the implications of an increase or reduction of one element on the others and therefore the power that the government has at its disposal in support of the national interest. This understanding will also inform decisions on public spending that could deliver greater efficiency and value for money. Finally, clearer and more transparent explanations will enable the government of the day to bring parliament, the media, influencers and voters along with the decision-making process.

Philip Dunne’s review of defence’s contribution to prosperity is a useful...
example of this type of analysis but just between two instruments and it only considers this input in a linear sense. For example, we note the value of defence exports and contracts to UK jobs and revenue, but not the actual value of military operations around the world in terms of enabling trade.

Turning to the current generation of national power, it appears to be ad hoc – conducted in stove-pipes along departmental lines. Although some elements are brought together as part of SDSRs, there is no comprehensive tool or approach that recognises the potential of the whole as greater than the sum of the parts. As an example, even if defence is one of the protected departments and growing at 1.7% in real terms over the next two years, this growth is only predicated on the (vitaly important) defence of the nation from identified threats rather than on any relation to the other elements of national power.

Drawing on the model of the US Office of Net Assessment in the Pentagon, former Defence Secretary Gavin Williamson’s announcement in July 2018 of a Strategic Net Assessment capability, explored by Gabriel Elefterieu in his Policy Exchange paper, is welcome as a method of better judging relative balances of hard power. But, this methodology should be applied to all the instruments of national power – soft as well as hard – and the relationships between these elements.

The proposal

In order to militate against loss of international influence we need to take a considered approach to the understanding and generation of national power. In essence, this is about enabling the achievement of our National Security Objectives (Protect our People; Project our Global Influence; Promote our Prosperity) – not just in execution (Fusion Doctrine) but in their creation.

A detailed study should be conducted to assess the merit of establishing a National Power Net Assessment (NPNA) capability. Steps might include:

- **The appointment of a Senior Responsible Owner.** Careful thought would need to be given to this appointment, in particular whether it should be held by a government official, for example the Cabinet Secretary, or whether it would be better performed by an independent commissioner.

- **A reappraisal of the constituent elements of national power using those outlined by the Fusion Doctrine as a starting point.**

- **The development of tools to better measure national power, exploiting modern science and technology including Artificial Intelligence, Big Data and Machine Learning.**

- **Consideration of the process of assessment.** For example, whether it would be better as a cross-government exercise (like an SDSR), through the offices of an independent inquiry (the Royal Commission model), or perhaps embedded in a permanent structure similar to the National Audit Office. Another option would be to develop the MOD’s Net Assessment tool – the capability it offers would at least need to be aggregated into one of the other models.

Existing methodologies include the narrative ones used by Morgenthau in Politics Among Nations and Seyed Zarghani in his paper *Measurement of National Power: Definitions, Functions, Measurements*. Building on these, more objective and scientific methods should be developed maximising the power of data science, machine learning and artificial intelligence. James Rogers’ recent publication: *Audit of Geopolitical Capability 2019: An Assessment of Twenty Major Powers* offers an excellent example of such a method.

Areas of study might include:

- **Consideration of how the UK has historically generated its power, for example through our co-founding of multilateral organisations, authorship of much of the rules-based international order, and our...**

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status as a ‘framework nation’ for military operations. It is also worth exploring the UK’s historical boldness in terms of power projection in areas of commercial interest. John Bew notes: “Acts of belligerence and pre-emption were a recurrent feature of British behaviour on the international stage… Britain was hyperactive and ferocious in defense of its interests.”

- Assessment of other nations – where disproportionate power appears to be achieved, for example Switzerland (the power of banking and financial institutions) and Israel (national character and productivity along with strong alliances).
- How the government should better communicate with parliament and the public to explain the links between national power and our way of life and the requirement to invest in these instruments.
- The education of strategic thinkers at the heart of government including politicians, civil servants and military officers.

The government-issued Aqua Book offers guidance on the commissioning, conduct and quality assurance of analysis of this nature. It will be useful to those charged with this work.

The benefits of pursuing the proposal

A NPNA will provide more accurate assessment of the resources required to generate national power – and the resulting value, defined as the ratio of function to cost – so that it is not merely seen as a cost/overhead. This will enable evidence-based political choice and the ability for the government of the day to explain potentially unpopular public spending decisions.

More specifically:

- It will better enable an understanding of relative balances of power, which will in turn enable better strategy making in pursuit of our national interest.
- It will give us greater confidence in strategic design due to greater assurance of our own strength.
- A more realistic assessment will help to guard against optimism bias in our calculations.
- Knowing what we have at our disposal will support the application of Fusion Doctrine, allowing us to better prioritise resources and pre-empt problems.
- It will contribute to our understanding of Modern Deterrence, which relies on latent capability (and perceived political will to use it) – a clear understanding of what we have at our disposal will help our calculations. This point is particularly relevant given the ‘era of constant competition’ in which the nature of deterrence is evolving.

