

CONTEXTUALISING ORGANIZATIONAL CHANGE:

The Neglected Cultural Legacy of the Hawthorne Works

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INTRODUCTION

The Hawthorne Studies, 1924-33, (see Roethlisberger and Dickson, 1939) are the largest, best known and most influential investigations in the history of organizational change research. They are associated primarily with the Australian psychologist and later Harvard Business School professor Elton Mayo and the research team he joined and developed at the Western Electric Company's Hawthorne Works, Cicero, Illinois.

While the Hawthorne Studies are very well known, I argue that the company in which these psychological, sociological and anthropological investigations were prosecuted - Western Electric - has remained rather anonymous in the major research accounts subsequently produced. Management research on Hawthorne has traditionally focussed on the various experiments and field studies that comprise the Studies. In so doing, it has failed to consider many wider factors and forces that shaped the host enterprise at this time, especially ones related to the industrial reputation and cultural climate of Western Electric.

To bridge this knowledge gap, I develop a *contextual* approach to understanding the nature of the Western Electric Company in the period that precedes the start of the Hawthorne Studies in November 1924 (with the initial, pre-Harvard, Illumination experiments). This approach sees important yet sociologically 'neglected' contextual factors addressed in two case accounts. These accounts highlight, respectively, the nature of the company's early *corporate* context - though an analysis of its industrial and commercial history - and the cultural influence of the Hawthorne Works' *communal* context - through an analysis of a major event in the firm's social history, the Works Picnic disaster of 1915. As a result of this research, it is argued that by the mid-1920s the Hawthorne Works - rather than being an essentially anonymous organization - had in fact developed a singularly progressive and enlightened corporate style.

In making this argument I challenge, ultimately, aspects of those hegemonic, revelatory narratives so regularly embraced in explanations of the Hawthorne Studies. Such narratives suggest, on the one hand, the scientific 'discovery' of human relations at Hawthorne by the Harvard Group (as reflected in research accounts by e.g. Mayo, 1933, 1935, 1945; Roethlisberger and Dickson, 1939; Roethlisberger 1941) and, on the other, that the Hawthorne investigations bring about a 'paradigm-shift' in management behaviour and organizational change (as presented in modern textbooks on organizational behaviour by e.g. Luthans, 2006; Smith, 2006; Rollinson, Saunders, and Thornhill, 2007). Drawing upon, among other things, research into the development of welfare capitalism (see Brandes, 1976; Jacoby, 1997; Tone, 1997; Hicks, 1999; Ebbinhaus and Manow, 2001) I argue in contrast that not only was the social-psychological well-being of the employee on the American corporate agenda well before Elton Mayo arrived at Hawthorne in 1928, but also that Western Electric had embedded a beneficent culture prior to any human relations enlightenment arising from Harvard Group interventions. Welfare activities at Hawthorne had encouraged elements of worker development, participation and need-fulfilment well before any kindred social-psychological or social-system (Paretian) constructs had been hypothesized for interpreting the behaviour of the firm's workforce. I suggest, therefore, that popular periodization narratives in organization theory (Burrell and Morgan, 1979; Barley and Kunda, 1992) - that typically situate the Hawthorne Studies as a "pivotal" (Thompson and McHugh, 1990: 76) turn from 'hard' scientific (Tayloristic, classical or industrial psychological) to 'soft' human relations management - are remiss in that they overlook the progressive reality of welfare capitalism and its enlightened influence on industrial workplace culture in many corporations of the pre-Depression era.

Beyond the Closed System: Rethinking Hawthorne Contextually

A major criticism of Hawthorne traditionally is that, in being an example of ‘closed-system’ organizational analysis, the Studies do not account for elements of organizational context (Katz and Kahn, 1966; Burrell and Morgan, 1979; Scott, 2003). Instead, the Hawthorne investigations – and subsequent critiques of them (e.g. Landsberger, 1958; Carey, 1967; Rose, 1970; Levitt and List, 2009) - are explained exclusively in terms of events (mainly experiments) that occur *within* the organization and *during* the period of research. Even where critical scholars suggest they are studying the ‘origins of the Hawthorne Studies’ (e.g. Wrege, 1976) the analysis is confined to internal factors relating to the period of the investigations themselves.

