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Expertise and equality

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There is a tension between expertise and equality. The work of experts is political — not neutral — and usually serves the interests of employers. Yet jettisoning all expertise would be disastrous, because so many essential operations of society depend on skilled performance. This tension can be addressed by challenging the most damaging facets of expertise — especially expertise in the service of domination — and fostering expertise in equalising power.

Experts are everywhere: doctors, lawyers, computer analysts, economists and a host of others, from basketball players to zookeepers. On the surface, experts seem to be a source of inequality: successful experts can earn a lot of money and rise to powerful positions in business, government or professions. On the other hand, some experts seem more interested in serving the community than in personal prestige and advancement, for example a highly skilled kindergarten teacher or an engineer specialising in designing products for people with disabilities.

What is the role of expertise in a society based on equality? For the purposes here, equality doesn't mean uniformity, but rather the absence of privilege based on power over others. People can be quite different, but no one would lack for what they need. This is not equality of opportunity, nor is it uniformity of outcomes, but rather appropriate support for each individual to develop to their potential and contribute to and benefit from society.

So, to ask the question another way: in a society based on equality, would highly developed skills be a threat or a welcome contribution? And during the struggle to create such a society, can expertise play a useful role, or is it to be avoided?

I approach this topic by first looking at problems with experts, especially their role in serving systems of power. Next, I make a distinction between beneficial and harmful forms of expertise. Then I turn to evidence that most people can become skilled performers, given sufficient practice and support. The implication is that efforts are needed to oppose damaging expertise and foster beneficial expertise.

Problems with experts

In 1931, Harold Laski wrote a 12-page pamphlet, "The limitations of the expert," that nicely summarises experts' key shortcomings. Experts can be so

immersed in their subject matter that they lose touch with common sense. By devoting so much effort to a particular way of viewing the world, they become reluctant to acknowledge new ideas. Indeed, all ideas are judged within the expert's own framework. Experts can become arrogant, individually and collectively, treating anyone or anything from outside their ranks as inadequate and irrelevant. Finally, the contributions of experts are embedded in a set of values, but experts do not recognise these values, nor accept that alternative values exist. Paraphrasing Laski, experts tend to confuse the importance of their facts with the importance of what they propose to do about them.

Most knowledge systems used by experts are opaque to outsiders. Jargon is part of the problem. Academics who write accessibly can have a hard time publishing in scholarly journals, where the expectation is for dense, formal styles that assume familiarity with the field. Academic writing serves to prevent entry by scholars from other fields as well as by non-scholars.

If you boil down a specialist article to its essence, in many cases it says nothing useful to outsiders, because the issues being addressed are of interest only to specialists. Or perhaps it just says something ordinary, dressed up in fancy prose. As an anonymous wit said, an expert is "one who can take something you already know and make it sound confusing."

It is useful to distinguish two meanings of the word expertise. It can mean a high level of skill or knowledge, and it can mean social recognition of skill or knowledge. Often these go together: a chess player may be highly skilled and be recognised by winning against top-rated opponents, thus obtaining formal recognition of expertise such as the label grandmaster.

In the field of scholarship, common types of formal recognition are academic degrees, appointments in universities and research institutes, authorship of peer-reviewed publications, membership in professional bodies, and awards. A scholar working independently, without degrees or affiliations, will have great difficulty in being recognised. People who perform at a high level but lack suitable credentials often are ignored in favour of less capable performers with degrees.

There are plenty of recognised experts without a commensurate level of skill. Doctors, once certified, can keep practising despite a stagnation or decline in performance levels, unlike competition chess players who are continually tested.

A related issue is that the domain of expertise may be more restricted than experts or others realise. For example, acknowledged experts in politics know an enormous amount about their specialities, but — surprisingly — may do little better than novices for predicting future political developments. They are experts in politics but not in political forecasting, a related but different skill (Green and Armstrong 2007; Tetlock 2005). The limited domain of expertise means it is wise to be wary of figures who trade on their status as experts, for example policy advis-

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ers who no longer practise in their field or Nobel Laureates who pronounce on issues remote from their prize-winning work.

David and Ruth Elliott in their 1976 book *The Control of Technology* describe four models of technocracy, or rule by experts. The first is that technocrats are a benevolent force in society. This doesn't address harmful expertise, such as that deployed by nuclear weapons scientists and engineers.

The second model is that technocrats are a self-interested elite. Experts certainly can be as self-interested as any group. They seek to leverage their knowledge and skills into power and privilege. On a collective basis, doctors and lawyers have been most successful in gaining official recognition from the state, barring anyone without a licence from practising in their fields. This occurred historically before there was much evidence that these groups had superior outcomes for patients and clients. Other groups also call themselves professions, claiming to serve the public interest and demanding a monopoly over certain activities (Illich, 1978; Lieberman, 1970).