How to improve understanding of national power

How then might we improve our understanding of national power? In the first instance, we need to be more scientific and deliberate; accepting that it is not an exact science and there is still room for error\(^9\) we can follow the examples of meteorological, political and economic predictions that have become significantly more accurate. The resulting data should be merged with subjective judgement in cross-government process to inform political choice. Such a method will also be key to convincing politicians that there is proper evidence that fits into budgetary controls. Some people will always argue for the “ineffable” qualities of national power because they choose to ascribe heroic qualities to the nation but such arguments are unlikely to convince a sensible chancellor.

A 2005 Rand workshop considered the forms and measurement of national power, proposing the following methodology: strengthen the international futures data set; improve the formulation for forecasting power; enhance the model foundations for forecasting power; develop scenarios.\(^{10}\) This offers a useful guide given its scientific and predictive basis.

How to improve the generation of national power

Once we have improved our understanding, how might we improve the generation of national power?

In the area of security, NPNA can inform calculations as to how much we preserve sovereign capability against how much we rely on alliances. It could also point to areas that achieve the greatest strategic influence, such as Continuous At Sea Deterrence, Carrier-Strike capability, Strategic Air Power, being seen as a framework nation in all domains, leadership of NATO’s Allied Rapid Reaction Corps, class-leading Special Forces and cyber capabilities, and a deployable warfighting Army Division. These would be obvious candidates for retention as sovereign capabilities.

It could inform decisions such as how much we are prepared to outsource the procurement of military hardware against sustaining engineering and manufacturing jobs in the UK.

In the field of economics, NPNA will help to guide investment decisions including the use of the Prosperity Fund. The Chinese Belt and Road Initiative offers a good example of economic power being used for political effect. In a recent article in the Economist, Banyan argues that: “Despite China’s denials, all the concrete pouring is a giant act of political engineering”,\(^{31}\) he also quotes Bruno Macaes, who writes that: “The Belt and Road Initiative…and its spillovers into politics and society… are not a bug in the project, but its most fundamental feature”.\(^{32}\) Similarly, Donald Trump has called for European car manufacturing to be “classified as a threat to US national security because it robs the country of an industrial base needed to produce military hardware.”\(^{33}\) At home, NPNA will also guide decisions regarding Foreign Direct Investment in our Critical National Infrastructure.

The generation of influence will be partly driven by security and economics but a NPNA will enable us to make deliberate decisions on

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investment in soft power on the basis of the influence it is likely to bring, thus increasing national power.

We also need to consider the process of decision making – who is involved and how they are selected and educated. The Virtual National Security Academy, established on the back of SDSR 15 is a positive step but thought should be given to extending this to a National Security University. This does not supersede the requirements for the Joint Services Command and Staff College and the broader military education system, but would explore the generation and application of national power at the strategic level beyond the military sphere, educating not just military officers but civil servants concerned with the generation and employment of the instruments of national power, business leaders, scientists and politicians. The US National Defence Academy and the French Institut des hautes études de défense nationale provide useful templates.

Finally, we should consider funding. If we accept that resources are becoming scarcer, we need to think more deeply about their generation and application. Thought should be given to the establishment of a National Security Fund. Peter Roberts argues that such a fund might include the budgets of the military, security and intelligence services, and development spending among other areas.34 Although it would present challenges, not least in governance and presentational terms, such a fund would, in concept at least, enable greater focus and coherence in the generation and application of national power.

A starting point for inclusion should be the resources attracted by the instruments considered by the Fusion Doctrine. Wider benefits of this policy could include:

• Solving the problem of central government mistrusting departments to manage their budgets; and eroding the proprietorial instincts of departments.
• Putting the monetary horse before the cart of Fusion-working. When a single department pays for something they want to own it.
• Enabling central decisions to insulate operating costs from long-term capability spend.
• Creating further potential for efficiency savings.

In conducting this work, the Green Book, which has “provided guidance to help officials develop transparent, objective, evidence-based appraisal and evaluation of proposals to inform decision making” 35 will provide a useful handrail.

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Conclusion

This paper has argued that we need to recognise shifting balances of power around the world, which point to a net loss of UK power and leverage. In turn, this will reduce our ability to shape world events to our advantage and threatens our way of life.

In order to address this, we need a better understanding of the instruments of national power and how they are generated. Current definitions are too narrow and we do not have a comprehensive tool or approach that recognises the potential of the whole as greater than the sum of the parts. A NPNA offers a method of achieving this.

The paper has recommended further work to allow policy makers to better understand, measure, generate and maintain national power. It has suggested some ways of doing this, including: exploiting technology such as data science, machine learning and artificial intelligence to provide more objective analysis; and the establishment of new machinery and governance structures to oversee the work.

The benefits of adopting such methods are considerable but include: enabling a better understanding of relative balances of power, which will in turn enable better strategy making; and informing political choices on public spending.

Such an approach is necessary to maintain the UK’s status as a leading international power and with it our ability to continue to provide for our people.
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