For research on Hawthorne, one particularly problematic aspect of this lack of contextual awareness and critique is that Western Electric is treated, implicitly, as just another plant for conducting industrial research - an unexceptional location from which results can be generalised. The inference is that although the experimental site is ordinary, the experimental results from Hawthorne - regarding group dynamics, informal organization, participation etc. - are *extraordinary*. I argue that this scenario is fundamentally flawed and suggest instead that when the company’s extensive welfare provisions are considered alongside the cultural legacy of a major tragedy that galvanizes its industrial community, the Hawthorne Works emerges as a very specific – perhaps uniquely conducive - location for conducting research into human relations.

Such analysis naturally joins previous research in organizational sociology that has reanalyzed the Hawthorne investigations (e.g. Landsberger, 1958; Carey, 1967; Wrege, 1976; Franke and Kaul 1978; Bramel and Friend 1981; Pitcher, 1981; Greenwood, Bolton and Greenwood, 1983; York and Whitsett, 1985; Gillespie, 1991; Olsen et al, 2004; McQuarrie, 2005; Wren and Bedeian, 2008; Levitt and List, 2009). It also joins a more restricted literature that has discussed the nature and development of Western Electric as a corporation and employer (e.g. Fagen, 1975, 1978; Gillespie, 1991; Adams and Butler, 1999; Wachholz, 2005). Of such writing, the present research engages specifically with a small number of accounts that have attempted to deconstruct the habitual narrative that ‘Hawthorne’ reflects a *revelatory* process in which Western Electric – a bureaucratic corporation ignorant of ‘human factors’ - is ultimately enlightened following the arrival of behavioural scientists from Harvard and their ‘discovery’ of human relations at work (e.g. Wrege, 1976; Wren, 1985; Gillespie, 1991; Wren and Bedeian, 2008).

Among such ‘anti-revelatory’ authors the work of Gillespie (1991) makes for the most compelling reading. Gillespie’s work outlines how evidence from the Hawthorne experiments serves not only to question the general ‘discovery’ narrative on Hawthorne, but also, and more significantly, how much of the Harvard Group’s own research narrative - as presented for example in *Management and the Worker* (Roethlisberger and Dickson, 1939) - can be considered socially, rather than scientifically, constructed.

Gillespie (1991: 42) queries, for example the veracity of just how revelatory the findings from the individual investigations were. Drawing on the Hawthorne researchers’ personal communications, he notes that when the Illumination experiments commenced both managers/superintendents (e.g. Clarence Stoll; George Pennock) and researchers (e.g. Charles E. Snow; Homer Hibarger) alike were “aware from the beginning that human factors could influence production and thereby interfere with the experimental results”, and that as a consequence “the researchers did all they could to minimize this effect”. In contrast to mainstream narratives, therefore, accounts such as Gillespie’s suggest that Hawthorne researchers were aware of implicit social and psychological forces in the workplace - such as the ‘Hawthorne Effect’ (Landsberger, 1958) - from the day the Studies began. In short, such forces did not have to be ‘discovered’.

It is argued that a major shortcoming with even the most authoritative and detailed texts on Hawthorne is a failure to appreciate the wider sociological circumstances that shaped the early development of the Works. As much as those landmark Harvard-based offerings which first disseminated the Hawthorne investigations - notably Mayo (1933), Whitehead (1938) and Roethlisberger and Dickson (1939) – this charge can be levelled at a key sociological reanalysis of Hawthorne – i.e. Landsberger (1958) - as well as the major biographical work linked to the Studies - Trahair's (1984) study of Mayo. Even in Gillespie's (1991) analytically more rounded account of Hawthorne, contextual analysis is restricted to details of factory organization, industrial relations systems, and personnel policies - the formative profile and cultural character of Western Electric remain largely unexplored. The present research, therefore, seeks to resolve this problem of contextual neglect. In so doing, it addresses, in particular, a major oversight in this literature - that none of these prominent works discusses, or even mentions, the influence of what is arguably the single most important contextual event in the formative history of the Western Electric Company: the 1915 Hawthorne Works Picnic disaster, in which 841 employees, relatives and friends perished.

THE NEGLECTED *CORPORATE* CONTEXT:

Western Electric, the Bell System and Welfare Capitalism

One of the reasons why the failure to consider contextual forces relating to Hawthorne represents such an oversight is that Western Electric was an extremely significant corporation in American economic expansion. When taught the Hawthorne Studies, given they have probably never heard of Western Electric, and receive very little feeling for it in the main resources available to them, beginning students can be excused for assuming this is a corporation of marginal significance. Nothing could be further from the truth. The reason why Western Electric is *so* important is that it is deeply woven into the fabric of American industrial history. Like other prominent manufacturers of the late nineteenth and early twentieth centuries - many of whose sites, like Hawthorne, have long been converted into shopping complexes; e.g. 'Model T Mall' in Detroit; 'Arsenal Mall' in Watertown, Massachusetts - 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*'; also later renamed *The Spirit of Communications* by Bell operating companies). 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 globe. The American corporation as capitalist God.

