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Rethinking the Hawthorne Studies: The Western Electric research in its social, political and historical context

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Abstract

In primary accounts of the Hawthorne Studies (1924–32), the host organization, Western Electric, is treated as a largely anonymous actor. Through case-based historical research we find such treatment masks the distinctive profile of the company in the years preceding and encompassing the Hawthorne investigations. Besides its significant industrial standing, when Western's reputation for welfare capitalism is considered alongside a tragedy that galvanizes its Hawthorne workforce, the company emerges as an iconic manufacturer with a singular cultural inheritance. Unlike previous retrospective studies, this research explains a range of social and political factors that shaped the Hawthorne Works at this time. In particular, it describes how an ostensibly 'human relations' philosophy had been espoused at Western prior to Elton Mayo's arrival in 1928, but that this outwardly 'progressive' ethos was underpinned by hard-edged paternalism and tough-minded anti-unionism. Later, during the 1930s, an increasingly challenging organizational climate developed at Western as a result of the Great Depression coupled with exigent AT&T policies. Findings from this research can be contrasted with 'enlightenment' or 'revelatory' narratives on Hawthorne as expressed in management textbooks. The article offers, at once, fresh insights into the history of Western Electric and new interpretations of the Harvard-influenced research conducted therein.

Keywords

AT&T, Bell System, Elton Mayo, Harvard Group, Human Relations School, organization and management theory, *SS Eastland*

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The Hawthorne Studies, 1924–32 (see Roethlisberger and Dickson, 1939) are the largest, best known and most influential investigations in the history of organizational research. They are associated primarily with the Harvard Business School professor Elton Mayo and the research team he joined at the Western Electric Company's Hawthorne Works, Cicero, Illinois in 1928. For many decades results from the Studies have formed a bastion of the 'human relations' approach in organizational behaviour, through producing theory and evidence that seemingly first challenged and then later rejected the assumptions and principles of 'scientific management' (Taylor, 1911).

Although the Hawthorne Studies are well known, the context in which these ergonomic, psychological and sociological investigations were conducted is less so. Indeed it has remained an essentially anonymous actor in the main research accounts subsequently produced. While organizational scholars have focused persistently on the various phases that comprised the investigations, they have given far less consideration to a range of social and political factors that shaped the host enterprise and its workforce at this time. It is argued that to achieve a more grounded and balanced narrative on Hawthorne – one that takes account of the circumstances of the setting in which the investigations were conducted – greater attention needs to be paid to contextual issues related to the firm's strategy, management and culture.

The principal question the article asks therefore is: *What kind of enterprise was Western Electric around the time of the Hawthorne Studies?* It is answered through research that considers two contextual issues: on the one hand, the nature of the company's corporate context – through analysis of its industrial reputation and business philosophy; and on the other, the firm's cultural context – through examination of its social organization and communal experience. As a result of these inquiries we find that by the early 1920s, rather than being an unexceptional firm, Western Electric had developed into one possessing a distinctive corporate profile and singular corporate culture. In particular, prior to the arrival of Elton Mayo, at face value it was a 'progressive' company espousing many 'human relations' style philosophies, although not for the reasons ascribed by mainstream management theory. Detailed knowledge of such factors directs us to offer not only fresh insights into the history of the Hawthorne Works but also new interpretations of the Harvard-influenced research conducted therein.

The article is developed in three phases. The first lays the theoretical and methodological foundations through considering the value of contextual research for understanding the Western Electric Company, the Hawthorne Works, and the Harvard Group investigations. The second addresses the task of developing contextual research on Hawthorne: here we research two cases relevant to understanding the character and climate of the organization in the early decades of its history. The third phase sees findings from these accounts discussed as part of a contextually informed approach to realizing and interpreting qualitative historical research in management and organization studies.

Rethinking Hawthorne contextually

> The investigators never undertook a systematic study of the social organization of the company, and it is therefore impossible to characterize it in detail or entirely accurately. (Roethlisberger and Dickson, 1939: 538)

Researching beyond the closed system

In organization and management theory a major criticism of research on the Hawthorne Studies is that it represents ‘closed-system’ analysis. In other words, as the focus is upon explaining a handful of social science investigations, the research base tells us relatively little about the culture or climate within which the host organization operated (see Burrell and Morgan, 1979; Katz and Kahn, 1966; Scott, 2003). Such contextual neglect is an anomaly given that, rightly or wrongly, the Hawthorne Works is synonymous with stimulating the most notable ‘paradigm-shift’ in the history of organizational research: scientific management to human relations.[1] Even where respected scholars suggest they are studying, more holistically, the ‘origins’ of the Hawthorne Studies (e.g. Wrege, 1976) the analysis is confined largely to technical issues relating to the investigations themselves.

A corollary of such closed-system investigation is that in the majority of studies on Hawthorne the host organization is treated as a commonplace location for conducting research in industry. The Hawthorne Works is portrayed as an unexceptional site from which results can be generalized; a seemingly representative organization in case-study terms. The inference is that while the experimental site is ordinary, the empirical results – regarding group dynamics, informal organization, management style, work satisfaction, etc. – are extraordinary.

In contrast, the historical analysis developed here is concerned not so much with revisiting the various phases of the Hawthorne investigations (see Bramel and Friend, 1981; Carey, 1967; Franke and Kaul, 1978; Greenwood et al., 1983; Landsberger, 1958; Pitcher, 1981; Wrege, 1976; Wren and Bedeian, 2008; York and Whitsett, 1985) as defining the character of Western Electric as a corporate actor and employer (see Adams and Butler, 1999; Fagen, 1975, 1978; Gillespie, 1991; Wachholz, 2005). It is argued that when the company’s reputation for scientific and technological innovation is considered alongside, its paternalism, anti-unionism and singular cultural legacy, for example, the Hawthorne Works emerges as a very particular location for conducting management and organizational research.

Deconstructing habitual narratives

This article therefore wishes to define the setting within which a famous episode in management history took place – the Hawthorne Studies. In so doing it relates to a body of literature that has sought to identify wider contextual factors influencing the Studies and in particular Elton Mayo’s Harvard-based research group at this time (e.g. Bruce and Nyland, 2011; Gillespie, 1991; Nyland and Bruce, 2012; O’Connor, 1999; Smith, 1998; Wrege, 1976; Wren, 1985; Wren and Bedeian, 2008; Wren and Greenwood, 1998). Amongst other things, such research has served to deconstruct and critique an habitual *revelatory* narrative in textbooks on organization and management theory – one where Western Electric (an authoritarian, bureaucratic corporation, ignorant of human factors) is enlightened following the arrival of behavioural scientists from Harvard and their ‘discovery’ of human relations at work. This body of anti-revelatory analysis offers a richer and wider canvas on which to portray the host corporation and the famous series of organizational investigations conducted therein.

Among research that has developed such an anti-revelatory approach, that by Gillespie (1991) has been seminal. Gillespie questions just *how* revelatory the findings from the various Hawthorne investigations were. He focuses not so much on the technical specifics of the experimental phases as on broader issues related to them, such as methodological insights revealed in the personal communications of the Hawthorne researchers. Gillespie argues, for example, that when the initial (pre-Harvard) Illumination Experiments commenced at Hawthorne, in November 1924, both superintendents (e.g. George Pennock, Clarence Stoll) and researchers (e.g. Homer Hibarger, Charles E Snow) alike were *already* aware that 'human factors could influence production and thereby interfere with the experimental results'. As a result they 'did all they could to minimize this effect' (p. 42). In contrast to the standard narrative of contemporary textbooks in organizational behaviour, Gillespie argues that the researchers were aware of a range of wider social-psychological influences on the experiments − such as the 'Hawthorne Effect' (French, 1950: 82) − from the day the Studies began. Thus, such forces did not have to be 'discovered'. Recent research has noted, similarly, that when Mayo and the Harvard Group initially published their findings, industrial commentators such as Mary B Gilson suggested that they had not actually 'discovered' anything that was not already widely known in American industry (see Gilson, 1940; Nyland and Bruce, 2012; Wrege and Greenwood, 1982).

With regard to the Harvard-influenced research, Gillespie also assesses the context in which the scientific discourse of the Mayo Group was produced. In the process, he questions the degree of intellectual integrity that the Hawthorne Studies narrative possessed. Gillespie suggests that the seemingly 'logical and unambiguous' narrative of 'scientific discovery' in Roethlisberger and Dickson (1939) was actually 'constructed' in the face of 'disagreements between the researchers over interpretation and meaning' (p. 175). He describes how 'the factory site' for this evidential 'production process' was not so much 'the Hawthorne plant of Western Electric' but rather 'Elton Mayo's Industrial Research Department at Harvard Business School' (p. 175). In other words, as presented in *Management and the Worker* (Roethlisberger and Dickson, 1939), the narrative developed by Mayo's research group emerged as much from internal politics at Harvard as scientific evidence from Hawthorne.

