

BRIEFING PAPER HONOURS FOR INNOVATORS

Executive Summary

This paper makes the case for establishing a new order of chivalry, specifically designed to encourage invention and raise the status of being an innovator in the eyes of the public.

It provides a brief background to how the official honours system and private prestige-based alternatives have been used in the past to encourage innovation in the country, as well as noting how the current use of the Queen's Awards for Enterprise and the Order of the British Empire are ineffective at meeting this end. It also discusses a few international examples of honours that promote innovation.

Lastly, it sets out the details of how the order might be organised, how its recipients might be chosen, and the costs of setting up and running the order. We argue that it is among the most cost-effective ways by which innovation can be promoted in the UK, raising the aspirations of young people and recognising the achievements of our unsung inventive heroes.

Historical Background

Raising invention's status and prestige was crucial to how Britain first got its reputation during the Industrial Revolution as the best place to innovate. Invention came to be seen as a viable and attractive career path, not just financially but in terms of the social standing that could result from it - something that was purposefully cultivated by those seeking to improve the country's technological prospects.

Pro-invention organisations like the Society for the Encouragement of Arts, Manufactures and Commerce (now the RSA) awarded honorary medals, as well as cash prizes, in order to encourage invention by appealing to people's sense of prestige and social standing. Initially awarded by high-ranking nobles, and later by interested members of the Royal Family, the Society of Arts medals were taken seriously by high society. Aristocrats had no qualms about submitting their own inventions for prizes alongside innovators of more humble backgrounds, with the overall effect of raising the social standing of invention.

Monarchs likewise honoured inventors personally, arranging for them to be granted civil list pensions in recognition of their achievements. The astronomer Caroline Herschel, for example, was in the early nineteenth century honoured in this way. Yet these awards depended on the personal preferences of the monarchs, with the likes of George III, George IV, and William IV being especially interested in bestowing this kind of patronage, while their predecessors were less so. And while this practice continues, it is done in private, thus failing to have a wider impact on the social standing of inventors more broadly.

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occasionally adapted to recognise inventors, scientists, and medical pioneers, along with other relatively neglected scholars (museum curators, archivists, antiquarians, historians, heralds, and linguists). The astronomer Frederick William Herschel, who discovered the planet Uranus, was made an early knight of the order. In the 1830s, upon the initiative of the Lord Chancellor Henry Brougham - a key nineteenth-century champion of innovation - it was more concretely directed towards innovators and scientists. It was awarded to the mathematician and pioneer of computing Charles Babbage, the scientist and inventor David Brewster, the neurologist Charles Bell (after whom Bell's Palsy is named), the physicist John Leslie, the mathematician James Ivory, and to serial inventors like Edward Thomason and John Robison.

Brougham, among others, was also responsible for many more statues of inventors and scientists popping up around Victorian Britain - a more visible way to raise their status. Likewise, the Blue Plaques that now dot buildings all over the country were originally conceived of as a cheap but visible way to recognise the individuals who contributed to the various arts of peace: science and invention, as well as fields like literature and scholarship.

Today, however, our institutions have neglected the importance of prestige and honour in encouraging innovation. The Guelphic Order came to an end in 1837 when Victoria ascended to the throne: it was a Hanoverian order, but she did not inherit the crown of Hanover. Groups like the Society of Arts also gradually shifted away from awarding prizes and towards alternative means of promoting invention, especially as private prizes proliferated and their effects became diluted. Although new cash prizes have since been developed to encourage innovation, often in emulation of the famous Longitude Prize of the eighteenth century, there have been no comparable equivalents to bestow universally recognised prestige - something that only a widely-publicised and significant royal association now has the power to do.

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The Status of Inventors Today

Innovators today are, of course, occasionally appointed to the Order of the British Empire. But such appointments make up a very small proportion of the whole. Since 2015, an average of 9.2% awards were given in every New Years or Birthday list for services to “innovation”, “technology”, “engineering”, “science”, “medicine”, “manufacturing”, “entrepreneurship”, and variants of those words, also including much broader terms like “industry” and “business” which may conceivably involve recognition for innovation. When the especially broad category of “business” is omitted, the figure stands at just 6.7%. These figures should not be treated exactly. On the one hand, they accidentally exclude much more specific citations where such terms were not used, but which may have involved recognising innovations, such as in specific medical fields. On the other, however, many of the citations using those terms were actually given in recognition of people holding management or leadership roles, increasing diversity in a

field, or for related charitable activities rather than for the innovations and scientific advancements in their own right. (These figures do not include the Birthday Honours list for 2020, or the New Years list for 2021, as those awards had an exceptional emphasis on responses to the coronavirus pandemic.)