But just *how* prominent was the Western Electric Company? Before examining a specific cultural event that brought national prominence - the Hawthorne Works Picnic disaster, 1915 – I will assess Western Electric's general profile in the early decades of its corporate history. In so doing, I document landmark events from the time the company joins the Bell System in 1881 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 it was in this year that Alexander Graham Bell - the inventor and patentee of the telephone - purchased a controlling interest in the stock of the Western Electric Company of Chicago (Fagen, 1975). At this point, Western Electric officially joined the Bell 'System'.

The economic motivation for this 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 would become AT&T in 1899 (Fagen, 1975).

However 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 for developing a 'research branch' of Western Electric, a move which would usher in a period of major technological breakthroughs (Israel, 1992). Notable among them was the development of the high vacuum tube in 1913, which brought with it the 'electronic age', with Western Electric emphasising the fact in advertisements depicting, for example, 'My Electrical Home' (Hawthorne Works Museum, 2009). Another signal event during this period saw the research operation at Hawthorne develop technology that would make a transcontinental telephone service 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, in 1905, 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 (Kay, 2000). The Hawthorne plant officially opened in 1907 and soon developed a reputation within American industry as a model of 'welfare capitalism', or the practice of businesses providing welfare-like services to employees (Jacoby, 1997). Under welfare capitalism companies might offer employees higher pay and non-monetary compensation, such as health care, housing, and pensions, plus possibly social clubs, sports facilities, employment bureaus and in-house training (Brandes, 1976). In the case of Hawthorne it 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 even an annual beauty pageant, which ran until 1980 (Adams and Butler, 1999; Hawthorne Works Museum, 2009). Many of the social events were run by the Hawthorne Club, which organised dances, concerts, sports, parties, and the annual picnic. Western Electric even managed to persuade the Chicago Public Library to locate a branch at Hawthorne (Adams and Butler, 1999).

By 1914 the Hawthorne Works had become Western Electric's sole manufacturing site; having absorbed the company's other facilities in New York and Chicago (Fagen, 1975). From this point on, despite opening plants in other locations, 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.' (Adams and Butler, 1999). 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). Western Electric phones were not the property of individual customers, but rather of local Bell System firms, and thus in turn of AT&T. Customers simply leased their phones from AT&T on a monthly basis, this seeing them individually pay for a phone and connection line in lease fees several times over (Fagen, 1975).

Ethnicity, Community and the 'Progressive' Era. By 1917, 25,000 people were employed at the ever expanding Hawthorne Works, a large percentage of them Cicero residents of Czech, Polish or Hungarian origin, the vast majority being first or second generation immigrants. The plant dwarfed Cicero itself, whose population in 1910 was 15,000 (Kay, 2000). Although many Hawthorne employees commuted to work from Chicago and communities such as Berwyn, Morton Park, LaGrange, Oak Park and Riverside, a large percentage of the workforce resided within a mile or less of the Works (Whyte, 1977). The fact that Hawthorne employees were frequently “neighbours at home as well as co-workers” apparently fostered a “family atmosphere” and “family culture” in which ethnicity was “a common denominator that helped galvanize relationships among employees” (Wachholz, 2005: 24-6). Indeed the majority of Hawthorne employees enjoyed 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), such as the cheap, daily commute on the streetcar - the ‘5 cent ‘El’ ride’ (Whyte, 1977).

Another sociological feature of this formative history was that Western Electric employed a relatively large percentage of women workers, even before the days of women’s suffrage. A regular feature of early Hawthorne Works Picnics was of a large group of women employees - known as the ‘window smashers’ - marching and wearing ‘Votes for Women’ sashes (Adams and Butler, 1999). Although not involved significantly in office work, women played key roles in most manufacturing areas of the plant, where their ‘delicacy of touch’ and ‘carefulness’ were valued for performing intricate tasks such as coil winding (Wachholz, 2005). In the spirit of welfare capitalism, the Women’s Club was opened in late 1912, just one year after the Men’s. As Wachholz (2005: 26) notes, a primary role of the Women’s Club was to “ensure participation” for women in Hawthorne’s wider welfare activities - such as athletics, education programs and entertainment - this including leading roles in the organization of employee picnics. Hawthorne was indeed a ‘social center’ (Whyte, 1977) 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).