A kindred line of analysis, but focusing on a wider set of contextual influences, is found in network-based research by O'Connor (1999) and Bruce and Nyland (2011). Both studies adopt an anti-revelatory or deconstructive stance through suggesting that Mayo's social networks and right-wing politics influenced the kinds of evidence claimed for by the Harvard Group. O'Connor's work, for example, documents the influence of Mayo's political ideology on the early development of the Human Relations School (HRS) at Harvard Business School (HBS). Identifying relationships between key members of the HBS-HRS social network − notably Wallace Donham, Dean of HBS, 1919−1942; Beardsley Ruml, Director of the Laura Spelman Rockefeller Memorial fund (which funded Mayo's research); John D Rockefeller Jr (who backed Mayo's research amidst concerns over labour relations in his industrial empire: see Bottom, 2006); and Mayo himself − O'Connor (1999: 117) describes how the HRS and HBS achieved success by 'positioning themselves as solutions to pressing social, economic, and political issues of the period between World War I and the New Deal'. She argues ultimately that this network facilitated 'the powerful alignment of the HRS and the HBS agendas in relationship to national, corporate and research agendas of the day' (p. 117). Mayo's political ideology was successful in that it 'convinced business leaders that his agenda would solve their worries' (p. 129) with this network of influence extending to the executives of the Western Electric Company. O'Connor's contribution can be summarized in the argument that: 'Scholars often note that Mayo entered the Hawthorne studies when they were already in progress. They note less that Mayo entered them at a time when his own ideas about politics and psychology were fully formed' (p. 125) (see also Bourke, 1982).

Similarly Bruce and Nyland (2011) develop a network-based explanation of contextual forces influencing the work of Mayo and the Harvard Group, one underpinned by actor-network theory (see Latour, 2005). Their research complements O'Connor's (1999) through challenging the orthodox view that the HRS emerged in the interwar years 'as a response to the alleged inhumanity and simplistic innovation the Scientific Management tradition was striving to develop within the workplace'. In contrast, Bruce and Nyland argue that the HRS was in fact a 'right-wing and decidedly undemocratic innovation that was developed in response to the demand from organized labour that workers be ceded an active and significant part in management decision-making'. They describe how Mayo and the HRS were able to 'translate the prevailing context and in so doing create a forum in which powerful actors came to agree that the Human Relations school was an innovation worth building and defending'. Whereas O'Connor's analysis of the politics of achieving legitimacy focuses primarily on the relationship between the HRS and the HBS, for Bruce and Nyland it is the link between Mayo's work and the interests of key industrialists, notably John D Rockefeller Jr, that is critical.[2]

Theory and method

This article is directed similarly at promoting contextually informed research on Hawthorne. In so doing, however, the analytical trajectory is different from that of Gillespie (1991), O'Connor (1999) and Bruce and Nyland (2011). Rather than focusing on Elton Mayo and the social networks connected to him, the investigation concerns, instead, the reputation and culture of the host corporation in the period prior to and encompassing the Hawthorne Studies.

The emphasis is placed, primarily, on developing a concept of 'prior context', or considering the 'parts that immediately precede' an event or era and which serve to 'clarify its meaning' (*Oxford Compact English Dictionary*, 1996: 212). It is important to note here that the intention is not to specify direct causal links between contextual factors and events in a firm's history, but rather to describe, qualitatively, the culture, atmosphere and environment in which certain organizational factors emerged and were developed. Put simply, the objective is to provide a broader sociological perspective on the company than is characteristically offered in the normative closed-system treatment of Hawthorne in management and organization studies.

As much as the Harvard-based offerings that first disseminated the Hawthorne findings (e.g. Mayo, 1933; Roethlisberger and Dickson, 1939; Whitehead, 1938), this charge of contextual omission can be levelled at a major reanalysis of the Studies – Landsberger

(1958) – as well as the principal biographical work linked to them: Trahair's (1984) study of Mayo. Even in Gillespie's (1991) analytically more rounded study of Hawthorne, contextual analysis is frequently restricted to details of factory organization, industrial relations systems and personnel policies: the broader industrial reputation and cultural character of the Works are factors that have hitherto not been explored extensively. The present research, therefore, aims to resolve this problem by redirecting organization studies away from the well-documented *logic* of research at Hawthorne towards the less familiar *context*.

Developing contextual accounts

To address the central research question ('what kind of enterprise was Western Electric?') we develop historical accounts relevant to understanding, respectively, the corporate and cultural character of the enterprise.

The first case (the 'neglected corporate context') assesses the industrial reputation and corporate philosophy of the early Western Electric Company. In so doing it draws information mainly from secondary sources, in the form of company histories and studies of American capitalism. The case is also informed by evidence from primary sources – for example, advertisements, catalogues, manuals and photographs; these were consulted during two visits to the Hawthorne Works Museum (Morton College, Cicero) in 2010. During these visits assistance in locating materials was provided by the Docent of the Museum, a former Hawthorne Works manager. In addition, sources from the Western Electric and Hawthorne Studies collections at Baker Library, Harvard Business School, were consulted during a visit in 2011.

The second case (the 'neglected cultural context') focuses on the communal experience of Hawthorne employees and specifically the symbolic impact of a tragic event on the workforce and local community. The case is informed by a range of primary and secondary sources. Those of most significance were again made available by the Hawthorne Works Museum, and included internal company documents (letters, memos, notices, etc.), volumes of *Western Electric News* (1912–33), and other in-company publications (e.g. *Hawthorne Microphone* and *Western Electric Magazine*). Assistance in their collection was again provided by the Docent. Other materials consulted in developing this case include academic studies in maritime economics, research by Chicago local history societies, internet sites, and documents from the Baker Library collections.

Historical approaches

Methodologically these case accounts adopt respectively two approaches to historical research: 'historical deconstruction' and 'ethnographic history' (see Hassard and Rowlinson, 2010). They also reflect, principally, two sociological registers – macro and micro.

The first case focuses predominantly on the macro-level context of the firm, and notably issues of socio-economic and political environment. The analysis reflects 'historical deconstruction' in the emphasis placed on 'puncturing popular historical myths rather than in sustaining them' (Hassard and Rowlinson, 2010: 9). In the first case this underpins explanation of the distinctive character and profile of the Western Electric Company.

As a research strategy, historical deconstruction ranges from straightforward debunking through to subtle appreciation of how histories are constructed (Evans, 1997). In management history, Charles Wrege is generally regarded as its foremost proponent (see Wrege and Greenwood, 1991; Wrege and Perroni, 1974).

The second case adopts a predominantly micro-level perspective and focuses on communal and symbolic factors influencing Western Electric at this time, notably the impact of a major tragedy on its management and workforce. This research reflects 'ethnographic history' through its concern with cultural events and their meaning/interpretation. Examples of ethnographic history in management and organization studies can be found in Childs' (2002) account of the management of slavery in the St John d'el Rey Mining Company, Brazil, and McKinlay's (2002) analysis of banking careers in Scotland before the First World War. Ethnographic history is informed primarily by formal sources – such as board minutes, ledgers, annual reports, etc. – but can also draw upon informal materials, such as cartoons and doodles in McKinlay's work.[3]

Case A: The neglected corporate context

> As the Company grows it must be more human – not less so. (Extract from: Policy # 10, Employee Relations Policies, Hawthorne Works, Western Electric Company, May 1924)

The Bell System, welfare capitalism and the progressive era

One of the reasons why the failure to consider contextual forces relating to the Hawthorne Works represents an oversight is that the Western Electric Company was a significant corporation in American industrial expansion. When management students first encounter the Hawthorne Studies, given they have probably never heard of Western Electric and receive little feeling for the company in available resources, it is understandable for them to assume that this is an enterprise of marginal significance. Nothing could be further from the truth: Western Electric is important because it is woven deeply into the fabric of American industrial history.[4]

But just *how* prominent was the Western Electric Company? Before we examine a specific event that brought the firm to the world's attention, we assess its general corporate profile in the early decades of its history. To establish this, we trace landmark events and developments from the time the company joins the Bell System in 1881 up to the start of the Hawthorne investigations in 1924.

Western Electric and the Bell System In accounting for the formative history of Western Electric, the year 1881 stands out, for this is when the inventor and patentee of the telephone, Alexander Graham Bell, purchased a controlling interest in the Western Electric Company of Chicago (Fagen, 1975). At this point, Western Electric officially joined the Bell 'System'.

The economic motivation was that since winning a legal battle over patent with Western Union, Bell had experienced problems in meeting market demand. In particular he had trouble in coordinating the activities of his three existing licensee manufacturers in Baltimore, Chicago and Cincinnati (Brookes, 1976). Bell sought a single manufacturer with the capability for handling mass demand and found it in Western

Electric, which at the time was America's largest manufacturer of electrical products (Reich, 1985). Western Electric thus became the exclusive manufacturer of telephones in the USA for the American Bell Telephone Company, which in 1899 would become AT&T (Fagen, 1975).

As his original telephone patent was due to expire in 1894, Bell proposed to source inventions and patents increasingly from outside concerns in order to bolster the company's innovative capacities (Reich, 1985). This strategic decision would see Western Electric's engineering departments initially forced to concentrate on 'adaptation and improvement' rather than 'invention and creation' (Adams and Butler, 1999). In 1907, however, a significant change of policy saw proposals to develop a 'research branch' of Western Electric, a move that would usher in a period of major technological breakthroughs for the firm (Israel, 1992). Notable among them was development of the high vacuum tube in 1913, which basically brought with it the 'electronic age', with Western Electric emphasizing the fact in advertisements depicting, for example, 'My Electrical Home' (Hawthorne Works Museum, 2010). Another signal development during this period saw the expanding research operation at Hawthorne create technology that would make transcontinental telephony a reality, from 1914 (Brookes, 1976).

The Hawthorne Works, welfare capitalism and AT&T In terms of the evolution of the Hawthorne Works itself, on 14 September 1902 Western Electric purchased 113 acres of prairie land west of Chicago (Whyte, 1977). Three years later, founder and still president, Enos Barton, advocated relocating the company's main manufacturing facility from downtown Chicago to this rural setting near the small town of Hawthorne, later incorporated into Cicero (see Kay, 2000).