Whether occupational monopolies actually serve the public is a complicated matter. At one level, excluding poorly trained or fraudulent practitioners protects the public from bad service, but professions can also protect poorly performing members from independent scrutiny and exclude competent outsiders, especially those who operate using a different approach. For example, some unorthodox cancer therapists are charlatans whereas others use methods that have been validated as effective, yet the medical establishment excludes both.

The Elliotts' third model — and the one they find most useful — is that experts are servants of power, in particular capitalists and governments. In this model, experts are "on tap but not on top."

Experts have long played a key role in supporting ruling groups. In the past century, economists, urban planners, doctors and military strategists have implemented and justified government policies and corporate plans. These sorts of experts are seldom rulers themselves: the key people exercising power are far more likely to be politicians and corporate chiefs.

Sometimes technical experts become rulers themselves. For example, Margaret Thatcher, who began her career as a research chemist, later became British prime minister; Hu Jintao, China's top ruler, started off as an engineer. The power of such individuals comes from their positions and political skills, not their technical knowledge. For those who rely on their expertise, it is hard to exert

power directly and easier to attach themselves to the systems of the state and capitalism. Even groups that are often thought of as progressive, such as social scientists, have a long record of serving power (Silva and Slaughter, 1984).

In a system where experts are not rulers themselves, the experts' collective self-interest makes them quite useful to rulers: experts support the power system and rulers protect the privileges of experts, or at least some of them. Many scientists, for example, are quite happy to work for the military, designing weapons or communication systems, in return obtaining jobs and status. They believe their professional responsibility is restricted to "doing good science," leaving decision-making to others.

The Elliotts' fourth model is of an uncontrolled, malevolent technocracy: a system of technological development out of anyone's hands. This, like the other three models, has an element of truth, but there are too many technologies well under control for malevolent technocracy to be a complete picture. For example, governments keep tight control over biological weapons and over the scientists who develop them; biological weapons development is not a runaway operation.

The fundamental problem is that organised systems of expertise — experts and their knowledge systems — are oriented to powerful groups rather than to non-experts. The limitations of experts noted by Laski make them ideal servants of power. Governments and corporations reward compliant experts with good salaries, stimulating jobs and sufficient prestige to keep most of them satisfied.

Jeff Schmidt, in his important book *Disciplined Minds* (2000), points out that most professionals in the United States are salaried employees; their expected role is to further the goals of their employers. In this context, the key thing that aspiring professionals must learn is to be subordinate, namely to orient their skills to the service of their employers, to develop what Schmidt calls "assignable curiosity." He shows how education systems foster the sort of intellectual acquiescence that prepares students for such jobs.

Bad and good skills

While it is important to expose problems with experts, it is a mistake to ignore their contributions. Experts play a crucial role in creating and maintaining many of the things people largely take for granted, such as computers, bridges and shoes. Is it illogical to accept products made possible by experts while condemning experts for their jargon and service to power? Furthermore, quite a few experts are committed to serving the general good, and some are committed opponents of systems of oppression.

It's worth remembering that certain sorts of experts are prime targets for rulers seeking to cement their power. For example, in some genocides, such as in

Cambodia and Rwanda, writers, doctors and teachers have been targeted: their skills in critical thinking and expression are a potential threat to repressive rulers.

Some sorts of skills are almost always harmful, and should be condemned and discouraged, for example skills in:

- malicious lying
- extortion
- designing nuclear weapons
- killing
- torture

At the other extreme are skills that would seem beneficial in most circumstances, for example:

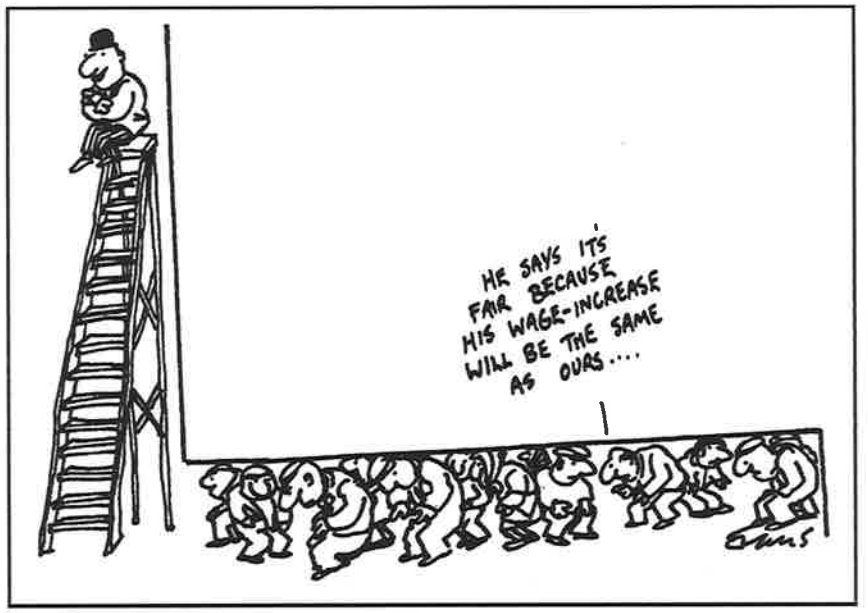
- supportive child-rearing
- organic farming
- composing beautiful music
- conflict resolution