Notably this was the time of the Progressive Era presidencies of Roosevelt, Taft and Wilson, an era reflected by 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 emphasised signally the ‘welfare of the individual’ (Buenker, Burnham and Crunden, 1986). During August 1912, for example, 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). The goal of such a department would be, in Alexander’s words, 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, Walter Allen, Vail’s associate, suggested 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). The following year AT&T proclaimed 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 significant in that it demonstrated to the corporation's political masters that Bell was "socially responsible" (Gillespie 1991:18). Whether or not the motives of corporations practicing paternalism and welfare capitalism were 'genuine' (see Tone, 1997; Hicks, 1999; Ebbinhaus and Manow, 2001), what is certain is that, in the 1920s, Western Electric represented a classic 'modern manor' (Jacoby, 1997)

Expansion, Innovation and Profile. In the period immediately prior to the Hawthorne Studies, Western Electric was 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 distributed a wide range of items manufactured by other firms (Adams and Butler, 1999). 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, 2009).

Around the start of the Hawthorne Studies (November 1924), the Cicero Works had expanded to over 30,000 employees (Kay, 2000); Western Electric had a catalogue approaching 1300 pages and rivalled General Electric and Westinghouse as a manufacturer and distributor (Fagen, 1975). The company had built on its initial welfare capitalist practices and become recognised as a provider of good wages, decent working conditions, and fringe benefits (Whyte, 1977; Wachholz, 2005); albeit still within a strategic framework designed to limit union organization. A major plank of the Bell System, in the 1920s Western Electric was a corporation with a "high public profile" that had applied "the new personnel policies to an extent unsurpassed by any other company" (Gillespie, 1991: 17).

THE NEGLECTED COMMUNAL CONTEXT:

The 1915 Works Picnic Disaster and its Social Impact

My second account of neglected context in the pre-history of the Hawthorne Studies concerns events surrounding a tragedy on the Chicago River in July 1915 - the Hawthorne Works Picnic disaster. Now rather 'forgotten' (Bonansinga, 2004), this was the most notable sociological event in the formative history of Western Electric. Although the event made a profound impact on "Chicago's developing social fabric" (Bonansinga, 2004: 240) and indeed served to "scar the collective memory of the metropolitan area" (Hilton, 1995: 234), it was above all a "neighbourhood affair", the main impact being on the "communities near the Hawthorne plant, Berwyn and Cicero" (Adams and Butler, 1999: 90). In the account developed here the main substantive events of the disaster are described together with details of how the disaster impacted on the Hawthorne Works and its community. The relevance of the disaster for Hawthorne Studies research is assessed in the Discussion.

The 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 from the Indiana Transportation Company to carry almost 7,000 Hawthorne Works employees, their relatives and friends on a four hour excursion from Chicago to Michigan City, Indiana (Western Electric News, 1915b). This had been an annual event since 1911 and was considered *the* major social outing of the year for a predominantly young workforce of primarily immigrant origin engaged on repetitive telephone assembly work (Western Electric News, 1915b; Bonansinga, 2004).

The number of employees attending the picnic began to increase significantly from 1913. Following attendance by approximately 3,500 for the first two years, in 1913 it increased to over 6,000. The main reason was that the picnic shifted its focus from the immediate family to include members of the extended (Western Electric News, 1915b). Hawthorne publicity for the 1914 picnic suggested, for example: "Bring along her mother and

her sister and her sister's youngsters. Make a family party of it" (Wachholz, 2005: 39). This expansion, however, brought with it the need to provide additional transport capacity and in being a maritime outing to charter additional vessels for the voyage across Lake Michigan. As such, an extra ship was chartered for the 1914 excursion – the *Eastland* (Western Electric News, 1915b).

One year later, the 1915 picnic was organized by the newly created Hawthorne Club, which had been formed from the merger of the Men's and Women's clubs in April (Whyte, 1977). The annual picnic was itself becoming a feat of organization, with for the 1915 event the Hawthorne Club founding a plethora of committees. Employees from all sections were encouraged to participate in the planning process, joining committees as varied 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 considered an ideal location for such a large outing in that Michigan City's showcase feature, Washington Park, offered a wide range of attractions, 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 structured so that, after disembarking, passengers would partake of a 'pot-luck' picnic followed by participation in sporting and other events organized by the various 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 Saturday of July (Western Electric News, 1915b).