On the whole then, the Order of the British Empire appointments are overwhelmingly used to recognise people's acts of philanthropy, political service, and charitable activities. These are of course praiseworthy activities and worthy of such recognition, but it means that the order does little if anything to raise the status of inventors and innovators. Specific recognition of their achievements is drowned out, with any status-raising effects on innovation as a career path worthy of aspiring to and emulating completely diluted. Given the current system, one would be forgiven for assuming that the surest way to an honour is to become a civil servant, politician, or philanthropist, or to achieve the fame that comes naturally to especially successful sports people, musicians, authors and actors. The order's increasingly problematic association with imperialism, too, by specifically referencing the British Empire, also makes it a non-ideal conduit for encouraging invention and entrepreneurship among young people.

Another source of recognition, the Queen's Awards for Enterprise, suffer problems of a different kind from the perspective of raising the standing of inventors. Although one of their principal categories is for innovation, they are given to businesses rather than to individuals. They therefore give firms some favourable PR. Indeed, a small industry has sprung up to help companies ensure that they have a higher chance of winning the awards. They are also only temporary, and lack the status or prestige of an order of chivalry. They are awarded only by Lord-Lieutenants rather than by members of the Royal Family. The Queen's Awards are thus a boon to a CEO or a manager at a company, but they do nothing to motivate people to become inventors.

A New Order for Inventors

Innovation, then, is inadequately recognised in the UK by the honours system. Yet changing the existing Order of the British Empire to recognise more inventors and scientists is unlikely to be the correct response. Any status-raising effects are diluted by the preponderance of other kinds of activities that are recognised.

This is why we think that there should be an entirely new order of chivalry, with the specific aim of recognising individuals for the inventions and innovations they have developed or introduced that improve people's lives, and not for any associated charitable or philanthropic activities. We envisage that the new order would be used to recognise the effects of a particular scientific breakthrough or invention, while the Order of the British Empire might still have a science and technology component by continuing to recognise contributions to increasing diversity or inclusion in

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a field such as engineering or science. The new order would be for serving the public through innovation, while the old would continue to be for general public service.

The creation of a new order of chivalry for inventors and innovators would show that the UK is serious about its intended aim of being the best place in the world to be a scientist, entrepreneur or inventor. It would also be more likely to encourage people to become scientists and inventors, by raising the status of those career paths. To this end, we propose that the new order be widely recognised as being of equal standing to the Order of the British Empire.

Outside of the UK, for example, there are many examples of honours that specifically encourage and recognise innovation. But these other countries tend to place those honours lower in precedence than those that recognise other activities. In Spain, the Order of Alfonso X, the Wise recognises people who have made advances in science, research, higher education and culture. Albeit broader than what we propose, its recipients have included architects, inventors, and medical researchers. Likewise, South Korea instituted the title of New Knowledge Worker as part of its highly successful project to promote economic growth in the latter half of the twentieth century. Its orders of merit also include an Order of Science and Technology Merit, as well as an Order of Industrial Service Merit. Both the Spanish and Korean honours systems, however, place science and invention below other kinds of activity. Indeed, both countries have systems that are significantly more segmented than the British system, with separate orders for arts and letters, for sports, and for various other activities. We do not propose that this is emulated in the UK. Instead, we think that the advancement of science and technology deserves special and separate consideration of a kind that does not often otherwise come with fame or recognition of its own (unlike literature, sports, music, acting, or politics).

To ensure that the new order for innovators is widely seen to be of equal standing with the Order of the British Empire, it should have a broadly equivalent structure of classes within the order. The first class of the new order should thus be equivalent to a KBE/DBE, with recipients receiving insignia and being allowed to use the titles of Sir/Dame, along with post nominals. There should be a commander class equivalent to a CBE, an officer class equivalent to an OBE, and a member class equivalent to an MBE. All, again, should receive insignia and post nominals. By using titles like Sir/Dame that are already widely recognised today, the new order would obtain immediate public recognition, and thus have the desired effect of raising innovators' status. The use of post nominals would have a similar effect, though the letters themselves would depend on the name chosen for the order.

It is essential that equivalent titles like Sir/Dame be used for the new order, as otherwise it would suffer one of the major pitfalls of the Royal Guelphic Order before its discontinuance in the UK. Because it did not entitle the holder to use "Sir" in the UK, it was seen as a sort of second-class kind of knighthood. Although the astronomer Wilhelm Herschel was called "Sir"

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by various official bodies, this in fact was not in accordance with protocol and the practice was quietly dropped after his death. His son, on receipt of the same honour for his own contributions to science, was also given a British knighthood so that the family would remain none the wiser. Others, however, like Charles Babbage, were insulted to have been fobbed off with the offer of a Guelphic knighthood instead of a British knighthood.

