

From outback icon to imperial time lord: ‘reinventing’ Sir Charles Todd (1910-2010)¹

Abstract

Drawing on the work of communication historians, both Australian and overseas, this article makes a case for revisiting and ‘reinventing’ Sir Charles Todd’s dynamic life and notable career over half a century. The author argues for a wider view of ‘Telegraph Todd’ than simply that of outback icon, one which is not merely celebratory in the Victorian tradition of his existing tributes, but which situates Todd firmly within networks of patronage and power, starting with pre-Victorian Britain and extending from his native South Australia across the Australian colonies. Contradictory historical representations of Todd, examined throughout this article, as popular outback icon, and imperial time lord, go to the heart of his complex legacy. In seeking to provide a more balanced perspective, this article focuses on the lesser known perception of Todd as imperial ‘time lord’, to understand his long career and the wider forces in which it was bound up. For this purpose, the author draws on contemporary insights provided by the burgeoning literature on the ‘British World’ in order to better understand Todd’s far-reaching connections and influence.

In spite of a series of concerted attempts to document the scope of Todd’s output and achievements, it is surprising that a biography of Sir Charles Todd still remains to be written one hundred years after his death in 1910. ² Todd’s practical achievements and colonial reputation make him an attractive subject for biography and render the absence of such a work all the more inexplicable. Drawing on the work of communication historians, this article makes a case for revisiting and ‘reinventing’ Todd’s dynamic life and career over half a century. The contradictory

historical representations of Todd, examined throughout this article, as popular outback icon, and imperial time lord, go to the heart of his complex legacy and the 'centennial challenge' outlined above. While a biography is beyond the scope of this article, a re-examination of Todd's influence, through the twenty-first century lens of British World scholarship, offers a new and comprehensive framework for understanding the wider forces in which Todd was caught up, and from which he was to benefit. In the context of a British World view which sets out to "understand the significant role played by the Empire in the history of the Dominions, and of the Dominions in the history of Empire",³ this article argues for a wider view of 'Telegraph Todd' than simply that of outback icon, one which is not only celebratory in the Victorian tradition of his existing tributes, but which, following Livingston,⁴ seeks to situate Todd firmly within networks of patronage and power, starting with pre-Victorian Britain and extending from his native South Australia across the Australian colonies.

Todd, the Overland Telegraph Line and colonial celebrity

Despite a national and international reputation within his own lifetime (1826-1910), Sir Charles Todd remains a relatively unknown figure to contemporary Australians. Celebrated in his life-time for his achievement in planning and organising the construction during 1871-72 of the Overland Telegraph Line (OTL) between Adelaide and Darwin, linking the Australian colonies to the world, Todd enjoyed remarkable influence on national communication and telegraphic issues throughout the late nineteenth-century, extending well beyond his home colony of South Australia. The exact nature of his influence, from politics and communications to matters of science, has yet to be fully determined, although Livingston⁵ maintains that it was disproportionate to his status as a senior civil servant. In this post-Telecom age of privatization, it requires an imaginative leap to associate such wide-ranging achievements with public sector

managers. This recent shift in thinking may account in part for the absence of a major commemorative work in recent years. One of the aims of this article therefore is to re-establish the context and complexity of Todd's varied achievements.

Todd's personal intervention on the hazardous Northern Territory leg of the Overland Telegraph construction, and demonstrated capacity to overcome serious logistical difficulties and flagging morale during the monsoon period, have been hailed as decisive in the successful completion of one of the great engineering feats of nineteenth-century Australia and earned him rapid colonial recognition. Yet Todd's persistent association with the OTL and the outback mythology which surrounds it are misleading, given his urban origins, training at Greenwich and Cambridge University and continued association with British and colonial scientific circles, culminating in his election to the Royal Society in late career. A contemporary interpretation should aim therefore not simply to re-examine the story of OTL construction, now well documented, but to capture the breadth and extent of his varied achievements over a more protracted period.⁶

