Law as Engineering is a provocative and stimulating book that asserts that lawyers are designers, and further that the type of designers that they are most closely aligned with are engineers.

The book starts with a lively account of earlier explorations of law and lawyers as social and legal engineers. The tradition most prominent in this account is the legal realist tradition, and the most prominent writer is Karl Llewellyn. Lon Fuller is also given respectful attention. One demarcation made in the introduction that is important for the book is the distinction between policy and law. The engineering of interest to Howarth is centred in legal drafting, of statutes and contracts, not in legal policy and grand schemes of social engineering. The autonomy of the law, both as a practice and as an academic subject, is tied up with this distinction between policy which is political and legal craft which is legal proper. The other task of the introduction is to suggest that our paradigm of the lawyer is wrong. Most lawyers are not concerned with litigation: the paradigm should not be lawyers as dispute specialists but lawyers as creators of legal devices such as statutes, companies, contracts and property interests. With this more realistic paradigm in place it is then possible to see more clearly the similarities with engineers who make devices.

Howarth locates his work alongside or as part of the self-proclaimed “new legal realists” movement. However, it seems congruent with many other contemporary approaches to ethical theory, legal theory, law, legal practice, and legal education. Consider the following attacks on the primacy of theory over practice:

Howarth on the relationship between science and engineering:

“Engineers are not even ‘applied’ scientists, in the sense of those who merely take advances in theoretical knowledge and apply them to practical problems … it is mistake to believe that the intellectual movement is always from science to engineering. The contrary movement is also important … many engineers claim that engineering is not merely applied science because it generates its own forms of knowledge … that engineering knowledge is not just ‘know-how’, a set of unspoken practices, but knowledge that can be stated clearly, tested and transmitted.”


2 David Howarth, Law as Engineering (2013) Edwin Elgar Cheltenham at pp. 54-55.
Howarth on his vision for legal research:³

“Academic engineers study how practicing engineers create new useful objects. Their objective is to take engineers’ implicit, unspoken ‘know-how’ and to turn it into explicit knowledge … They systemise what engineers do and make it explicit, but they also study the existing processes’ successes and failures … so they can suggest improvements … There is a template here for legal research.”

Carnegie report on the primacy of practice:⁴

“Formal knowledge is not the source of expert practice. The reverse is true: expert practice is the source of formal knowledge about practice. Once enacted, skilled performance can be turned into a set of rules and procedures for pedagogical use, as in the cognitive apprenticeship. But the opposite is not possible: the progression from competence to expertise cannot be described as simple a step-by-step build-up of the lower functions. In the world of practice, holism is real and prior to analysis. Theory can – and must – learn from practice.”

MacKinnon on the split between high status theory and low status clinical practice in legal education:⁵

“The theory/practice split inherited from male dominance has not served women conceptually or practically. I doubt it serves legal education either.”

Toulmin on the proper role and use of ethical theory as subordinate to moral practice, rejecting the ideas that theory is foundational for practice or the source of principles that are then somehow simply ‘applied’ in specific cases:⁶

“This brings into focus the relation of Ethical Theory to Moral Practice, which comes onto center stage at this point: the central issue is not the timeless question, ‘What general principles can be relied on to decide this case, in terms that are binding on everyone who considers it?’ but rather the more timely question, ‘Whose interests can be accepted as morally overriding in the situation that faces us here and now?’”

“Theory (so to speak) is not a foundation on which we can safely construct Practice; rather it is a way of bringing our external commitments into line with our experience as practitioners.”

Ferris and Johnson on the purposes of legal education:⁷

---

³ Ibid. at p. 158.
“There has been an implicit assumption that legal education should be about exposition and evaluation, and should reward facility in exposition and theoretical awareness. This theoretically based assumption generates a theory-induced blindness … The role of lawyer as rule entrepreneur is lost sight of. One alternative assumption about legal education would be that law is a game like activity; and legal education should be directed towards promoting those qualities that would enhance performance in this game … We argue for a clearer awareness of the role of rule entrepreneurship in clinical programmes and in legal education generally.”