Then there are skills that can be turned to good or bad purposes, for example:

- persuasion
- carpentry
- computing
- sports
- bridge-building

Persuasive skills can be used to promote cigarettes or exercise; carpentry skills can be used to make quality products for the rich or poor, to build tables or gallows. The impact of these skills depends heavily on the context. Actually, this applies to all skills, even the ones that appear to fit into the good or bad category. An organic farmer might be producing food for criminals, and a nuclear expert might be a vocal opponent of nuclear weapons. All skills can be used for a variety of purposes, but any given skill is easier to use for some purposes than others, depending on the context. In other words, skills are adaptable, but they are never neutral.

Most experts are part of systems of expertise, involving training, credentials, formal registration, regulation and employment. These systems strongly condition the way experts' skills are deployed. Many of the problems with and benefits from experts are due to the way systems of expertise are organised and the purposes with which they are aligned.



Jeff Schmidt (2000) argues that the most damaging feature of expert professionals is their willingness to be subordinate to their employers. He shows how the education of professionals operates to promote this willingness, either breaking or excluding resisters. But what about expertise in a society based on equality? Would subordination be such a problem if it were subordination to collectively decided social goals rather than to the special interests of employers?

There is one special sort of expertise that is especially relevant here: expertise in political machinations, especially rising to positions of power and exercising authoritarian rule, in an organisation or an entire society. For the purposes of achieving a more equal society, this sort of expertise would be discouraged and replaced by widely acquired skills in cooperative living and participatory decision-making.

Using Lord Acton's adage that power tends to corrupt, it's reasonable to say that skills directly relevant to the acquisition or exercise of power over others are most dangerous. Conversely, skills not linked to unequal power are less risky. Skills in equalising power are especially valuable. Examples include facilitating meetings, resolving conflict, dealing with bullies, designing participatory conferences, organising poor people, promoting appropriate technology, and opposing repressive rulers.

Do those with experience in exercising power actually have superior performance? A long-serving politician may be perceived as skilled in marginalising challengers, dividing the opposition party and manipulating issues to win elections, in the tradition of pragmatic autocrats (Greene 1998; Machiavelli 1992). But it is hard to test whether politicians acknowledged as crafty are indeed expert performers; maybe they are merely survivors in a ruthless game whose outcomes depend more on luck than skill. In any case, some undesirable forms of expert performance are undoubtedly possible, such as killing (Grossman 1995) and designing antipersonnel weapons (Prokosch 1995).

Some activists are highly suspicious of experts, even those aligned to social movements, often for good reason. Someone who stands out as highly knowledgeable or an eloquent speaker may be taken up by the media as a spokesperson, thereby gaining a disproportionate influence on the direction of a group or an entire movement, often at the expense of others' participation. A talented figure can be a source of envy. Others may leave key tasks to the expert and not try as hard as they would otherwise. A group can become dependent on a single person and vulnerable to that person's disaffection or departure.

Once again, the key problem is systems of expertise linked with systems of power. An eloquent speaker can parlay that talent into influence within a group, or possibly leave for a conventional political career. A key task then is to ensure that expertise serves to empower many others rather than just a few.

This is not easy. Lily Hoffman, who studied US activist movements among medical and planning professionals, found four main strategies. Firstly, the activist professionals could promote better distribution of professional services, for example to the poor. Secondly, they could empower people to demand services. Thirdly, they could organise the professional workplace. Fourthly, they could act as a vanguard to change society. However, each of these strategies came unstuck in the politics of knowledge: when radical professionals try to undercut professional knowledge, they undermine their credibility among clients. Hoffman (1989, p. 201) concludes that "it is difficult to be both professional and political at the same time and in the same place."

Critics of expertise-power systems have often argued for sharing of knowledge and skills. Experts are less of a threat if others know what is involved. If everyone knows the basics of how to write a press release, then an expert press-release-writer is less likely to be able to set the agenda for a group. But there are limits to sharing, because expert performance does not come easy. It requires a lot of work over a long time.

How to be an expert

Research into expertise over the past few decades has shown that experts are made, not born. Becoming an expert requires deliberate practice — lots of it — over many years (Goldberg, 2005; Howe, 1999; Restak, 2001).