The Hawthorne plant, which officially opened in 1907, soon developed a reputation within American industry as a champion of 'welfare capitalism', or the practice of businesses providing welfare-like services to employees (Jacoby, 1997). Under welfare capitalism companies would typically offer workers higher pay and superior non-monetary compensation (such as health care, housing and pensions, plus possibly social clubs, sports facilities and in-house training) than available from other firms in the industry (Brandes, 1976). However, there was a price to be paid, for much of the strategic thinking behind it was that higher levels of compensation and welfare would act as a bulwark against the rise of organized labour. In the case of Hawthorne the provision of such welfare policies and practices was writ large. The Works became virtually a city in its own right – containing a hospital, power plant, fire brigade and evening school (the 'Hawthorne University'), as well as a gymnasium, running track, baseball team, greenhouse, brass band, magazine and an annual pageant, which ran until 1980. Many events were run by the Hawthorne Club, which organized dances, concerts, sports, parties and the annual picnic (Hawthorne Works Museum, 2010).

By 1914 the Hawthorne Works had expanded to become Western Electric's sole manufacturing site; having absorbed the company's other facilities in New York and Chicago (Fagen, 1975). Despite later opening smaller plants in other locations, from this point on, as Whyte (1977: 23) suggests, 'the story of Hawthorne is practically the story of Western Electric'. A year later the Western Electric Manufacturing Company was incorporated in New York as a wholly owned subsidiary of AT&T, under the name Western Electric Company, Inc. At this time in locations where AT&T subsidiaries provided the local service – which was the vast majority (Fagen, 1975) – all components and connected devices of the 'public switched telephone network' were manufactured by Western Electric (Brookes, 1976).

Complement, community and culture In terms of the size and composition of workforce, by 1917, 25,000 people were employed at the expanding Hawthorne Works, with a large percentage being local residents of Czech, Hungarian or Polish origin (mostly first or second generation immigrants). As aerial photographs of the period suggest, the plant dwarfed Cicero itself, whose population in 1910 was 15,000 (Kay, 2000). The firm held a virtual monopoly in its industry, which some commentators suggest served to buttress its sense of social unity (Adams and Butler, 1999).

Although many Hawthorne employees commuted to work from Chicago or suburbs such as Berwyn, LaGrange, Morton Park, Oak Park and Riverside, a large percentage of the workforce resided within a mile or so of the Works (Whyte, 1977). Local historical societies suggest that as Hawthorne employees were frequently 'neighbours at home as well as co-workers' this fostered a 'family culture' in which ethnicity, in particular, was 'a common denominator that helped galvanize relationships among employees' (Wachholz, 2005: 24–26). Indeed, most Hawthorne employees experienced a common work–life pattern, living within a 15-minute walk of the plant and residing in rows of workers' 'cottages' at a rent of $15–20 per month (Wachholz, 2005). Even when employees resided further afield, 'life experiences were common' (Lindberg, 1997: 17), with the working day bounded by the cheap commute on the streetcar – the '5 cent "El" ride' (Whyte, 1977: 22).

Another distinguishing feature of this communal profile was that Western Electric employed a relatively large percentage of women workers (even before women's suffrage). Although having no significant role in managerial or supervisory work, there were women operatives in most manufacturing areas of the plant, and notably those sections where 'delicacy of touch' and 'carefulness' were valued for performing intricate tasks, such as coil winding (Wachholz, 2005: 26). A feature of early company picnics was of a large group of Hawthorne women workers (known colloquially as the 'window smashers') marching and wearing 'Votes for Women' sashes (Adams and Butler, 1999: 94).

Under the company philosophy of welfare capitalism, a Women's Club was opened in late 1912, one year after the Men's. Wachholz (2005: 26) suggests that the Women's Club allowed women to participate in Hawthorne's wider welfare activities – such as education programmes, entertainment and sports – this including roles in the organization of employee picnics (see later). The Hawthorne plant was indeed the 'social center' (Whyte, 1977: 22) for the surrounding community, and its clubs were 'enormously popular' among 'the large number of young men and women and those who lived in the working-class suburbs adjacent to the works' (Gillespie, 1991: 19).

The 'Progressive' Era In terms of the political and ideological context this was the time of the Progressive Era presidencies of Roosevelt, Taft and Wilson – an era characterized by social activism and the movement's desire to moderate the excesses of corporate capitalism (Glad, 1966). Noted for its antitrust sentiments, stress on efficiency and faith in experts, the Progressive Movement emphasized above all the 'welfare of the individual' (Buenker et al., 1986).

Reflecting such ideology, during August 1912 Magnus Alexander (President of General Electric) sent the text of a speech he had given to the American Academy of Political and Social Science to Theodore Vail (President of AT&T) in which he drew 'particular attention' to the potential for creating a 'Department of Applied Economics, which might be more properly be called a Department of Applied Psychology' (Adams and Butler, 1999: 89). In Alexander's words the goal of such a department would be to 'apply the same scientific, calculated and sagacious study to the *human needs* in industry that are now applied everywhere to the engineering, selling, financial and purchasing requirements' (Adams and Butler 1999: 89; emphasis added). In September 1912 Vail's associate, Walter Allen, suggested (with perhaps an element of cynicism) that establishing such departments within the Bell System would, 'benefit the companies in their general public relations by convincing the public that the management has really at heart the *human side* of the business and is striving to better conditions in industry' (Adams and Butler 1999: 89–90; emphasis added).

In any event, the following year AT&T announced the creation of the Bell System 'Benefit and Insurance Plan'. Although implementation of employee welfare plans had commenced in 1906 – with a modest pension scheme aimed at 'help(ing) the company attract and retain workers and discourage them from striking' – the introduction of a welfare plan throughout the Bell System was useful in that it assisted the corporation in convincing its political masters that Bell (a virtual monopoly) was 'socially responsible' (Gillespie, 1991: 8). Whether or not the motives of corporations practising such welfare capitalism were genuinely 'progressive' remains moot (see Ebbinghhaus and Manow, 2001; Hicks, 1999; Tone, 1997). What is certain, however, is that by the early 1920s Western Electric's Hawthorne Works was an archetypal 'modern manor' (Jacoby, 1997).

Expansion, innovation and profile In the period preceding the Hawthorne Studies, Western Electric was also one of the major distributors of electrical equipment in America (Fagen, 1975). In line with the huge expansion of demand for such goods, the company even supplied a wide range of items manufactured by other firms. This saw distribution not only of standard equipment for the home – such as refrigerators, sewing machines, electric fans, vacuum cleaners, etc. – but also of less standard items, such as electric toys (Hawthorne Works Museum, 2010).

Around the start of the Hawthorne investigations (late 1924), Western Electric had a catalogue approaching 1300 pages and rivalled General Electric and Westinghouse as a manufacturer and distributor (Fagen, 1975). With a workforce of over 30,000 employees (Kay, 2000), the company had expanded its initial welfare capitalist practices and was recognized (according to local history and in-company sources) as a provider of above average wages, good working conditions and valued fringe benefits (Hawthorne Works Museum, 2010; Wachholz, 2005; Whyte, 1977). It promoted, paternalistically, 'an informal cradle to grave covenant between employer and employee' (Adams and Butler, 1999: 98). Arguably the major plank of the Bell System by the mid-1920s, Western Electric was a corporation of 'high public profile' – one that had applied 'the new personnel policies to an extent unsurpassed by any other company' (Gillespie, 1991: 17).

Finally, shortly after the Hawthorne investigations commenced, a restructuring exercise by AT&T, in 1925, saw the founding of Bell Telephone Laboratories Inc. This body absorbed much of the research and development work previously carried out by Western

Electric's engineering department (Reich, 1985). 'Bell Labs', as it became known, would be owned 50:50 by Western Electric and AT&T, with this reorganization establishing institutional responsibilities that lasted until the 1980s. At this time, the Bell System largely functioned thus: Bell Labs designed the network; Western Electric manufactured the telephones, cables, transmission equipment and switching equipment, and installed the phones; the Operating Companies billed the customers; and AT&T ran the long-distance network (Fagen, 1978; Page, 1941). Ultimately Western Electric and Bell Labs would invent the loudspeaker, bring sound to motion pictures, win a Nobel Prize for the invention of the transistor, and introduce systems of mobile communications that would culminate in the cellular telephone (Fagen, 1975, 1978; Hawthorne Works Museum, 2010; Israel, 1992).

During its formative history, therefore, and notably the period immediately preceding and encompassing the start of the Hawthorne Studies, the Western Electric Company had achieved significant corporate profile, developing a reputation for technological innovation and mass manufacturing capability. In addition, it was a signally paternalistic enterprise and major sponsor of welfare capitalism, with such policies and practices facilitating an image that it was a 'progressive' employer.

Case B: The neglected cultural context

> We are the victims of a disaster so awful that the world has stood aghast at its horrors, even in this year of horrors (Thayer HB, President, Western Electric Company, *Western Electric News*, 1915a: 1)

The Eastland *disaster, communal experience and organizational symbolism*

The second case account of neglected context concerns social organization and communal experience. Specifically, we develop an ethnographic perspective to document the impact of a tragic event on the Hawthorne plant, its workforce and the local community. More than any other, this incident serves to define the character and constitution of the Works in the period preceding the Hawthorne investigations.