Finally, pre-dating these twenty-first century attempts to subordinate theory to practice is Bernard Williams on theory (bad) critical reflection (good) and life (the point of it all). 8

“Theory looks characteristically for considerations that are very general and have as little distinctive content as possible, because it is trying to systemize and because it wants to represent as many reasons as possible as applications of other reasons. But critical reflection should seek for as much shared understanding as it can find on any issue, and use any ethical material that, in the context of the reflective discussion, makes some sense and commands some loyalty. Of course that will take things for granted, but as serious reflection it must know it will do that. The only serious enterprise is living, and we have to live after the reflection; moreover (though the distinction of theory and practice encourages us to forget it), we have to live during it as well.”

These various currents are not obviously the result of conscious borrowing and active discourse. The cross-references between them are surprisingly few. The Carnegie report is not referred to in Howarth; and neither the Carnegie report nor Howarth refer to the work of Toulmin or Williams; and MacKinnon is not referred to in Carnegie or Howarth. It seems that the twenty-first century academic zeitgeist rejects the traditional primacy of theory over practice and Law as Engineering can be best understood in this broader intellectual context.

Chapter 2 is devoted to the question “What do lawyers do?” is excellent. It reviews a lot of research on legal services and is persuasive on the need to give a higher profile to transactional lawyers in accounts of legal professional practice. The material on legislative draftsmen is interesting and informative and this reader certainly profited from the attention given to the work of these specialists. The material on the work of City lawyers is also well assembled and structured. The transactional lawyer and the legislative draftsman are both

---

7 Graham Ferris and Nick Johnson, Practical Nous as the Aim of Legal Education? (2013) 19 International Journal of Clinical Legal Education at 271. Howarth in Law as Engineering notices rule entrepreneurship but does not emphasise its importance at p. 196. However, the role of the legislative draftsman is given great emphasis in the book. It seems Howarth retains a technocratic view of legal practice: see pp. 151-158 and p. 167. However, he is clearly very concerned with the ethics of legal practice and pp. 168-169 suggests he thinks ethical lawyering can temper, minimise, or even avoid unethical practices. The section of the Nottingham Law Journal devoted to “Practical Applied Legal Theory” is an attempt to encourage thinking about the relationship between practice, real life, and theory.

seen as producing documents which are the form of the devices that lawyers design. This means that social interactions are rather downplayed: negotiation, team building and management, and oral communication fall into the background as necessary antecedents of the final documents. The textual bias may be due to a desire to downplay the oral aspects of the role, because the oral and situational has traditionally been emphasised in the lawyer as advocate paradigm that Howarth is trying to supplant.

The chapter does have a rather partial focus on commercial private practice and legislative drafting. Howarth shows awareness of the relative neglect of lawyers who do not serve powerful institutions, whether public or private. However, he seems to assume transactional lawyers working for private clients do the same sort of thing as City lawyers at a less exulted level. He develops one example from private client work, specifically will drafting, to highlight key aspects the transactional lawyer’s role. The whole chapter is a very useful corrective for unreflective characterisations of legal services as being concerned with disputes and courts.

The following chapter “Law as engineering” is also excellent. It gives a fascinating account of academic engineering. It is hard to disagree with Howarth’s judgment that the engineers have a far better articulated and differentiated account of the practice of engineering than academic lawyers have managed to produce of the work of transactional lawyers. The chapter goes on to compare the roles of the drafting lawyer to the engineer and the comparison is interesting and generates novel insights. Finally, the chapter allows for the possibility of allowing litigators into the engineering fold. Together these two chapters constitute sufficient reason to read this book. The similarities between law and engineering are powerfully delineated. The material assembled is instructive and excite intellectual curiosity and engagement.

The fourth chapter “Implications (1) – Professional ethics” works less well. The central contention: that the ethics of transactional lawyers, those involved in non-contentious work, need far greater attention is surely correct. The criticism of assertions in non-contentious fields of ethical positions justified by systemic features of adversarial advocacy is well made. Identification of a problem with the effects of legal advice and services on third parties to the lawyer client relationship is sound. Thus, the chapter is valuable. However, the examples chosen to illustrate these problems do not work very well. The examples are chosen to link legal ethics to the banking crisis, and this renders the argument rather artificial. The systemic causes of the banking crisis were not driven by legal practices. It would have been better to use situations that have already been discussed in the literature on professional ethics. This

---

9 Linklaters’ advice letter on Repo 105s in the context of Lehman Brothers business, and the assembling of derivatives for Goldman Sachs that the bank shorted.