The SS Eastland. The background to the Hawthorne Picnic tragedy was a series of events relating to one of the Great Lakes passenger ships chartered for the event, the *SS Eastland*. In wake of the sinking in 1912 of the *Titanic*, on 4 March 1915 the LaFollette Seamen's Act - mandating 'lifeboats for all' - had been signed into law by President Woodrow Wilson. In the case of Great Lakes passenger ships, this would see the fitting of additional sets of lifeboats and rafts, despite prior professional advice that many of these vessels would suffer stability problems if this were completed. Indeed, for at least one of the steamers hired, the *Eastland* - a vessel that, due to being designed for speed, sat high in the water - this would make her potentially unstable (Hilton, 1995).

A large luxury vessel, almost 84 meters in length, and known as the 'Speed Queen of the Lakes', not long after taking its maiden voyage, in May 1903, the *Eastland* was suspected of possessing design flaws which made it susceptible to listing (Bonansinga, 2004). Analysis suggested the centre of gravity was unduly high, making the boat potentially top-heavy, and notably so when passengers gathered on the upper decks (Hilton, 1995). An incident of overcrowding in July 1903 saw the *Eastland* begin to list and water flow up one of its gangplanks. Although the problem was resolved, a further case of listing occurred in August 1906, this time resulting in formal complaints being registered against the then owners, the Chicago-South Haven Line (Hilton, 1995). In an attempt to correct *Eastland's* listing tendencies, its licensed capacity was reduced several times: from 3,300 passengers down to 2,800, then 2,400, and finally 1,125. However in early July 1915, just three weeks before the date of the Hawthorne picnic, steamboat inspectors had been persuaded to increase the passenger capacity, with inspector Robert Reid formally granting the *Eastland* an amended certificate allowing it to carry 2,500 (Hilton, 1995).

On the morning of Saturday 25 July 1915, from around 0630 onwards, passengers started to board the *Eastland* on the south bank of the Chicago River, downtown between Clark and LaSalle Streets (Western Electric News, 1915b and c). People had not been allocated to specific ships and there were no passenger lists (Bonansinga, 2004). Under the stewardship of Captain Harry Pederson, the *Eastland* was scheduled to be the first vessel to depart. By around 0710, 2,752 passengers had apparently boarded the ship - although later

testimony by navigation inspector R.H. McCreary maintained he turned away prospective passengers after the automatic counter registered 2,500 (Hilton, 1995). With many passengers initially standing, as was usual, on the wharf side in order to wave to family and friends, but subsequently moving to the upper open decks of the river side to observe the view (Western Electric News, 1915c), the *Eastland* began to list initially toward the wharf and then toward the river, both at around 10 degrees. Attempts by the crew 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 due 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 ultimately allowed water to pour into the ship from portholes on the main deck, most of which were open, causing furniture and passengers to begin sliding across the deck (Western Electric News, 1915c). Counter arguments, however, question elements of this scenario (Hilton 1995). In any event, at 0728, ten minutes after the gangplank had been drawn in, and when the *Eastland* began to push off from Clark Street dock, the vessel suddenly lurched, rolled and capsized, resting on the river bottom only twenty 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 now became trapped due to the sudden capsizing of the vessel, with many others being hindered in making their escape by heavy furniture (Bonansinga, 2004). Despite an immediate response by the crew of the tugboat, *Kenosha* - which was originally to tug *Eastland* to Lake Michigan - and the fact that the *Eastland* was still partially tied to its mooring and only about twenty feet from the wharf, 841 passengers, the vast majority women and children of immigrant origin or descent, and four crew perished in the incident, the death toll including 22 whole families (Bonansinga, 2004). This represented the greatest loss of life in Chicago's history - greater than the Chicago fire of 1871 - was America's worst maritime disaster, and for Western Electric "the greatest tragedy that has ever befallen organized industry" (Western Electric News, 1915e: 16).

During the rescue operation, many of the bodies were moved to the Second Regiment Armoury on Washington Boulevard at Curtis Street, where they were laid out for identification, with the doors being opened for family and friends shortly before 2300 hours that night (Hilton, 1995). Earlier in the day, on the opposite (north) side of the river, the Reid-Murdoch company warehouse had been requisitioned as a temporary hospital and morgue (Western Electric News, 1915b). As a large proportion of the victims were of Czech descent, a significant number were subsequently buried in the Bohemian National Cemetery at 5255 N. Pulaski Street (Hilton, 1995). In the period immediately following the disaster, there emerged sweeping accusations of both criminal activities and conspiracies which were levied against the ship's crew, operators, leasing company, and also Western Electric (Bonansinga, 2004).