Despite concerted attempts to document the scope of Todd's output and achievement,⁷ his profile as a major figure still remains elusive. Along with his role in the OTL narrative, Todd's accumulation of numerous honours and distinctions in both Britain and Australia during the course of his career lend themselves more readily to biographical summaries and dictionary entries, even in useful contemporary accounts such as Donald Lamberton's.⁸ It is interesting to note that, though he himself was a prolific correspondent and report writer, Todd never contemplated an autobiography. In this respect, Todd's own silence, as Moyal⁹ points out, anticipated a long pattern of reticence, among Australian civil servants about their often influential careers. Todd's youngest daughter, Lorna Todd, wrote extensively about both her

after and mother and recorded her ambition to write a biography of her father. She contended that her father was first and foremost a scientist and astronomer rather than a telegrapher. Yet the voluminous literature devoted to his role in OTL's construction has ensured that this achievement remains the sole focus of his reputation, overshadowing his other significant telegraphic initiatives across Australia (east to west, from Adelaide to Western Australia for example), but equally passing over Todd's notable achievements and writings on astronomy, meteorology and other fields of colonial science. Todd has been consistently assimilated into the powerful outback mythology of the OTL, associated with pioneering and outback settlement, whether it be in newspaper centenary supplements, visual documentaries,¹⁰ Telecom artefacts or memorabilia on display in museums.¹¹

Amid the celebratory tone of Victorian biography and the popular literature on the OTL, there are flashes of biographical insight about Todd, most notably in the works of Peter Taylor¹² and Alan Powell.¹³ Powell, anticipating a British World perspective, propounds the view of Todd as a visionary in so far as he was "full of energy and conceit, he was a hard, fair-minded employer and brilliant organiser and from the first, he wanted the South Australian telegraph system to connect with the world".¹⁴ Taylor's well researched account of the OTL construction surpasses previous efforts in linking Todd the individual to broader narratives of exploration and construction. However, as in previous and subsequent accounts, Todd's British background including his scientific training and courtship, while at Cambridge, of Alice Gillam Bell who accompanied him to South Australia at age 17, is only briefly introduced. Charles himself was an enthusiastic 29 years of age when he arrived in Adelaide to fulfil his dual Colonial Office appointment as Superintendent of Electric Telegraphs and Government Observer, the latter in a scientific role which would preserve his links with Greenwich. The early years (1826-1855) which Todd spent training at Greenwich and Cambridge under George Airy and Professor James Challis were

arguably formative decades in his long career to follow. Taylor's character sketch¹⁵ also raises significant questions about Todd's leadership, alleging that he lacked "the obvious charisma one expects from a great leader" or "the commanding personality" associated with outback exploration. Livingston ¹⁶ supports this early view of Todd as an unworldly young scientist, driven, at least in his early South Australian years, by the demands of his political masters.

Arguably, Todd does not comfortably fit the explorer mould into which he has been often cast and his lack of overtly Australian masculine traits perplexed popular writers like Frank Clune who was more inclined to give the credit to Todd's workmen than to Todd himself.¹⁷ Taylor, in this regard, comments perceptively on Todd's remarkable return journey from the Northern Territory, observing that Todd was a scientist, not a bushman and that, by choosing to return to Adelaide overland rather than by sea, he had successfully undertaken "a journey that even a skilled bushman ... would have taken seriously".¹⁸ The personal and local significance of Todd's OTL achievement may ultimately be understood as a rite of passage for a young unworldly scientist yet to make his mark on colonial administration. For if the first decades of colonial employment were characterised by modest beginnings, the 1870s emerge as a decade of assurance and recognition, driven by his growing influence across the Australian colonies.