This case revolves around a tragedy – the *SS Eastland* disaster – on the Chicago River during the Hawthorne Works Employees' Annual Picnic of July 1915 – an event not discussed or referenced in any of the primary research accounts of the Hawthorne Studies (e.g. Mayo, 1933; Roethlisberger and Dickson, 1939; Whitehead, 1938). This was, however, the most notable event in the formative history of the Works – one that brought Western Electric to the world's attention. While the incident had a profound effect on 'Chicago's developing social fabric' (Bonansinga, 2004: 240) and served to 'scar the collective memory of the metropolitan area' (Hilton, 1995: 234), it was a largely 'neighborhood affair', with the main impact being on the 'communities near the Hawthorne plant, Berwyn and Cicero' (Adams and Butler, 1999: 90). In what follows, details of the disaster are presented alongside discussion of how it affected the workforce and local community. The case also assesses how Western Electric symbolically managed the aftermath, with this issue being considered further in the Analysis and Discussion section.

The Hawthorne Works Picnic and its expansion The history of the 'Hawthorne Works Employees' 5th Annual Picnic' is that on 24 July 1915 the Western Electric Employees' Association chartered five Great Lakes passenger steamers to carry almost 7000 employees, their relatives and friends on a four-hour excursion from Chicago to Michigan City, Indiana. This had been an annual event since 1911 and was considered *the* social outing of the year for a young workforce of predominantly immigrant origin engaged in repetitive telephone assembly work (*Western Electric News*, 1915b).

The number of employees attending the annual picnic began to increase significantly from 1913. Following attendance by approximately 3500 for the first two years, in 1913 it increased to over 6000. The main reason was that the picnic shifted its focus from inviting the immediate family of employees to members of their extended families (*Western Electric News*, 1915b). In a rather gendered statement, Hawthorne publicity for the 1914 picnic declared, for example: 'Bring along her mother and her sister and her sister's youngsters. Make a family party of it' (Hawthorne Works Museum, 2010). This expansion, however, brought with it the need to provide additional transport capacity, and in being a maritime outing to charter an additional vessel for the voyage across Lake Michigan. For the 1914 excursion, therefore, an extra ship was hired, the *SS Eastland* (*Western Electric News*, 1915b).

One year later, the 1915 picnic was organized by the newly formed Hawthorne Club (or Western Electric Employees' Association), which had been created from the merger of the Men's and Women's clubs in April (Whyte, 1977). For the 1915 event, the Hawthorne Club established a formal structure for organizing the event. This saw employees encouraged to take part in various aspects of the process, joining committees such as: 'Program, Judges, Prizes, Beach, Dancing, Tug-of-War, Central, Honorary, General, Amusement, Picnic, Transportation, Tickets, Photographic, Reception, Grounds, Publicity, Music, Athletics, and Races' (Wachholz, 2005: 28). The destination for the 1915 picnic was Washington Park, Michigan City, which offered a range of facilities appropriate to the event, including a baseball park, roller coaster, electric merry-go-round, dancing pavilion, bowling alley, amusement park, bathing beach and picnic grounds (Wachholz, 2005). The outing was arranged such that, after disembarking at Michigan City, passengers would partake of a 'pot-luck' picnic and then engage in various activities organized by the committees. Although the Hawthorne plant normally operated for six days a week, it was closed for the Saturday of these annual festivities, always the last in July (*Western Electric News*, 1915b).

The SS Eastland The background to the tragedy of the 1915 Works Picnic was a series of events relating to the aforementioned *SS Eastland.* In wake of the 1912 sinking of the *RMS Titanic*, the LaFollette Seamen's Act (1915) was passed mandating 'lifeboats for all'. In the case of Great Lakes passenger ships this would see additional lifeboats and rafts fitted, despite advice that this could cause some vessels stability problems. Indeed, for at least one of the steamers hired for the event, the *Eastland*, a boat that sat relatively high in the water, this would make her potentially unstable (Hilton, 1995).[5]

On the morning of Saturday 25 July 1915, Hawthorne Works employees and their families boarded the *Eastland* on the south bank of the Chicago River, downtown between Clark and Lasalle Streets (*Western Electric News*, 1915b, 1915c). People had not been allocated to specific ships and there were no passenger lists. The *Eastland* was scheduled to be the first vessel to depart, and by around 7 o'clock 2752 passengers had boarded (Hilton, 1995). With many passengers initially standing on the wharf side to wave to friends, but subsequently moving to the river side to observe the view, the *Eastland* began to list initially toward the wharf and then the river (*Western Electric News*, 1915c). Attempts to stabilize the vessel by adding water to the ballast tanks failed to remedy the problem (Hilton, 1995).

During the next quarter of an hour, possibly owing to passengers wishing to observe a canoe race, an additional number moved to the river side (Bonansinga, 2004). One suggestion is that this caused further listing and allowed water to pour in from portholes on the main deck, causing furniture and passengers to slide (*Western Electric News*, 1915c). (Counter-arguments, however, question elements of this scenario: see Hilton, 1995: 234–235.) In any event, 10 minutes after the gangplank had been drawn in and when the *Eastland* began to push off from Clark Street dock, the vessel lurched, rolled and capsized, resting on the river bottom, which was only 20 feet beneath the surface (Hilton, 1995). Given that a large number of passengers had already moved below decks ('It had begun to drizzle … and the mothers had taken their children inside', *Western Electric News*, 1915d: 20), hundreds became trapped owing to the sudden capsizing of the vessel. Despite an immediate response by the tugboat *Kenosha* and the fact that the vessel was still partially tied to its mooring, 841 passengers (mainly women and children) and four crew members perished, the death toll including 22 whole families. This represented the greatest loss of life in Chicago's history, America's worst maritime disaster, and for Western Electric 'the greatest tragedy that has ever befallen organized industry' (*Western Electric News*, 1915e: 16).

Impact, aftermath and symbolism In the days following the tragedy, Western Electric made little effort to operate the Hawthorne plant (*Western Electric News*, 1915b). On Monday 27 July a few hundred employees turned up for work, followed by a few thousand on Tuesday. By the end of Tuesday 28 July Western Electric had turned away around 800 local residents offering to fill the jobs of victims (Adams and Butler, 1999). Wednesday 29 July saw the day of the greatest number of funerals and was declared an official day of mourning by the company; the main entrance gates were draped in black. All but very essential employees were excused from work in order to attend the many services held in Illinois and cities across the United States. En masse, Western Electric's senior management team attended a special memorial service in Chicago (*Western Electric News*, 1915b).

Historians have described the impact of the incident on the Chicago metropolitan area (Hilton, 1995) and in particular on the western suburbs around Cicero (Kay, 2000; Wachholz, 2005). Within the Hawthorne plant itself 'survivor stories' (*Western Electric News*, 1915c) recounted acts of heroism performed by the crews of the *Kenosha* and freighter *Schuylkill*, the Coast Guard, frogmen and divers, doctors and nurses, members of the public, and Hawthorne employees themselves. In accounting for the tragedy in the *Western Electric News,* however, the company suggested, rather paternalistically, that it did not wish to 'single out any individual for personal mention' as this could be 'unfair to the rest' (1915b: 8). As survivors of the *Eastland* continued to work at Hawthorne for several decades, this preserved the disaster in the company's oral history (Whyte, 1977). Indeed the last known survivor of the *Eastland*, Libby Hruby, daughter of a Czech immigrant employee, died locally in Berwyn as late as 6 November 2004 (archiver.rootsweb.ancestry.com, 2011).

Sources also describe the role Western Electric played in the relief effort (see Hilton, 1995; Wachholz, 2005; *Western Electric News*, 1915b). Meeting with officials of the City and the Red Cross at City Hall the following morning, the company's senior executives agreed to raise $200,000 within 48 hours. In addition, Western Electric offered a $100,000 subsidy to the relief initiative; ultimately both figures were over-subscribed. Of the corporation's initial subsidy, $75,806 was spent on funeral expenses (Hilton, 1995). Wider action saw Western Electric make its medical, nursing and welfare staffs available to survivors and the families of victims, with treatment being offered at either the Hawthorne plant or by way of house calls (*Western Electric News*, 1915b, d and f).

In early August 1915, Alexander Graham Bell, who had been retired from the telephone business for a number of years, but still held considerable stock in AT&T and Western Electric, accompanied his wife Mabel on a visit to the Hawthorne Works (Inficad.com, 2011). During the visit, the Bells reputedly stopped at each work station, shook hands with employees and discussed the disaster and how it had affected them. Sources suggest that Mabel Bell took details of employees who had perished together with the names and addresses of family members affected by the tragedy. These individuals subsequently received notes of condolence and personal gifts from the Bells (Inficad.com, 2011). This visit was followed by a period of recruitment in which Western Electric adopted a policy of favouring victims' relatives when assessing employment applications (Adams and Butler, 1999).

Although more *passengers* perished on the *Eastland* (841) than the *Titanic* (832), after initial media coverage the event began to fade from national attention.[6] Among the possible reasons are that the incident was overshadowed by the more global news coverage of the First World War or that the City of Chicago did not want negative media coverage and so suppressed the incident (Hilton, 1995). Another possible explanation, however, is that as those who perished were predominantly working class immigrants – mainly women and children – they represented actors with relatively little 'voice'. Unlike the *Titanic*, the *Eastland* did not claim the wealthy or famous, nor did any of Western Electric's executives perish.