There are a plethora of theories as to exactly why the *Eastland* capsized. We have already noted the historically popular singular explanation that there was a rush of passengers from the wharf- to the river-side of the ship. Two other popular, yet largely discredited, theories are that the tug *Kenosha* may have pulled the *Eastland* over, and that the ship's keel may have been resting on debris or mud at the bottom of the Chicago River (Bonansinga, 2004). The most authoritative account of the disaster - Hilton (1995) - argues that there was no *single* cause and that instead the ship capsized due to the cumulative effects of a number of events. We have already cited some of Hilton's 'straws that broke the camel's back', for example, that in being built for speed the *Eastland* was a narrow ship that sat high in the water, thus causing instability; the installation of additional life boats and rafts added to the top heaviness of the vessel; and the licensed capacity of 2,500 was too great for a ship with known built-in stability problems. Other reasons include: a problematic water ballast system

that, when only partially filled, made it vulnerable to the consequences of the ‘free surface’ effect; the absence of a stability test; and ignoring a written safety alert from a qualified naval engineer. Above all, however, is the charge that the ‘licensed professionals’ who owned and operated the vessel had acted in an ‘unprofessional manner’, notably in respect to human safety (Hilton, 1995).

Impact, Aftermath and Legacy. In the days following the tragedy Western Electric made little effort to operate the Hawthorne plant (Western Electric News, 1915b). On Monday 27th a few hundred employees turned up for work, followed by a few thousand on Tuesday. Of the workers that returned to work on Monday, the majority apparently spent much of the day gathered in groups, discussing the disaster that many had witnessed only two days earlier (Bonansinga, 2004). By the end of Tuesday 28th Western Electric had turned away around 800 local residents offering to fill the jobs of the victims (Adams and Butler, 1999). Wednesday 29th saw the day of the greatest number of funerals and was declared an official day of mourning by the company; the main entrance gates to the plant 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).

The event subsequently entered the folklore of the Hawthorne Works (Wachholz, 2005), the suburbs around Cicero (Kay, 2000) and the wider metropolitan Chicago area (Hilton, 1995). ‘Survivor stories’ (Western Electric News, 1915c) recounted the heroic acts performed not only by the crews of the *Kenosha* (especially Captain John O’Meara and crewman Carl Mattson), freighter *Schuylkill*, the Coast Guard, frogmen and divers, and doctors and nurses, but also members of the public - such as Charles Klein, Edward Atkin and A.W. Perkins, who spontaneously stripped off their clothes and dived into the river, sometimes repeatedly, to rescue *Eastland* passengers (Wachholz, 2005) - and notably Hawthorne employees themselves, although initially Western Electric did not wish to “single out any individual for personal mention” as this could potentially be “unfair to the rest” (Western Electric News, 1915b: 8). As survivors of the *Eastland* continued to work at Hawthorne for several decades, this served to preserve the disaster as a landmark in the company’s oral history (Whyte, 1977). Indeed, the last known survivor of the *Eastland*, Libby Hruby, daughter of a Czech immigrant employee, and at the time a ten year old who had been standing on the upper deck, died locally in Berwyn as late as 6 November, 2004, age 99, more than 20 years after the closure of the Hawthorne Works (www.archiver.rootsweb.ancestry.com/th/read/CHICAGO-BOHEMIANS/2004-11/1100481270).

In early August 1915, Alexander Graham Bell, who had been retired from the telephone business for a number of years, but who still held considerable amounts of stock in both AT&T and Western Electric, accompanied his wife Mabel on a high-profile visit to the Hawthorne Works (www.inficad.com/~ksup/welectric.html). During the visit, the Bells reputedly stopped at each work station, shook hands with the employees and discussed directly the disaster and how it had affected them. Such was the personal attention shown, that Mabel Bell reputedly took full details of employees who had perished, together with the names and addresses of family members affected by the tragedy (www.inficad.com/~ksup/welectric.html). Subsequently these employees and their families received personal notes of condolence from the Bells along with gifts, to the extent that they were deemed appropriate in each individual case (www.inficad.com/~ksup/welectric.html). This goodwill visit was closely followed by a period of recruitment in which Western Electric adopted a policy of favoring victims’ relatives when assessing employment applications (Adams and Butler, 1999).