The second theme of biographical significance to emerge from popular accounts is the persistent acknowledgement of Alice Todd, both in preliminary remarks about their courtship and also because Alice Springs, in the heart of the outback, was named after her. Beyond this, however, the close ties between Charles and Alice, including their considerable correspondence have not been given sufficient consideration by historians. South Australian historian, G.W. Symes, who undertook exhaustive research on Todd in preparation for a biography during the 1970s, relied heavily on Todd's official reports. Alice Thomson, a contemporary British relative,

has written candidly about Charles and Alice in conjunction with her visit and OTL pilgrimage into the outback at the time of the centenary celebrations. Her semi-biographical work, the *Singing Line*¹⁹ introduces timely perspectives on gender and race into the OTL and family narratives. One reviewer, when reproaching Thomson's her limited acknowledgement of oral and family sources, aptly wrote of it that "there is no readily available biography of Todd and the telegraph endeavour presented here is fascinating and cries out for a fuller work".²⁰

Todd as imperial 'time lord'

The work of communications historians like Moyal²¹ and Livingston²² suggests new ways of interpreting Todd's significance. Rather than focussing on distance as the sole determinant in its establishment of the international telegraph the dominant Australian historiographical tradition has done, they both place greater emphasis on the essential dimension of time., In Todd's case, this shift in paradigm offers new historical interpretations and narrative possibilities. As Osborne implied in his suggestive essay – 'Communication – see Transport',²³ any comprehensive study of Todd should be sensitive to changing notions of time and modernity rather than be guided solely by Geoffrey Blainey's more conventional preoccupation with distance, and the extensive OTL literature surrounding Todd. For historians of the communications revolution,²⁴ the achievement of the OTL constitutes as much a revolution in time as the conquest of space, a phrase more usually associated with exploration and empire. For Peter Putnis,²⁵ in particular, the telegraph was decisive in linking the colonies to an emerging international order in which the speed of information flows hastened the advent of colonial modernity, disrupting traditional forms of social, political and economic behaviour in the process.

Using the concept of time as his starting point, Graeme Davison,²⁶ in a similar vein, offers an

original perspective on colonial modernity in which different time zones and local practices gave way, albeit gradually, to greater standardisation and conformity. Greenwich standard time was not adopted in Australia until the end of the century, but time-consciousness was nevertheless instilled by mid century through the introduction of technologies like the telegraph. For Todd, early training at Greenwich in regulating the time balls used to co-ordinate British shipping instilled an acute sense of time and the need for the colonial adoption of standard time, a cause which he championed in his later career. Todd was particularly well placed to implement such reforms in conjunction with his scientific work by using the telegraph system and harnessing the exactitude of the new time regimes which accompanied it. The fact that Todd used his astronomical skills to establish the position of colonial boundaries and employed a state-wide network of telegraph operators to gather meteorological data suggests that he extended this logic to a range of other activities, with perceived benefits to South Australians and ultimately the wider Australian community.

Davison identifies a similar confusion over the standardization of time in Australia, in part because of the uneven nature of railway development, with the result that city and country operated under separate time regimes.²⁷ In discussing the implementation of standard time in Australia in 1895, Davison points out that Australia was one of the last English-speaking countries to adopt the standard system, while its attitude towards implementation fell somewhere between British unity and American independence. Arguably the telegraph, which Todd had championed, was more influential than the railway at an inter-colonial level. At an 1893 gathering of colonial Postmasters, Todd's leadership on the issue was unanimously acknowledged.²⁸ In South Australia, his advice as head of the local Astronomical Society, was sought by the Legislative Council when a Standard Time Bill was introduced into the legislature in August 1898.²⁹ Subsequently, he became "the leading Australian advocate of standard time".³⁰

The burgeoning literature devoted to time and technology in the Victorian period is worth revisiting for an understanding of Todd as time lord. Iwan Morus, for example, has demonstrated how telegraphy stimulated the Victorian imagination and underpinned British techno-scientific culture,³¹ attributing to the Greenwich Observatory, Todd's training ground, a central role in the establishment of a mid-century time signal and epitomizing the "constant human and intervention" required to maintain its "façade of seamlessness".³² The convergence of astronomical and commercial time, in conjunction with the railways, is a theme common to British and American time literature, although opinions vary as to the nature of the connection and its ongoing implications for standard time. For while the adoption of the Greenwich signal was rapid in Britain³³ the situation in the United States was complicated by the need for multiple time zones and greater resistance, with the result that a dual system of local and standard time remained in place in the United States until 1918.³⁴