In the years that followed the tragedy there appears a subtle change of register in what might be called the social emphasis of the firm. One example is that from 1918 Western Electric started to make a series of 'industrials' – short films about the nature of the business. As Wrege (2008: 2) has noted, several of these films (e.g. *People and Productivity* and *A Square Deal for His Wife*) were markedly 'people oriented' and appear socially enlightened for the time.[7] Indeed, this was a period in which Western Electric seemed keener than ever to emphasize its 'Square Deal Policy' for employees – a policy in which 'practices have been worked out to make things convenient and pleasant for every member of the great Western Electric family' (Albright, 1917: 29). Another subtle change around this time saw the sub-title of *Western Electric News* change from: 'Produced once a month for the employees' to 'The Employees' Magazine'.

In the early decades of Western Electric's history, therefore, the *Eastland* tragedy served to bring sociological profile to an organization that already possessed a significant industrial reputation. Above all, the event served to galvanize the workforce, bring clarity to social and organizational relations, and make overt a range of cultural and symbolic forces within the enterprise. These are factors that have yet to be fully accounted for in historical readings of Hawthorne.

Analysis and discussion

These twin cases offer contextual information relevant to understanding the character and culture of Western Electric's Hawthorne Works during the early decades of the twentieth century. In terms of organizational research they identify neglected 'actors' in the company's 'network of meaning' (see Bruce and Nyland, 2011; Mills and Durepos, 2010). The first case illustrates how Western Electric had developed a distinctive corporate and industrial profile, and the second how the social and cultural awareness of its workforce was impacted by a major human tragedy. Taken together they counter the traditional practice of explaining organizational behaviour at Hawthorne within a contextual vacuum.

Corporate philosophy and reputation

Through initially analysing corporate philosophy and reputation it has been argued that during the early twentieth century Western Electric was a prominent employer. We have illustrated how this decidedly paternalistic company, a major player in the Bell System, possessed 'high public profile'. In addition to its transcendent reputation for technical innovation, we note how from its opening in 1907 the Hawthorne facility had a considerable reputation for promoting welfare policies and practices. Describing a photograph of the Hawthorne Club track and field meet of 1927, Gillespie (1991: 20) suggests this represents 'welfare capitalism at its peak'; this picture was taken less than a year before Elton Mayo first entered the Works. An organization renowned for technological advances and possessing state-of-the-art facilities, in the years preceding the Hawthorne investigations the Western Electric Company was also known for practising the 'new personnel policies', for which its standing was apparently 'unsurpassed'. In addition, it was avowedly anti-union and deployed a range of measures (overt and covert) for combating the combination of workers.

It can be argued, however, that such a corporate style was not only the result of 'strategic choice' (Child, 1972) but also determined by industrial and sectoral 'contingencies' (Burns and Stalker, 1961; Lawrence and Lorsch, 1967). Although many American corporations of the early twentieth century received prominence for promoting apparently 'progressive' employment practices, this was nowhere more evident than for 'science-based firms such as those in the electrical manufacturing industry' (Adams and Butler, 1999: 97). As Jacoby (1997: 20) suggests, in many high technology companies of the period, forms of welfare-influenced organization, incorporating an emphasis on 'progressive' forms of employment, had gained 'the aura of technological inevitability'.

Likewise, reflecting Walter Allen's 'applied psychology' proposals for Bell companies a decade earlier, psychologist Robert Yerkes (1922: 56–57) in a speech to the National Research Council outlined the shift in personnel research from 'things that are worked with, to the worker; from the machinery of industry, to the man who made, owns, or operates it'. Yerkes' speech suggests that employee psychology and well-being were on the personnel research agenda years before Mayo exploited his significant Rockefeller support at Hawthorne. This resonates with Gilson's (1940: 98) review of Roethlisberger and Dickson (1939), which suggests that the Hawthorne Studies 'operated at the kindergarten stage of industrial knowledge' in that it they had 'consumed years to discover' notions that 'should have been clear at the outset if the investigators had acquainted themselves with the experience of others'.

Further, Bendix (1956: 311) notes how in the years preceding the Hawthorne investigations many managers had 'anticipated Mayo with regard to a reassessment of the motivation of workers', and indeed that during the early 1920s 'several writers had pointed out that it was wrong to think workers were only interested in money'. Bendix comments on how many of Mayo's sentiments appear to have been rehearsed in the earlier 'Open-shop' campaign, which like Mayo tended ideologically to 'neglect … trades unions and their role in industry'. Indeed, Bendix argues that employees involved with the campaign directed their attentions to 'introducing many measures designed to forestall [unions] by satisfying the demands of workers in line with managerial objectives', the campaign thus reflecting many of the motives of welfare capitalism.[8]

In her critique of *Management and the Worker*, Gilson (1940: 100–101) similarly draws attention to the failure of Roethlisberger and Dickson (1939) (and thus the Hawthorne research team as a whole) to discuss the issue of labour unions. She argues that in 'six hundred pages describing the Western Electric experiment, costing thousands of dollars, and supported by some of the wealthiest groups in the country, no reference is made to organized labour except a short statement, unindexed, that it was so seldom mentioned by any workers that it was not considered sufficiently important to discuss'. Gilson adds that the deployment of internal spies by Hawthorne's management – designed to identify labour activists amidst industrial uncertainty from the late 1920s – may be one of the reasons why in the 20,000-plus interviews of the plant-wide Interview Program (1928–30) workers were reported to have 'criticised the company in no instance'. She suggests, 'we know of no instance where spies have been employed without some fear of unionism'. Indeed, the 1937 [US Senate] Committee on Education and Labor noted how from 1933 to 1936 Western Electric spent $25,825.76 on such espionage (see Gilson, 1940: 100).

Such factors may provide explanation for why founder Enos Barton and the early directors of the Western Electric Company put so much effort into establishing welfare capitalism at Hawthorne – to shore up a particular form of liberal political economy by appearing to create 'capitalism with a human face'. Although in terms of American industry as a whole Western Electric's seemingly enlightened organizational practices were perhaps atypical (compare the early working conditions and industrial relations climate at Ford's Highland Park and Rouge plants), they were nevertheless taking place in an ideological climate where such deliberate paternalism was not completely unheard of. This perhaps suggests a hypothesis for management history to explore: that Western Electric's highly paternalistic climate provided a particularly congenial environment for Mayo and his colleagues to conduct their research (see Whitehead, 1938: 13, on this point).[9]

Indeed, in May 1924, six months prior to the start of the Illumination experiments and four years before any Harvard involvement, the Hawthorne personnel function had issued to employees responsible for 'directing the work of others' a statement of the company's Employee Relations Policies, commonly referred to as the 'Ten Commandments'. Completing a list of similar homilies, the last exhorts managers and supervisors to: '*Carry on the daily work in a spirit of friendliness.* As the Company grows it must be more human – not less so' (extract from: Policy #10, Employee Relations Policies, Hawthorne Works, Western Electric Company, May 1924: emphasis in original).

By the mid-1920s, therefore, if 'social man' (Mayo, 1933; see also Dingley, 1997; Rose, 1970) had not yet been discovered in *theory* at the Hawthorne Works, for a range of ideological and commercial motives Western Electric's management was already minded to meet his 'human relations' needs in *practice*. Politically it can be argued that Mayo − well known as an anti-union academic (Bendix, 1956; Trahair, 1984) and someone 'shrewdly tuned in to what he believed his benefactor [John D Rockefeller Jr] wanted to hear' (Bruce and Nyland, 2011: 391) − was readily disposed towards Western Electric's strategic paternalism. Contrary to the orthodox narrative of management and organization studies, which suggests a theoretical and practical paradigm-shift in the wake of behavioural experimentation, the impression from this research is that Mayo and his team *did not so much turn the sociological tide at Hawthorne as swim briskly with it*. Indeed, Roethlisberger and Dickson (1939: 540), in a rare reference to Western Electric's cultural evolution, suggest that 'perhaps the secret of this company's favourable history of industrial relations lies in the fact that it possesses a remarkable number of social processes by means of which the individual is integrated or identified with the collective whole'. They go on to acknowledge that 'a large number of these integrating factors were to be found in the activities sponsored by the Hawthorne Club' (Roethlisberger and Dickson, 1939: 540), a key arm of Western Electric's welfare capitalism and a strategic bulwark against unionization.

It can be argued further that the union of Western Electric and Elton Mayo's Harvard Group − brokered by the influential network of John D Rockefeller Jr − was to prove a genuinely symbiotic one. Both would profit significantly from the reputation the Hawthorne Studies were to bring. Whilst Mayo and his colleagues, through their long-term access to and involvement with Western Electric, could bask in the glory of discovering a new management model, 'social man', the corporation could build on its reputation for progressive polices and employee welfare through the profile gained from a wealth of publications (three books and 33 articles by the Harvard Group between 1929 and 1939) on humanistic 'discoveries' at Hawthorne. Indeed, one of the original reasons why Western Electric executives had approached the Harvard Business School for assistance with the Hawthorne Studies programme was that personnel director TK Stevenson had been impressed by Mayo as a 'communicator', following a talk he had given on 'What Psychology Can Do for Industry in the Next Ten Years' to an executive lunch at the Harvard Club in October 1927 (Trahair, 1984: 208).