Although in terms of the death toll more passengers perished on the *Eastland* (n = 841) than on the *Titanic* (n = 832), and while the event had a major impact on the working communities surrounding the Hawthorne plant, after significant initial media coverage relatively little profile seems to have been attached to the event in terms of its general impression on the American public. Among the possible reasons for this are that: the incident was overshadowed by the more global newsworthy events of World War One; the City of Chicago did not want negative media coverage and so suppressed the incident; and, more prosaically, as those who perished were predominantly working class immigrants - and mainly women and children - they represented actors with relatively little 'voice' (Hilton, 1995). Unlike the *Titanic*, the *Eastland* did not claim the wealthy or famous, nor did any of Western Electric's executives perish.

DISCUSSION

To demonstrate the distinctive sociological profile of the early Hawthorne Works and how this shaped its members' experiences two accounts of neglected contextual factors have been produced. In terms of social theory, these are considered missing actors in the Hawthorne Works' network of meaning. One concerns the generic reputation and identity of the focal corporation, Western Electric: the other, the impact of a specific, tragic event on the local community of its Hawthorne plant. In identifying such neglected yet influential factors, the article has sought to counter the practice of explaining Western Electric and its Hawthorne Works within a historical and cultural vacuum.

In analysing, initially, corporate reputation it has been argued that during the early twentieth century Western Electric was an extremely prominent employer - a major player in the Bell System, it possessed 'high public profile'. We have noted not only Western Electric's stellar reputation for scientific innovation, but also how around the time of the Hawthorne Studies it boasted a massive catalogue and a production facility, at Cicero, of over 30,000 employees; it was one of America's 'Big 3' electrical manufacturers.

Above all, we have noted how from its opening in 1907, the Hawthorne facility established a reputation for being *progressive* and *enlightened*. Although 'scientifically managed' (Adams and Butler, 1999), from its inception the Hawthorne Works was a provider of good wages, decent working conditions, and significant fringe benefits (Wachholz, 2005). The plant, in particular, was considered a beacon of so-called welfare capitalism. Describing a photograph of the 'Hawthorne Club track and field meet, 1927' Gillespie (1991: 20) suggests this is "welfare capitalism at its peak"; this was of course just a year before Elton Mayo first entered the plant. An impressive plant, with state-of-the-art facilities, and possessing a 'family culture', in the years preceding the Hawthorne Studies, the Works was practicing the 'new personnel policies' in which its reputation was 'unsurpassed'.

Through its welfare policies and modern personnel practices, therefore, Western Electric appeared to be a very progressive employer in the years leading up to the Hawthorne Studies. Such a corporate style, however, was not only a matter of strategic choice, but also seemingly one linked to industrial logic. Although many American corporations of the early twentieth century received positive press for their development of '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 firms of the period such employment programs had gained "the aura of technological inevitability".

Moreover, perhaps reflecting Walter Allen's 'applied psychology' proposals for Bell companies a decade earlier, in a speech to the National Research Council in 1922, Robert Yerkes, Chairman of the Personnel Research Foundation, had discussed a policy shift from

“things that are worked with, to the worker” (Yerkes, 1922: 1). This speech suggested that employee psychology and human well-being were high on the agenda for industrial research funding prior to, for example, Elton Mayo exploiting his significant Rockefeller support (see Trahair, 1984). We have indeed noted how in many spheres of Western Electric’s activities – and especially those associated with the Hawthorne Club – sociological and psychological well-being was promoted through a range of participative and developmental welfare opportunities. More prosaically, in May 1924, six months prior to the start of the Illumination experiments – and more than four years before any Harvard involvement – the burgeoning Hawthorne personnel function issued to employees who were ‘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 sentiments, the final commandment exhorted 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’ (emphasis in original). By the mid-1920s, therefore, if ‘social man’ (Mayo, 1933; see also Rose, 1970; Dingley, 1997) had not yet been ‘discovered’ at Hawthorne in *theory*, the Works certainly appeared to understand his needs in *practice*.

It can be argued, therefore, that Elton Mayo did not so much turn the social and psychological tide at Hawthorne as swam briskly with it. Indeed Roethlisberger and Dickson (1939: 540), in a rare reference to Western Electric’s prior, historical context, and seemingly drawing upon Durkheim (see also 1939: 272 and 389), admit 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”. Grounding this historical-contextual statement, they go on to specify 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).