Todd's correspondence on the subject with Canadian engineer, Sir Sandford Fleming, confirms that the British-speaking movement was part of an international one. In this respect, it may be more useful to compare Todd to his British and overseas counterparts than to other South Australians. The careers of eminent engineers and scientists like Sandford Fleming and Todd's patron, George Airy, offer valuable insights into Todd's nineteenth-century background and training, including the gentrified state of British universities, scientific debate around navigation and astronomy, along with the central importance of telegraphy, both as an object of research into electromagnetic theory and as a commercial industry of international significance.³⁵ For what was occurring in Todd's lifetime constituted a remarkable convergence, not only of communications, railways, telegraph and stock markets, but also of British-based technical expertise in physics, mathematics, astronomy, meteorology and engineering, in which Todd had

been groomed. Airy's role at Greenwich was not merely to advise on such issues but to engage in practical experimentation. In conjunction with British Admiralty, he set out to extend time distribution to the navy, instituting a daily drop of a time ball at the Deal lighthouse on the southern coast, to assist captains and navigators in the regulation of their chronometers.³⁶ For this important purpose, he entrusted its maintenance to the young Charles Todd, and it was on one such return journey from Deal that Todd first learnt of his Colonial Office appointment to South Australia.³⁷

Like prominent contemporaries such as Lord Kelvin and Sir Sandford Fleming, Todd was steeped in the new sciences and his career, in England and South Australia parallels theirs in a number of respects. Indeed, Fleming and Todd were destined to correspond on the issue of standard time and met when Fleming visited the Australian colonies in 1893. Like Todd, Fleming, as the builder of the Canadian Pacific railway and champion of the Pacific cable, has not been well served by his biographers, and his international profile has, until recently, been understated.³⁸ Yet the conditions of empire expansion and communication which spawned their achievements are certainly comparable. British and Dominion communication historians³⁹ concur that the late nineteenth-century, which Todd's career spans, brought dramatic advances in communication (steam, railways, telegraphy) and the heightened 'time consciousness' which Davison⁴⁰ documented across the Australian colonies.

At a time when his telegraphic responsibilities were still making heavy demands, and with the long connection between Adelaide and Perth under construction, Todd persisted with his Observatory work, writing to Airy in November 1875 that 'a Time Ball at the Semaphore was now dropped by current from the Observatory at one hour pm daily, except on Sundays, since the beginning of August'.⁴¹ He was pleased to add that "on only two occasions has the Ball failed to

drop”, and that the time error was “no more than two or three tenths of a second... a degree of accuracy nowhere exceeded”.

Nor was Todd slow to correct what he labelled “absurd statements” emanating from the Adelaide press on the alleged inaccuracies of the Time Ball arrangement. In January 1876, he castigated one *Lantern* correspondent for conflating the time discrepancy from three and a half seconds to three and half minutes, concluding wryly that “you certainly would not pass the civil service examination”.⁴² In June of that year, he wrote in private to the editor of the *Adelaide Register*, reproaching him for not setting other correspondents right, and enclosing a table with the calculated anticipated error of the Observatory Clock, though he declined to be drawn into further controversy on this occasion.⁴³