Thus, while evidence suggests that Western Electric was undoubtedly 'scientifically' managed in the period prior to the Hawthorne investigations (see Adams and Butler, 1999: 78−80), this is not the whole story, for the company also emphasized, for a number of reasons, 'human relations' style philosophies through its strategic paternalism and welfare capitalism. Before Elton Mayo's time at the plant, the Hawthorne Works was already providing many of the classic ingredients of a human relations approach to workforce management – through media for satisfying social needs (e.g. social clubs, sports teams), providing facilities for personal development (e.g. the ‘Hawthorne University’) and devising policies for making the organization ‘more human’ (e.g. the ‘Ten Commandments’). The narratives of contemporary textbooks on management and organization fail to take such factors into account. Sociologically, although Braverman’s (1974) well known suggestion is that the Human Relations School functioned as the ‘maintenance crew’ for Scientific Management – psychologically oiling its exploitative economic wheels – another evolutionary explanation is that the doctrine of ‘human relations’ ultimately functioned as a *modernizing agent for welfare capitalism*. For many industrialists, the appeal of the Human Relations School’s constellation of job-based development and enrichment practices possibly lay in providing a watered-down well-being for firms not or no longer willing to support the full menu of welfare capitalist services in order to avoid labour turnover and unionization.

Cultural experience and identity

If the first case illustrated macro themes of corporate reputation and philosophy, the second focused mainly on micro issues of cultural experience and identity. Specifically, the latter case described the impact of a major tragedy on Western Electric, its workers and the local community. In so doing the case has not only offered insights into the habitus or life-world of Western Electric’s employees, but also the symbolism of how the company handled the aftermath of a traumatic event.

To appreciate the cultural context of the Hawthorne Works at this time an argument is made for revealing, ethnographically, the impact of critical incidents such as *Eastland* on the corporation’s social fabric. This case suggests that the essence of organizational relationships is often revealed during moments of social crisis (Erikson, 1976). In contrast to so-called orthodox or mainstream analyses of Hawthorne in organization studies, which focus primarily on empirical data and their evaluation, this research highlights factors and forces whose influence extends beyond the work of Elton Mayo and the Harvard Group.

In making this argument, a focus of investigation has been the character of those working class communities that bordered the Hawthorne plant and provided the mainstay of its labour force. This has been explored in relation to what, for Western Electric, was the most notorious event in its history – the tragedy of the Works 5th Annual Picnic, which crystallized issues of social organization and communal experience. In the wake of this tragedy, the well-publicized relief actions of Western Electric and the high-profile visit by the Bells appeared to place the symbolic accent even more firmly on paternalism and welfare.

We have shown how the *Eastland* disaster and its aftermath were consumed primarily by Hawthorne’s largely ethnic working communities. At the turn of the 20th century one-quarter of America’s labour force was foreign-born, including half of all unskilled workers (Jacoby, 1985). When early social scientists at the University of Chicago, such as Jane Addams and Florence Kelley, conducted their ‘social surveys’ they found astounding cultural variety in the neighbourhoods of Chicago (see Elshtain, 2002; Sklar, 1995).

It was such ethnically diverse communities that came together to chase the utopianism of the 'American dream'.

Hawthorne represented a similar social experiment. Sociologically it reflected the co-existence of cultural groups facing what Mary Parker Follett called the 'dynamics of integration' (see O'Connor, 2011). For example, the establishment of the Hawthorne Evening School saw Western Electric incorporate an education programme for immigrant workers that had previously taken place at Jane Addams' settlement complex, Hull House (near Western's earlier Clinton Street facility). From around the turn of the century this arrangement had seen Hull House submit monthly accounts to Enos Barton, with the system reflecting 'a primitive form of welfare capitalism' (Adams and Butler, 1999: 95). Indeed, Western Electric's provident funds, together with the development of the Hawthorne Club's educational and recreational programmes, 'essentially institutionalised the paternalism of Enos Barton … at Hawthorne' (p. 96).

A key contextual factor highlighted by the *Eastland* tragedy, therefore, is the cultural experience of the Hawthorne workforce, an issue that brings into focus the values, goals and motives of ethnic communities. Although in comprising a diverse workforce Hawthorne was far from unique among industrial employers, its distinctive social and organizational history engendered a heightened sense of solidarity. Kai Erikson's famous remark that in the face of major disasters (such as *Eastland*) it is 'the *community* that cushions pain … represents morality and serves as the repository for old traditions' (1976: 193; emphasis in original) appears to fit Hawthorne well. The research presented here suggests that crucial to understanding the cultural fabric of the Works is comprehension of the demographic character and communal experience of its workforce, or what Roethlisberger and Dickson (1939: 538) refer to as its 'social organization'.

For ethnographic history, appreciation of the social organization of the Hawthorne plant requires awareness of the cultural preferences of ethnic communities at this time. A good starting point is the anthropological and sociological literature on 'ethnic Chicago' (see Lindberg, 1997). If we take, for example, the sizeable Czech community at Hawthorne we find that in the Chicago of the early twentieth century it was residing in what was now the world's third largest Czech city (after Prague and Vienna) – one that by the 1920s boasted four Czech-language newspapers (Cozine, 2005). Politically, Czechs tended to support the Democrats, with this support peaking on the election of Anton Cermak, a Czech immigrant, as the Democratic mayor of Chicago in 1931 (Gotfried, 1962). Socio-economically, the Czech community in Chicago had established its own network of institutions, including savings and loan associations, mutual benefit societies and fraternal organizations (Lindberg, 1997). More prosaically, such first and second generation immigrants (and notably working women) provided regular support for family networks in their country of ethnic origin (Baker Library, 2011). Hogan (1978) and Weiss (1981) suggest that transplanted peasant culture – which emphasized family collectivism, religious devotion, and attitudes towards the value of money – affected workplace relations at sites like Hawthorne. Above all, in terms of personal preferences, this literature suggests that 'by the 1910s and 1920s', Czech workers in Chicago 'earned more and worked at a wider range of occupations', with an important corollary for this research being that 'as operatives at Western Electric' their energies were 'devoted more to ethnic and neighbourhood organizations than to radical or unionist activity' (Cozine, 2005: 153).

Hypotheses arising from this excursion into 'social organization' include that in the economically more buoyant period of the mid-1920s – encompassing the early Hawthorne investigations (i.e. the Illumination Experiments and the initial Relay Assembly Test Room studies) – such ethnic communities not only possessed a familial orientation but were also relatively quiescent as an industrial workforce (see Carey, 1967). A further suggestion from the 'ethnic Chicago' literature is that this was more significant in the case of women workers, for whom Hawthorne, given the nature of its assembly operations, was a major local employer (Lindberg, 1997; see Bramel and Friend, 1981; Locke, 1982). Such hypotheses provide grounds for ethnographic history to reinterpret the orthodox narrative of studies such as the Relay Assembly Test Room, where issues such as gender and ethnicity are rarely accounted for, notably in the explanations of organizational behaviour textbooks.

The notional quiescence of ethnic groups at Hawthorne in the 1910s and 1920s, however, can be contrasted with the image of Hawthorne workers that emerges from the later, more sociologically oriented, Bank Wiring Room investigation of the early 1930s. One contextual explanation for why the men of the Bank Wiring Room established a 'negative group dynamic' (as opposed to a positive or quiescent one) is that this was a natural reaction to the timing of the study. Simply put, the research coincided with a sharp rise in unemployment during the early years of the Great Depression (see Garraty, 1986): Western Electric was making large-scale redundancies and workers wished to preserve their jobs, a contextual factor of which the Harvard Group, although aware, was keen to downplay. Despite 13 of the 14 operators being in 'very poor financial condition' and that the group as a whole 'speculated endlessly on when the depression would end', Roethlisberger and Dickson (1939: 531) maintain that the Bank Wiring Room study 'was not a "depression story"' – a position that seems implausible when all factors are considered. When discussing 'the effects of the depression', Roethlisberger and Dickson's defence of their primarily psychological analysis of 'cliques' and 'output restriction' – a central plank of the Hawthorne Studies narrative – appears flimsy.[10]

Similarly, taking their lead unquestioningly from *Management and the Worker*, organizational behaviour textbooks ignore the dramatic shrinkage of the American economy during the 'hard years' of the Depression and how this was so critically experienced at Western Electric, where sales fell from a high of $411 million in 1929 to less than $70 million in 1933 (Adams and Butler, 1999: 222). The 1930s was in fact the only decade of the twentieth century in which the number of telephones per head of population fell (Fagen, 1978). In contrast to some form of hypothesized corporate enlightenment emerging at Hawthorne in the wake of Harvard Group investigations, there is evidence to the contrary – of increased workplace control throughout the 1930s, notably through AT&T executives pressurizing Western's management over productivity. Indeed, throughout the early decades of the 20th century the influence of AT&T should not be understated, for as Charles Wrege has suggested (personal communication) Western Electric had 'no real autonomy' at this time and functioned primarily as a 'ward' of AT&T. Danielian (1939), for example, notes how the 1935–37 investigation of the telephone industry by the Federal Communications Commission revealed within AT&T divisions significant work intensification alongside widespread redundancies and a preference for hiring on a part-time basis. Charles Wrege (personal communication) has argued similarly that his personal conversations with Bell operatives who were employed around this time revealed a ‘human touch’ within the System, but only on the part of the workers themselves, who (reminiscent of the Bank Wiring Room subjects) would ‘stall the work as long as possible so that the operators could be kept on longer’. This represents another instance of where context-based research serves to question, qualify or even contradict textbook explanations of organizational behaviour at Hawthorne.