Consider for example *The Cambridge Handbook of Expertise and Expert Performance*, a massive compendium of research reviews (Ericsson et al., 2006). The book includes studies of expertise in a wide variety of fields, including chess, mathematics, transportation, medicine and acting, studies of how to analyse expertise, and studies of theoretical and empirical connections between expertise and other fields.

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One finding is the "ten-year rule." Across a wide range of fields, it seems to require at least a decade of deliberate practice and training to produce world-class achievements. This applies to Mozart and the Beatles as well as to writers, inventors and athletes (see also Gardner 1993). Even child prodigies seem to take this long for their breakthroughs; they simply start much earlier.

However, doing something for ten years — in other words, having lots of experience — is not enough to become an expert. What is required is "deliberate practice", namely concentrated, conscious effort at improvement. An amateur musician, for example, may have lots of experience playing through pieces, but a high-level professional will spend untold hours practising ever-more-difficult pieces, striving to master them.

As one set of chapter authors puts it, " ... to improve performance it is necessary to seek out practice activities that allow individuals to work on improving specific aspects, with the help of a teacher and in a protected environment, with opportunities for reflection, exploration of alternatives, and problem solving, as well as repetition with informative feedback" (p. 60).

Deliberate practice is hard work. According to one contributor, "Expert performers from many domains engage in practice without rest for only around an hour, and they prefer to practice early in the morning when their minds are fresh." How frequently do experts practise? "... elite performers in many diverse domains have been found to practice, on the average, roughly the same amount every day, including weekends, and the amount of practice never consistently exceeds five hours per day." (p. 699). Too much practice can lead to burnout.

The really important implication of this research is that virtually anyone can become highly skilled in some area, given suitable opportunities and willingness

to practise. Humans have much the same brain material. Thinking and acting change the structure of the brain — the system of neural connections — as well as its content, and concentrated effort over a long period can cause the brain to be structured in a highly efficient way for particular tasks. The key to expert performance is training the brain, and just about everyone can do it to a considerable extent, barring major organic dysfunction.

Brain structuring starts before birth and continues until death. Not everyone has the same opportunities, so expertise in any given field is not equally available to all. Nevertheless, the capacity of most humans to train their brains for specialised purposes throws a new light on the connection between expertise and equality.

Another important general finding is that skills are highly specific to limited domains, reflecting the adage that experts know more and more about less and less. Hardly anyone achieves world-class skills in multiple areas, being both a swimming champion and performing violin concertos, or even performing both violin and cello concertos.

If expertise is highly specific to domains, this gives no support for experts having a disproportionate decision-making role. You can trust a skilled pilot to fly a plane, but not to make superior transport policy decisions. You can trust a skilled organic gardener to produce nutritious vegetables but not to make superior agricultural policy decisions. You can't trust a skilled political liar at all.

Implications

I've argued that expertise can act against efforts to achieve equality when it is a source or support of power over others, and expertise in the acquisition and exercise of power is the most dangerous. Expertise is less risky if it is not linked to power, and best when it serves to equalise power.

Experts are made, not born, which means there is a great potential to reorient expertise to serve society rather than the interests of elites and experts themselves. There are three main ways to go about this. The first is to oppose harmful, self-interested and power-serving expertise. A key to this is exposing the role that experts play in damaging activities (whether designing cluster bombs or justifying inequality), protecting their own privileges while excluding outsiders from decision-making, or serving powerful groups. Experts can be challenged by questioning their facts and their assumptions and by questioning the credibility of individual experts or of expertise more generally (Martin, 1991; Richardson et al., 1993).

The second way to reorient expertise is to promote beneficial expertise. This can be done by making this sort of expertise better known, by honouring its practitioners, by explaining what it involves and by defending worthy experts when they come under attack. It is especially important to support and defend sorts of expertise that are not widely recognised or lauded. A person skilled at organising business meetings can make a lot of money and be recognised by peers, but a person skilled at organising protests has fewer career prospects. There may be greater intrinsic satisfaction in organising protests, but the question to ask is what incentives should exist to promote greater expertise.

The third way to reorient expertise is to set up decision-making systems that equalise power while using and promoting beneficial expertise. The goal is to sever the connection between expertise and domination. One method is selecting decision-makers randomly, as in a jury. Jury members listen to experts and hear different points of view, but make their own decisions following deliberation. This is quite different from decisions made by judges, who are experts in their own right. A judge has legitimacy — a social mandate — for ongoing exercise of power, whereas jury members do not, because they are there, by the luck of the draw, for a specific purpose. Random selection can be used to select decision-makers for policy purposes in what are called citizens' juries (Carson and Martin, 1999).

No doubt there are many other possibilities. The investigation and promotion of systems to promote beneficial expertise has hardly begun. This is a good area in which to develop expertise!

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