As an administrator, Symes aptly describes Todd, the civil servant, as a “benevolent autocrat”⁴⁴ operating departments where punctuality and industry ('rational time') were deemed essential to the proper co-ordination of colonial communications. In a manner consistent with his own personal example, Todd promoted high standards of training and efficiency among his telegraphic work force and raised their status and remuneration in the civil service. In his case, this notion of the efficient and well organised manager needs to be tempered by a genial nature, a well developed sense of humour and a flexible mind, qualities which elicited strong loyalty from his workforce, both while on the line and in the office. In other respects, this image of Todd, as modern manager, can also be tempered by a sense of Christian charity and generosity, especially towards single women, whom he actively recruited into his work force at a time when they were still excluded from similar employment in other Australian colonies.⁴⁵

At the institutional level, the speed of the telegraph reinforced the “work rhythms of

capitalism",⁴⁶ as well as facilitating information and commercial exchange, enhancing the authority of officials like Todd in the process. For Todd was both a promoter as well as manager of the new time order. Increased usage of the telegraph across borders, both inter-colonial and national, altered the social structure of colonial society, legitimating and validating "wider systems of authority", imperial as well as federal, through repetition and "the adoption of new routines...within the organizational structure of public and private life".⁴⁷ The assumption that Todd envisaged his telegraphic connections solely as an incentive to federation needs to be qualified by Inglis' remarks⁴⁸ about the capacity of the OTL in particular to bring Australia into wider imperial networks, with greater capacity to respond to the needs of Britain in time of crisis.

Communication historians have long been interested in the impacts of technology in both objectifying and compressing the social experience of time. Marjorie Ferguson, for example, reviewing a considerable literature on the related concepts of time and modernity, questions the linear determinism which underpins the techno-orthodoxy of space-time contraction. She argues that media like the telegraph replaced "old certainties with new ambiguities",⁴⁹ overlaying local ideas about time and space, as well as earlier sensory-based epistemologies and experience. The impact of such temporal elasticity, she continues, is therefore more problematic and indeterminate than most orthodox communication historians are prepared to admit. For the multiplication of notions of duration and distance creates new 'time zones' which disrupt as well as transform existing social routines. In a similar vein, Raymond Williams' notion of 'structure of feeling', invoked by James Carey,⁵⁰ is pertinent to an understanding of the transformation of time itself, its impact on 'common-sense thinking', and on the use and nature of language itself. Scholars of modernity have in turn emphasized the implications of such change at a personal level, extending beyond conceptions of the self in the past and the present – in Todd's case a combination of social, scientific and bureaucratic rhythms – to uncertainty about how one

conceives the future in terms of a career. On this conundrum, Todd's reluctance to contemplate an autobiography throughout his long career becomes more comprehensible, since he was so closely bound to the demands and opportunities of the present .

The related concepts of time and modernity continue to preoccupy Australian and overseas scholars. In a recent special issue of *Media History*, devoted to time and news flows, Putnis alludes to the 'fractured' colonial experience of time and to the importance of the telegraph in dramatically closing the 'time gap' between Britain and Australia. More generally, he goes on to emphasise the role of modern communication technology in sustaining the 'imagined community' of the British World.⁵¹ The dramatic reduction of this 'time gap' in the wake of the OTL goes some way towards explaining Todd's rapid elevation to celebrity status. In his discussion of the different temporal contexts in which colonial readers consumed news, the same author points to an important synergy between the press and the telegraph, in so far as the telegraph "accentuated the importance of time management as an imperative of efficient news production", transforming the role of the colonial editor into that of "time-keeper" for the purposes of news production and transmission.⁵² In Todd's case, the relationship between the OTL and the press is worthy of special attention because of the strategic significance of South Australia and Adelaide for incoming international traffic entering the colonies. . The unprecedented access it provided to overseas news had implications for all Australian newspapers and dictated the circumstances under which the Australian Press Association, the first national news agency, would continue to operate.