This form of analysis can also be extended to the last of the three main Harvard-influenced phases of the Hawthorne investigations – the Interview Program. While many of the sections of *Management and the Worker* devoted to the Program involve a more sociological style of analysis (see Roethlisberger and Dickson, 1939: 189ff), and notably those which describe ‘non-directive’ research, once again the explanatory focus is almost exclusively on *internal* issues of organization. This is witnessed, for example, in explanations of ‘complaints and personal equilibrium’ (chapter XIV), ‘attitudes within the supervisory organization’ (chapter XV) and (the rather unconvincing chapter on) ‘complaints and social equilibrium’ (chapter XVI). It can be argued that a stronger emphasis on contextual forces would have yielded more perceptive, critical and compelling information from investigations that, despite focusing on ‘the relations existing between work effectiveness and personal situations’ (p. 315), did so predominantly from the Harvard Group’s preferred ‘psychopathological’ perspective. A number of other contextual factors, such as the company’s overt anti-unionism and covert forms of surveillance, undoubtedly skewed the results of the Interview Program – a mass exercise that reported virtually ‘no criticism of the company’.[11] Again this line of analysis puts in new (contextual) light research by the Harvard Group that is so regularly and unquestioningly recounted in organizational behaviour textbooks.

Contextual research by the Harvard Group?

Finally, in this discussion of wider influences on the corporate and cultural shaping of Western Electric, we must qualify our ‘neglected context’ thesis by acknowledging that at one stage during the Hawthorne investigations there was a desire expressed to break with a closed-system experimental approach and account for the effects of external forces on the firm and its workforce. This relates principally to a proposed anthropological study of local communities in correspondence between Mark Putnam and W. Lloyd Warner. In May 1930 Mayo sent Warner (a Harvard anthropologist) to Hawthorne with a letter of introduction to Putnam (Chief of Hawthorne’s Industrial Research Division) – a visit made in response to a suggestion by William Dickson (Chief of Hawthorne’s Employee Relations Research Department) that ‘social relationships’ also be studied at Hawthorne. Impressed with Warner’s anthropological perspective, Putnam became convinced that ‘the next research should be of the home and social life of Hawthorne workers’ – a view supported by Dickson (Gillespie, 1991: 155). This appeared a natural progression, given that in the ‘non-directive’ research of the Interview Program a range of ‘life experiences’ related to the employee’s ‘social situation’ were hypothesized as influencing work attitudes (see Roethlisberger and Dickson, 1939: 201–205, 270–291).

Two factors, however, served to prevent such contextual research being realized at Hawthorne. The first was a *volte face* by Warner himself, who when more familiar with

Cicero (and no doubt its notorious resident, Al Capone) decided its communities had become ‘too disintegrated’ (Gillespie, 1991; Jacoby, 1986); Warner opted instead to study the more ‘stable’ community of Newburyport, Connecticut (see Warner and Lunt, 1941).[12] The second was opposition primarily from Fritz Roethlisberger to the research direction Warner wished to take, which represented a significant shift from the established psychopathological approach of the Harvard researchers (see Gillespie, 1991: 157; Roethlisberger and Dickson, 1939: 313–315). With the possibility of researching the local community abandoned, Warner focused instead on internal factory research at Hawthorne, and on providing the research model for the Bank Wiring Room, albeit a study that ultimately downplayed the importance of significant contextual influences on the experimental setting.[13]

This, then, was the nearest the Harvard Group would come to undertaking contextual research in the Hawthorne Studies programme. In the final section of *Management and the Worker* (Part V) within a discussion of the ‘social organization of the plant’, Roethlisberger and Dickson (1939: 554–558) make fleeting references to the influence of the ‘foreign element’ and its ‘value system’ (p. 556) and how human sentiments ‘do not exist in a social vacuum’ (p. 558). But such wider social and cultural issues never received formal investigation in the Hawthorne Studies, despite Roethlisberger and Dickson (1939) initially noting, for example, the large percentage of ‘Czechoslovakians’ (p. 6) at Hawthorne, or later offering an assurance that ‘anthropology did not go by unheard’ (p. 272). Despite the ethnic background of five of the six initial members of the Relay Assembly Test Room being Central European (p. 23: the sixth member was Norwegian) and only three of the 14 members of the Bank Wiring Room being ethnically ‘American’ (p. 404: the modal ethnic group was ‘Bohemian’), as Roethlisberger and Dickson (1939: 538) ultimately admit: ‘The investigators never undertook a systematic study of the social organization of the company, and it is therefore impossible to characterize it in detail or entirely accurately’. This is despite the fact that one of the defining models in *Management and the Worker* – Figure 32: ‘Scheme for interpreting complaints involving social interrelationships of employees’ – presents the ‘Social organization of [the] company’ as one of the key influences on ‘Satisfaction or dissatisfaction’ (p. 375).

For the Hawthorne Studies, therefore, additional evidence from such contextual analysis could and should have been woven into those areas of the Harvard Group’s research seeking sociological explanation of workplace attitudes and behaviour. This would have offered deeper insights into why, for example, the women of the Relay Assembly Test Room appeared so ‘integrated’ (Roethlisberger and Dickson, 1939: 540), the men of the Bank Wiring Room seemed ‘antagonistic’ toward one another (Roethlisberger and Dickson, 1939: 519) and the subjects of the Interview Program ‘criticized the company in no instance’ (Gilson, 1940: 101).

Conclusions

The aim of this article has been to provide contextual insights on one of the most famous locations in the history of management and organizational research: Western Electric’s Hawthorne Works. In so doing it has sought to place in fresh perspective the sociological phenomenon most readily associated with it – the ‘Hawthorne Studies’ research programme – conducted by, amongst others, Elton Mayo and members of the Harvard Group. The article has attempted to deconstruct aspects of those hegemonic narratives so regularly embraced in explanations of the Hawthorne Studies in the organizational behaviour literature. These suggest on the one hand the scientific 'discovery' of human relations by the Harvard Group (as reflected in research accounts by, for example, Mayo, 1933, 1935, 1945; Roethlisberger, 1941; Roethlisberger and Dickson, 1939) and on the other that their investigations brought about a 'paradigm-shift' in organizational behaviour (as presented in textbooks by, for example, Luthans, 2010; Rollinson, 2008; Smith, 2007). A particularly popular yet flawed narrative in organization theory is that in the wake of the Harvard Group investigations an 'engineering' culture reflective of 'scientific management' was replaced at Western Electric by one of sociological 'enlightenment' under 'human relations' management.

In contrast, drawing initially upon research into welfare capitalism, it has been argued that not only were American industrialists aware of social and psychological issues in the workplace prior to Elton Mayo's arrival at Hawthorne in 1928, but also that Western Electric, for a range of ideological and commercial reasons, had promoted elements of a 'human relations' philosophy prior to any so-called enlightenment stemming from Mayoite interventions. For a range of motives welfare capitalism at the Hawthorne Works had sponsored forms of employee well-being long before any social-psychological or social-system constructs were hypothesized for interpreting the behaviour of its workforce. Popular narratives in organization studies (see Etzioni, 1964, for one of the earliest and best known) that situate the Hawthorne Studies as a decisive or 'pivotal' (Thompson and McHugh, 1990: 76) turn from 'hard' scientific to 'soft' human relations management are remiss in that they overlook the impact of a range of economic, ideological and political forces on the cultural shaping of major American industrial corporations at this time.

Such forces were often directed at resolving, through strategically determined welfare capitalism and hard-edged corporate paternalism, the problems of an increasingly hostile industrial relations climate. It was felt, in particular, that such 'progressive' practices may allow large American firms to 'avoid the dreaded unionism' (Witte, 1954: 15), or else the threat of high labour turnover, which could reduce company profits significantly. In the pre-Depression era, company loyalty (especially among semi-skilled workers) was a valuable asset, and Western Electric was keen to cultivate it. In the same year as the *Eastland* disaster, 1915, for example, the company instigated a system of 'service pins' for long-term employees, in a move that suggested that 'rewards for output had been supplemented with rewards for loyalty' (Adams and Butler, 1999: 96).

On the other hand, we have noted that the economic downturn of the 1930s saw AT&T put increased commercial pressure on Western Electric and other Bell System divisions, with the result that a tougher work environment ensued (Danielian, 1939). Contrary to the folklore sometimes peddled in management textbooks (e.g. that an alienating corporate culture, pre-Mayo, was transformed into a munificent one, post-Mayo), evidence suggests that (with caveats) the reverse was probably true at Western, where a relatively benevolent climate in the 1920s became harsher during the 1930s. In other words, this research proposes that the influences acting upon corporate strategy and industrial behaviour at this time were many and varied, with organizational philosophies being far more subtle and complex than many 'models of management' in contemporary textbooks suggest.

We have also noted, however, that there are a number of significant historical studies that have taken contextual factors into account. There are, for example, excellent contributions that identify ideological and political factors relevant to our understanding of the Hawthorne Studies (e.g. Bendix, 1956; Gillespie, 1991; Rose, 1970). Other commendable accounts explain important social networks linked to Hawthorne and the Harvard Group (see, for example, Bruce and Nyland, 2011; Nyland and Bruce, 2012; O'Connor, 1999). From the present perspective, however, such otherwise praiseworthy research can be sociologically restricted to the extent that the focus of scrutiny is generally the institutional nexus of just one man – George Elton Mayo (see also Smith, 1998; Wren and Greenwood, 1998). As a result, even in the most insightful research on Hawthorne, the breadth of contextual understanding on the corporation in which Mayo and his colleagues famously practised their art can be limited.