Proposed Structure

- 1st Class - Equivalent to a KBE/DBE (Recipients get insignia, Sir/Dame title and post nominals)
- 2nd Class - Equivalent to a CBE (Recipients get insignia and post nominals)
- 3rd Class - Equivalent to an OBE (Recipients get insignia and post nominals)
- 4th Class - Equivalent to an MBE (Recipients get insignia and post nominals)

Adopting an equivalent structure for the new order would also avoid one of the pitfalls of especially prestigious foreign awards such as the USA's National Medal of Technology and Innovation. Awarded since 1985, it specifically recognises individuals, teams, and organisations for their inventions. Only a handful are awarded each year, making it especially exclusive, with recipients including Steve Jobs and Steve Wozniak, Bill Gates, and companies like IBM and eBay. Yet it is perhaps too exclusive to be widely known. In this sense, it is similar to the highly exclusive Order of Merit in the UK, which can only have 24 living holders - so few recipients that the honour is not known or readily recognised by the public at large, despite its official prestige.

This consideration also implies that a fairly large number of inventors and scientists should receive the honour each year. As a guide to the numbers that might be expected, since 2015, the number of Order of the British Empire awards given each year for services to invention and science-related fields have ranged from 176 to 246 per year (not including 2020 and 2021 due to the exceptional circumstances of the coronavirus pandemic, and calculated using the method outlined earlier).

A number above 200 per year, or at least 100 for each Birthday or New Years list would thus be reasonable, especially as that number will be split among the four classes too. An overall annual maximum might thus, for symbolism's sake, be set at 273. This would reflect that -273.15 degrees Celsius is the figure of 0 kelvin, Baron Kelvin having been the first British scientist and inventor to be elevated to the House of Lords and one of the initial members of the Order of Merit - a major historical precedent of official recognition being given to a person's contributions to science and invention.

In terms of organisation, it would make the most sense to use the existing

honours infrastructure. There are already honours committees for science and technology, for health, and for business and the economy, which deal with public nominations. The existing science and technology committee might thus also deal with nominations to the new order, or perhaps a joint committee made up of relevant members of the three committees might instead be formed, with its own chair. Regardless, the creation of the new order is unlikely to add much administrative cost.

The insignia themselves are also inexpensive, such that introducing them is likely to be the most cost-effective possible policy that the government can adopt to promote invention. We have obtained quotes from a company that manufactures orders and medals: after an up-front cost of £15-20,000 for the preparation of dies, ribbon designs, and related things, the approximate costs per insignia are as follows:

- 1st Class - £1,600
- 2nd Class - £650
- 3rd and 4th Class - £125

Supposing the suggested maximum of 273 awards a year is adopted, and split along the same lines as the current awards - roughly 56% equivalent to our proposed 4th class, 27% 3rd class, 14% 2nd class, and 3% 1st class or higher, not including the separate British Empire Medal - then we could expect an annual cost of the insignia themselves of approximately only £66,000 per year. Needless to say, such a sum for a government is less than small change. It is less than the salary of a single MP. Yet its effect on raising the status of science and invention in the country is likely to be many times that amount.

Lastly, it is worth considering potential names and symbolism. The orders of chivalry have no particular naming convention. There are orders of the Garter, Thistle, Bath, Merit, of St Michael and St George, Royal Victorian, of Distinguished Service, the British Empire, Imperial Service, Companions of Honour, and of St John, in addition to the royal family order traditionally bestowed on female members of the royal family. One possibility, to coincide with the Queen's platinum jubilee in 2022 would be to name it the Elizabethan Order - something harking back to both the flourishing of science and invention during the first Elizabethan Age in the late sixteenth century, with such pioneers as Francis Bacon and William Gilbert, as well as commemorating the second Elizabethan Age under our present Queen.

PROPOSED POST-NOMINALS

- KE/DE - Knight/Dame of the Elizabethan Order
- CE - Commander of the Elizabethan Order
- OE - Officer of the Elizabethan Order
- ME - Member of the Elizabethan Order

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Proposed Design

To give an idea of how the awards themselves might look, some potential designs were put together for us by John Petrie OBE, who has helped design national honours and decorations for several Commonwealth countries. As with most orders of chivalry, the proposed motto Merito et Industria is concise and easily understood, emphasising the virtues that the honour rewards. The choice of an owl also references Athena, the ancient Greek goddess of wisdom, who is frequently associated with science and invention. It is a simple motif that has been used for thousands of years, and is readily recognisable for its associations even today.

KNIGHT/DAME OF THE ELIZABETHAN ORDER



COMMANDER OF THE ELIZABETHAN ORDER



OFFICER OF THE ELIZABETHAN ORDER



MEMBER OF THE ELIZABETHAN ORDER





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