The frameworks provided by communication and cultural historians offer a better understanding of the ways in which Todd contributed to the emerging information order, including the development and maintenance of his often hectic daily work rhythms and official

schedules. The temporal and spatial pressures of modernity pose particular narrative challenges for conventional biography as well as autobiography..⁵³ Central to the relationship between biography and modernity for Ferguson is the role of agency and the extent to which individuals can control and harness these new rhythms and demands. In this respect, Todd's position appears to have been privileged, as a simultaneous technological promoter and innovator; he belongs to the small group of actors or 'time lords' to adopt the term used by Fleming's biographer⁵⁴ who define time-space boundaries "through policy, regulation, ownership and professional and interpersonal practices".⁵⁵ Such an interpretation promises to throw light on Todd's longstanding commitment and knowledge of telegraphy, and may lead to a fuller appreciation of other facets of his career, including his passion for navigation, work on meteorology and astronomy and his willingness to experiment with new communication developments such as wireless and telephony in late career.

An example of this privileged role was Todd's local initiative in commissioning and organising the erection of a clock tower for the Adelaide Post Office in the early 1870s. The outcome of protracted negotiations with the South Australian Agent-General, British manufacturers and the Greenwich Observatory, the Turret Clock proved an expensive item, its careful craftsmanship and delivery by sea and road, costing the colony over two thousand pounds. ⁵⁶ To ensure it struck on the hour, Todd had Westminster chimes imported for a further 410 pounds. The ceremonial task of setting the clock in action was vested in the Colonial Secretary, while Governor Musgrave wrote to its instigator, commending the project and expressing his wish that "your personal labours will be rewarded by the excellent performance of the clock".⁵⁷ Colonial 'time consciousness' was on this occasion given official sanction, if not public recognition.

Davison's *Telling the Time*, while an insightful exploration of colonial time, constitutes a social history rather than an individual narrative, something which few historians of time have yet to attempt. An exception is Canadian historian, Clark Blaise who, in his appropriately titled, *Time Lord. Sir Sandford Fleming and the Creation of Standard Time*,⁵⁸ weaves a biographical narrative around the overarching theme of standard time, using it to explore a range of contexts, national and international. In Todd's case, exploring a more comprehensive thematics of time could also be fruitful, based on the ongoing nineteenth-century developments with which he was intimately associated: the Greenwich Observatory and time distribution, navigation: inter-colonial and imperial communications, dual management of posts and telegraphs: standard time, and technological federalism.

Networking and patronage in the 'British World'

Both Livingston and Symes, when planning their unwritten biographies of Todd, structured his life around changes and advances in telegraphy. One of the associated difficulties each encountered, however, was that a linear technological narrative did not always accord with the fluidity of Todd's own experience. Both scholars, when drawing upon the OTL literature, relied heavily on Todd's voluminous official reports, to the point that Symes despaired of finding clues to Todd's character and cast him as a 'shadowy figure'.⁵⁹ Livingston, more so than Symes, who continued to pursue family contacts, drew upon the insights of fellow communication historians and the available telecommunication literature for his pre-federation telecommunications study.

Academic accounts of both Moyal⁶⁰ and Livingston⁶¹ are important in establishing a more complex narrative than that of the popular OTL literature. In recent decades, Australian communication historians have revisited Todd's achievements and raised a series of fundamental

new questions concerning Todd's achievements. Telecommunications historian, Ann Moyal⁶² has, for example, queried the assumption that Todd was solely responsible for the conception and construction of the Overland Telegraph Line, ascribing the initiating role to Sir William McDonnell, in the case of South Australia and the OTL, and according the honour of fathering the colonial telegraph in Australia to Samuel McGowan, his Victorian counterpart. The extent to which Todd acted on the wishes of his superiors was a point debated even by some of his contemporaries. For patronage played a significant role in Todd's early career, both in Britain, in the case of Astronomer Royal, George Airy, and in South Australia, under Governor McDonnell. Todd, who proved adept at cultivating powerful patrons in British institutions such as Greenwich (George Biddell Airy) and the British Post Office (Sir William Preece), brought this networking capacity to bear in his years of colonial service.