11 For example: William H. Simon, The Practice of Justice: A Theory of Lawyers’ Ethics (2000) Harvard University Press, Cambridge MA develops some pertinent cases that could have been discussed. The cause lawyer literature also offers illuminating discussion of the relationships between the personal ethics of the person who is a lawyer, the ethics of the lawyer as professional, and the ethics of the practice of the client. The treatment of the extensive and varied literature is disappointing. Finally, the problem of ethical action in the
is because better examples are available in the literature, and the repeated examination of the same problem scenarios from different perspectives can produce a more generative and elaborated discourse: one might refer to the related literature developed around runaway trolleys in ethical discourse. Thus, novelty of presentation here was at the expense of the potential value of the discussion. However, as noted the questions raised are pertinent and important and the discussion of analogous engineering ethics is valuable.

The fifth chapter “Implications (2) – Legal research and teaching” is a useful contribution to ongoing debates about the Law School. The assumption that lawyers do and should serve the powerful is evident once more, and there is no counter-balancing example from private client practice. Also, from a UK Law School perspective there is a neglect of those students who study law but do not go into practice.

The differentiation between policy and law is also active. The distinction tends to introduce a division between purpose and technical implementation. It is an instrumentalist view of law that Howarth advances. He then superimposes a duty to have regard to the uses made of legal devices taken from ethical discourse in engineering. In effect he places role morality and public benefit in an uneasy and unresolved relationship of tension. He has identified problems with extending the role morality of the advocate to the transactional lawyer but has not given enough attention to the role morality of the transactional lawyer.

The suggestion that rules are legal materials the way that engineering has materials and that research into rules is usefully analogous to research into metals and plastics is unpersuasive. Rules are words, or social practices, or logical relations, or authority bestowing conventions, or plans of action amongst other things. If there is to be a science of materials then the subject matter would have to be: the speech act or written equivalent (the operative words of a deed); the interpretative community; community norms of action (where community is defined by relationship or practice e.g. those people and organisations who work in the construction industry). The focus on the text that was present earlier returns and it is not just the advocate it displaces: it is the social situation that is obscured. If this is correct then Howarth’s attempt to demarcate the social sciences and academic law also breaks down. The argument that doctrinal law serves by providing construction materials seems to be a return to a rather abstract naïve view of law. Practice is about what works, and sometimes rules work in practice. The movement from this to: all that is important for practice is clear rules; seems illegitimate. Construction of contracts and dispositions is uncertain in practice because the text, the rules or words, are not autonomous of communities of practice as Howarth recognises elsewhere.

---

face of pressure is clearly identified as an important issue in the context of the Challenger disaster, but no attention is given to the literature on moral courage and efficacy e.g. Mary C. Gentile, *Giving Voice to Values: How to Speak Your Mind When You Know What’s Right* (2012) Yale University Press, New Haven.

The fifth chapter is thus provocative and intriguing but not wholly successful in its own terms. Perhaps the sheer bravado of attempting a reformist account of the entire activity of the academic legal community in a single chapter is intended to imply that the treatment is tentative and exploratory, and an invitation to debate, rather than the final word on the subject from the author. It certainly kept this reader engaged, although ultimately it was unpersuasive.

Finally, Howarth’s conclusion deals with “objections” to the idea of law as engineering and highlights the promised benefits of the approach. It keeps up the clear style but it suffers from the vice of setting up weaker positions to overcome than could be established. The benefits it identifies are also a little speculative.

In conclusion this book is entertaining, informative, engaging, and provocative. It is well written and referenced, the index is good and useful, the physical book feels and looks good. If seen as an attempt to reformulate how law and lawyers are seen by themselves and others, and how law is taught and researched, then I very much doubt it will succeed. However, if viewed as one work in a current that reflects a zeitgeist that rejects genuflection to systemic theorising in the legal academy then it is a useful and helpful contribution to the discourse. The book places legal practice in the field of making, and depicts legal practice as primarily about making useful devices. It introduces to a legal audience an academic and practical discipline that does have real similarities with law. It thus allows fruitful generalisation and creative appropriation of concepts from engineering. It is certainly worth reading and reflecting upon.

GRAHAM FERRIS*
Reader in Law
Nottingham Law School