This article therefore has adopted a different trajectory from previous 'anti-revelatory' or 'deconstructive' research on Hawthorne. Instead of making Mayo or the Harvard Group the primary focus, we have concentrated instead on the social and political environment in which the Hawthorne Studies were prosecuted. To appreciate such a context we have described important yet neglected influences on the host firm's evolution. Acknowledging the roles played by a number of important sociological actors in establishing a meta-narrative for Hawthorne − for example, Elton Mayo, the Harvard Business School and John D Rockefeller Jr − we have argued that there are yet many others to be accounted for in realizing a robust historical appreciation of Western Electric's organizational behaviour. In the present research these include the industrial reputation of the firm, the motives of paternalism and welfare capitalism, the ideology of progressivism, the influence of economic depression, and the experience of ethnic working communities.

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Notes

1 In the organization studies literature this is traditionally portrayed as a shift from an engineering-influenced to behavioural science perspective on industrial management in the wake of the Hawthorne Studies. The 'orthodox' narrative − as reflected, for example, in textbooks on organizational behaviour − sees 'human relations' typically defined as shorthand for a legacy of post-Hawthorne behavioural science research on groups, motivation and employee satisfaction. While it is beyond the scope of this article to discuss, at length, the chronological relationship between scientific management and human relations, it is important to note that this narrative is highly contested. Research in management history suggests that scientific management − as established in the 'Taylor system' (see Kanigel, 1997) − while certainly

involving time study and wage incentives, was in fact more of an all-embracing program for overhauling the structure of organizations − one that continued to evolve throughout the 1920s and 30s (see Nyland, 1996; Nyland and Heenan, 2005). On this issue, I would draw attention to the evolution of a continuing scientific management tradition at Hawthorne in the 1920s and 1930s (notably under the guidance of Henry Fleetwood Albright, Western Electrics' 'champion of scientific engineering') and how the company helped 'export scientific management to Japan' (see Adams and Butler, 1999: 76−80). Similarly, although 'human relations' (as a 'school' of management thought) is recurrently defined and explained as a successor movement to scientific management, research in management history describes how, in American industry, the term actually predates the work of Elton Mayo and the Harvard Group (see Bruce, 2006).

2 Bruce and Nyland illustrate how 'the meta-narrative regarding SM [scientific management] and HRS became the received wisdom' and in the process how 'conservative, anti-liberal segments of the American business community, seeking a return to the managerial hegemony they believed they enjoyed in the pre-New Deal era, stood to gain' (p. 384). Ultimately they question the extent to which 'Mayo's interpretation of the Hawthorne experiments was more reflective of his pre-formed personal views than of the actual empirical results', with such ideological artefact serving to 'shade Roethlisberger and Dickson's "official" account' (1939: 385).

3 Although these case accounts are directed at different historical ends, there are instances of thematic overlap in their analysis. For example, certain issues of reputation and philosophy inform the case on 'cultural context', while themes of culture and symbolism inform that on 'corporate context'. This is a largely inevitable by-product of conducting qualitative historical research, where the emphasis is placed on broad issues of interpretation and meaning rather than the narrow control of variables (Green and Troup, 1999; Hassard and Rowlinson, 2010).

4 Like other iconic manufacturers of the late nineteenth and early twentieth century, Western Electric was emblematic of the technical inventiveness, pioneering spirit and commercial power of the United States. Symbolically, nothing reflects this better than the corporation's masthead logo and trademark of the period – *The Genius of Electricity* (or *Golden Boy*). Designed in 1916 by Evelyn Longman, to symbolize the telephone as a modern messenger, this Mercurial figure sees a naked, muscular, white male, wrapped in thick electrical cable, grasping three bolts of lightning, and standing aloft a modest globe: the American corporation as capitalist God (Hawthorne Works Museum, 2010).

5 A large luxury vessel known as the 'Speed Queen of the Lakes', not long after taking its maiden voyage, the *Eastland* was suspected of possessing design flaws that made her susceptible to listing (Bonansinga, 2004). In particular, the centre of gravity was unduly high, making the boat potentially top-heavy when passengers gathered on the upper decks (Hilton, 1995). An incident of overcrowding in July 1903 saw the *Eastland* list and water flow up one of its gangplanks. Although the problem was resolved a further case of listing occurred in 1906, this time resulting in formal complaints being registered against the owners (Hilton, 1995). In an attempt to correct *Eastland*'s listing tendencies, its licensed capacity was reduced several times: from 3300 passengers down to 2800, then 2400 and finally 1125. However, just three weeks before the 1915 Hawthorne Works picnic, inspectors increased the capacity to 2500 (Hilton, 1995).

6 Estimates of *Titanic* passenger fatalities vary: 832 is the 'high' or 1912 US Senate Inquiry figure. The 1912 British Board of Trade figure is lower, at 818, and other estimates are lower still. Figures vary in the literature for a number of reasons, including double-counting due to passengers travelling under aliases, deaths at a later date but due to injuries sustained in the disaster, etc. In addition, c. 700 crew perished in the *Titanic* disaster.

7 Wrege (2008) suggests that a decade or so later Western Electric policy changed to making predominantly business-oriented (or 'promotional') films.

8 There are possibly echoes, here, of how, in *The Making of English Working Class*, EP Thompson (1968) suggests that the philanthropist Robert Owen was less of a proto-socialist and more of an 18th-century Whig – one who believed that social unrest and revolution could be stayed by the introduction of rationalist principles of organization. In some of Mayo's earlier work, and notably *Democracy and Freedom* (1919), there appears a similar concern with the prospects of modern industrial society giving rise to civil unrest and thus disrupting liberal capitalism (see Ackroyd, 1976; Bourke, 1982; O'Connor, 1999).

9 There is a sense, therefore, in which Mayo can be seen almost as a fellow-traveller of the Progressive Movement; although he came to the same problem, maintaining social cohesion and avoiding worker unrest (or the 'Worker Problem', as it was known by the Progressives), from a different philosophical direction (Buenker et al., 1986; Glad 1966). Also, the article should not be read as characterizing Hawthorne as a 'workers' paradise' at this time. Apart from the use of in-house spies there is evidence, for example, of the company making restrooms uncomfortable (i.e. lack of heating in winter; lack of ventilation in summer) so that employees would return to work quicker (Charles Wrege: personal communication). This perhaps resonates with the image of the industrial restroom as portrayed in Charlie Chaplin's film *Modern Times*. The local nickname for the plant, after all, was the 'Bohemian Bastille'!

10 With regard to the Bank Wiring Room, despite *Management and the Worker* offering sociological analyses of the 'output situation' (chapter XVIII), 'supervisory situation' (chapter XIX) and 'internal organization of the group' (chapter XXI), the case material in these chapters is mostly lacking in contextual insight. Although some exceptions can be found in the more discursive sections of the 'interemployee relations' chapter (XX; see, for example, pp. 460−462), as Roethlisberger and Dickson (1939: 459) rightly caution: 'In this chapter, only the descriptive material pertaining to the relations that existed among the fourteen operators will be presented'. In other words, the research was to remain 'closed-system'.

11 It would be a mistake to consider that things were exclusively 'rosy' at Hawthorne in the pre-Depression period. As Charles Wrege (personal communication), for example, has pointed out, under Hawthorne's 'Extra Incentive Earnings Plan' (1925), higher piecework earnings had the drawback that if the workers, as a 'gang', earned $100, it had to be split with the 'Gang Boss' and the 'Section Chief': 75% for the workers, 25% for the supervisors. The foreman and the assistant foreman were not *legally* entitled to this distribution, but following 'Hawthorne ethics' they demanded their 'cut'. Wrege thus suggests that Hawthorne at this time was not necessarily the 'nirvana' that official company statements described.

12 In autumn 1923 Capone had moved his 'hangout' from the *Four Deuces* (Chicago) to the *Hawthorne Inn*, just up the street from the Works, facilitating a strategic move to the 'wide open' city of Cicero. Reflecting the growing influence of organized crime in Cicero, in the month the Illumination Experiments commenced at Hawthorne (November 1924), Capone famously 'slugged' Cicero Mayor Joseph Klenha on the steps of City Hall 'as police officers stood by and watched' (Eig, 2010: 28). Earlier the same year Capone's brother, Frank, was shot dead by police 'as hundreds of workers began pouring out of the Western Electric factory across the street' (Eig, 2010: 29). By the early 1930s, then, contextually Cicero had seen organized crime, gang culture and rising unemployment bring significant cultural changes to an area whose communities were beginning to 'dislocate' (Shaw and McKay, 1942).

13 Although not leading to formal anthropological research on Hawthorne's local communities, Warner's influence certainly extended to other Harvard Group 'late-comers'. Notable here is Warner's relationship with the social anthropologist Burleigh B Gardner and especially the latter's development of the nondirective interviewing method (see Jacoby, 1986: 613−619).

As a graduate student at Harvard in the early 1930s, Gardner attended seminars conducted by Mayo and Lawrence Henderson, and later joined a team of student interviewers hired by Warner for his 'Yankee City' (Newburyport) project and related studies. Subsequently, through Warner, Gardner obtained a job in Western Electric's new 'employee counseling program', which used nondirective interviewing for therapeutic purposes. After working at Western Electric for five years, Gardner wrote *Human Relations in Industry* (1945), a book based on his experiences. Warner's influence on Gardner is perhaps reflected in the greater sensitivity the book displays towards social class, ethnicity, and the world outside the workplace, especially the reasons why workers join unions, this representing a notable political departure from Mayo and a methodological departure from the Hawthorne Studies programme.

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