

From Prominence to Demise: The Disappearance of Expert Systems

Experts and professional organizations are a relatively recent addition to societal life. However, the role of experts is weaker now than in its developmental days of the 19th and 20th centuries. Experts systems arose in the 19th century as part and parcel of the deterministic governing laws, as well as inexorable casual laws (O'Malley 2000). Consequently, expert systems reflected specific economic situations, such as the control of economic risk via insurance. This reliance on expertise not only undermined the ethos of uncertainty, but experts and skilled credentialed professionals became a necessity to manage risk and personal affairs (see Menger 1981). Freidson (2001) credits the 19th century onwards with increases in forms of specialization in both formal and technical knowledge. The development of the intellectual form of specialization led to the era of experts and expertise. Semi-skilled labourers, or 'mechanical skilled labour' as Freidson (2001) prefers, represent the first early form of 'expert skill'; however, the term 'semi-skilled' implies that anyone could perform this type of work as it was deemed as simple and non-intellectual. Discretionary specialization, as the second type of 'expert skill, requires the possession of a body of knowledge gained through processes of special training, such as an apprenticeship, university education, diploma or certification process (Freidson 2001; see also Braverman 1974). As a result, those who perform discretionary specializations are experts or specialists. While Freidson (2001) admits that tasks within this realm of specialization may be narrow, minute, detailed or specialized, the tasks require the use of discretionary judgment by the workers in order to produce a success product and/or service.

While the 19th century witnessed the development of early expert systems and skill, the 20th century was not without advances. Government deployment of uncertainty occurred through the utilization of experts and their skills (O'Malley 2000; Reed 1996). The increasing mobilization of skill and expert systems in the 20th century marked a distinction between classical and neo-liberalism. Access to expert advice was a crucial part of the neo-liberalist era; experts, through their skilled credentials, provided laypersons with knowledge in order to make informed decisions and minimize overall harm and risk. Moreover, the growing dependence on experts led to a technocracy, where knowledge itself does not give power; "only exclusive knowledge gives power to its possessors" (Freidson 1994: 67).

Essentially, skill and expertise is equivalent to formal knowledge. As a principle axial in modern society, expertise is formal knowledge as it is not for "common people or the common, specialized trades" (Freidson 1986: 3; see also Bell 1976; Braverman 1974). Requiring specialized skill and training, experts occupy a distinctive niche in both professions and society, more generally. Experts represent bearers of knowledge for governments, social institutions and organizations, as well as laypersons. As Hardwig (1985) argues, the average citizen or layperson has too many questions and ideas to even possess the knowledge to determine the answers independently. Consequently, laypersons rely on experts to provide them with a rational explanation of a situation to which the laypersons seek answers. Accordingly, laypersons are "epistemically dependent on the authority of experts for all but the beliefs on which he or she is an expert" (Hardwig 1985:336).

While expert systems, skills and credentialism gained prominence from the 19th century onwards, expert systems are now facing disablement. As some scholars suggest, expert systems and credentialism now increasingly face occupational demise, closures, non-traditional modes of operation and vulnerability in the effectiveness of these expert systems (Muzio et al 2007; Freidson 1994; 2001; O'Malley 2000; Reed 1996). This movement faces further depletion in the advent of self-help and do-it-yourself philosophies which mitigate the need of expert services. Through experiential knowledge, this phenomenon enables laypersons to engage in the same tasks, behaviours and work, which experts once did exclusively (Borkman 1986). By employing experiential knowledge in lieu of expert advice, expert systems and skilled credentials become undermined. Thus, a minimization of the credentialed professional occurs, affecting the state of professionalism and value placed on skill, more generally.

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Key References

- Arney, W.R. (1991) *Experts in the Age of Systems*, Albuquerque, New Mexico: University of New Mexico Press.
- Braverman, H. (1974) *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*, New York: Monthly Review Press.
- Freidson, E. (1986) *Professional Powers*, Chicago: University of Chicago Press.
- Freidson, E. (ed). (1973) *The Professions and their Prospects*, Beverly Hills: Sage Publications.
- Macdonald, K.M. (1995) *The Sociology of Professions*, London: Sage Publications, Ltd.
- Pierson, Robert. 1994. 'The Epistemic Authority of Experts', *The Philosophy of Science Association*. 1: 398-405.
- Wright, G. and F. Bolger (eds). (1992) *Expertise and Decision Support*, New York: Plenum Press.

References

- Bell, D. (1976) *The Coming of the Post-Industrial Society*, New York: Basic Books.
- Borkman T. (1976) 'Experiential knowledge: a new concept for the analysis of self-help groups.', *Social Service Review* 50 (3):445-56.
- Braverman, H. (1974) *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*, New York: Monthly Review Press.
- Freidson, E. (1994) *Professionalism Reborn*, Chicago: University of Chicago Press.
- Freidson, E. (2001) *Professionalism The Third Logic*, Chicago: University of Chicago Press.
- Fuller, S. (1986) *Social Epistemology*, Bloomington and Indianapolis: Indiana University Press.
- Hardwig, J. (1985) 'Epistemic Dependence', *The Journal of Philosophy*. 7: 335-349.
- Menger, C. (1981) *Principles of Economics*, New York: New York University Press.

- Muzio, D., S. Ackroyd, and J.F. Chanlat (eds) (2007) *Redirections in the Study of Expert Labour: Established Professions and New Expert Occupations*, Basingstoke: Palgrave
- O'Malley, P. (2000) 'Uncertain Subjects: Risk, Liberalism, and Contract', *Economy And Society*. 29: 460-484
- Reed, M.I. (1996) 'Expert Power and control in late modernity: an empirical review and theoretical synthesis', *Organization Studies* 17 (4): 573-597.