Thus, whereas Western Electric was undoubtedly ‘scientifically’ managed during this period, this is not the whole story – it was also highly welfare-oriented in its corporate style. The basic periodization tables presented in texts on management and organization fail to take this fact into account. Ideologically, although Braverman’s (1974) well known suggestion is that the human relations movement became the ‘maintenance crew’ for scientific management – socially oiling its mechanistic wheels – another explanation is that the doctrine of human relations functioned as a modernizing agent for welfare capitalism. It can be hypothesized that part of the corporate popularity of the human relations constellation of job-based development and enrichment practices lay in providing a watered down well-being for firms no longer willing to support the full menu of welfare capitalist services.

The second contextual account developed in this article focuses on one of the Hawthorne Works’ ‘integrating’ provisions – the Hawthorne Club’s Employees’ Annual Picnic, and specifically the fifth, in 1915. It has been argued that in order to appreciate the generic context in which the Hawthorne Studies were prosecuted, it is important also to comprehend the influence of specific cultural landmarks in the Works’ formative history. On being taught the Hawthorne investigations, students are typically fed a diet of textbook-based, closed-system, experimental data derived mainly from Roethlisberger and Dickson (1939). In contrast, this article has made a case for appreciating the contextual nature of corporate climate at Hawthorne through an examination of the impact and influence of events occurring in the period *prior* to the Studies. Of particular concern to this investigation has been the analysis of sociological issues whose influence extends beyond the boundary of the focal organization.

For Hawthorne, the most significant single event in the plant’s cultural history is the Works Picnic of 1915, a tragic event which served to bring issues of community, humanity and relationships to the fore. In particular, it drew attention to the emotional side of an

organization which already possessed a reputation for employee welfare and familial values. In the wake of this tragedy, the well publicised relief actions of Western Electric and the respectful visit by the Bells, for example, placed the cultural accent even more firmly on paternalism and fraternity.

To make sense of the cultural climate of the Hawthorne Works at this time, I have argued that knowledge is required not only of such landmark incidents, but also of how they affect local communities whose social and economic agendas, in turn, can influence the affairs of a major local employer like Hawthorne. In the case of the 1915 Picnic disaster, it is argued that one sociological factor that has been regularly overlooked in this network of relations is that of local, predominantly immigrant, communities and their values, goals and motives. In line with Erikson's (1976) Durkheimian analysis, it is suggested that in the face of disasters such as the 1915 Works Picnic it is the community that 'cushions pain', 'represents morality' and serves as the 'repository for old traditions'.

If we seek to understand, for example, the 'life-world' (Husserl, 1970) of the large percentage of Czech employees at the Hawthorne plant at the time, then it is important to trace some of the wider cultural influences arising from membership of this immigrant community. Chicago at the turn of the twentieth century was in fact the world's third largest Czech city. Indeed, by the 1920s Chicago boasted four Czech-language newspapers (Gotfried, 1962). In terms of social organization, Cozine (2005) notes how, as the Czech community became established, so it founded its own 'network of institutions', including savings and loan associations, mutual benefit societies, and fraternal organizations. Discussing how such community institutions potentially impacted at the level of the firm, she argues that for the large percentage of Czech operatives at Hawthorne "by the 1910s and 1920s" their energies were "devoted more to ethnic and neighborhood organizations than to radical or unionist activity" (Cozine, 2005: 1).

Such analysis suggests that, at this time, the significant Czech community at Hawthorne not only had distinct institutional identity but also collectively was relatively compliant to welfare capitalist policies and practices (cf. Schneirov, 1986). For the Hawthorne Studies, evidence from such contextual analysis could, and arguably should, have been woven into those areas of the Harvard Group's research seeking anthropological explanation of workplace culture and why it appeared so "integrated" (Roethlisberger and Dickson, 1939: 540). This may have yielded sociologically more grounded and anthropologically far richer information than extracted, for example, from the Interview programme at Hawthorne, which despite its impressive size was frequently restricted to "the relations existing between work effectiveness and personal situations" (Roethlisberger and Dickson, 1939: 315).

CONCLUSION

In conclusion, this article has examined a number of historical, cultural and sociological factors relevant to understanding the reputation and climate of the Western Electric Company in the era preceding the Hawthorne Studies. The resulting contextual analysis has suggested that the Hawthorne Works possessed a signally progressive reputation and communal culture at this time. In particular, a paternal, welfare-oriented ethos of 'family culture', reflecting an "informal cradle to grave covenant between employer and employee" (Adams and Butler: 98) was emphasised by the Cicero-based operation. A firm with a reputation for scientific innovation, that possessed an integrated workforce not renowned for industrial militancy, and whose employees and management carried the emotional baggage of a major human tragedy, in the years which followed, if human relations theory was going to be 'discovered' anywhere it would be at the Hawthorne Works.