British World historians, Bridge and Fedorovich, attribute this networking capacity to the "cultural glue which held together the British World", be it "family and community connections" or "business, religious, educational, scientific and professional associations".⁶³ Their observation that "the extent and influence of these networks – globalization from below, or at least from lower down than the commanding heights"⁶⁴ encourages further inquiry in the case of the ambitious young Todd. From a social and administrative perspective, Todd's colonial appointment, on George Airy's recommendation, ensured his upward mobility in South Australia, a distinctly English settlement devoid of a convict past and gold rush immigrants. Eric Richards, in a valuable survey of the "British diaspora in wide angle", asserts that British emigration differed significantly from the usual experience of diaspora, operating as "a relatively privileged cocoon"⁶⁵ which allowed its citizens to move more frequently and freely across the globe. Richards' observation that "most of the destinations to which the British emigrated were already members of an anglocentric world" applies equally to the Todds, since Charles and Alice were to encounter

colonists of the same religious persuasion as their London and Cambridge communities, while en route to Adelaide.⁶⁶

Additionally, British World historians⁶⁷ have linked technological innovation with wider cultural networks of patronage and influence operating across the empire, offering valuable insights into the larger forces which shaped and connected British and colonial administrations. From this perspective, Ashley Jackson states that:

The growth and maintenance of Britain's position as a world power has depended upon the creation of networks. The British Empire was peopled at all levels by men and women who, to a surprising extent, knew each other and came from similar backgrounds and whose world views were shaped by many common characteristics.⁶⁸

Jackson goes further than other writers however in emphasising both the role of human networks, and the centrality of physical networks in sustaining British influence, be they "roads, railways, underwater cables, wireless installations, subsidized shipping lines and ports." In this respect, Todd's contribution was considerable, but he also drew on the experience of others, notably of explorers, scientists and administrators in establishing Adelaide as a potential hub for Australian international telecommunications traffic.

At a colonial level, there is evidence of these networks in the early telegraphic assignments undertaken by Todd. In preparation for his appointment and the infrastructure he was commissioned to build, the young engineer made careful preparations before embarking from England, with only one assistant and several thousands pounds of electric cable equipment, recommended by Airy, C. V. Walker and "several other gentlemen whose practical experience might be useful to me".⁶⁹ The construction and extension of the intercolonial telegraphic network, in which Todd played a considerable part, was itself a considerable achievement, requiring

personal and organizational skills in the office and in the saddle, and relying on the good will of neighbouring colonies. Todd's professional ties and travel were critical in establishing of a long association with Samuel McGowan Victoria's PMG, and with William Cracknell who, after serving as Todd's early assistant in South Australia, went on to become Postmaster General of New South Wales. The construction of the OTL, however, was a project on an altogether grander scale. Innovative technology came from Europe in the form of insulators from Berlin Imperial Pottery.⁷⁰ Equipment, especially for the repeater stations which required their own battery supply, was cumbersome. Substantial local resources were nevertheless required. The South Australian government used contractors to guarantee the necessary supply of men, materials and stock, to the benefit of the local economy. However not all of these resources proved suitable. Timber, initially used for poling, was in short supply on sections of the arid route and was prone to destruction by termites. Subsequently Todd was obliged to repole the Line at considerable time and expense, using imported iron poles.⁷¹

Todd's long list of instructions issued to his OTL overseers prior to its erection,, covered every aspect of construction, and was characteristic of his thoroughness, grounded in a combination of practical and professional skills. Characteristically, British World networking involved a combination of scientific and engineering expertise. Airy was the pre-eminent example, described by Chapman as simultaneously "a First Wrangler and theoretical mathematician by training, but equally an engineer by instinct, who only placed complete trust in theory after it had been shown to work in practice".⁷² In his capacity as Astronomer Royal, Airy continued to engage with practical engineering matters through collaboration with both private and public institutions. His willingness at Greenwich to work with railway and telegraph companies in time distribution and management gave the young Todd access to these newly forming networks, where he befriended prominent figures such as Charles V. Walker and Latimer Clark.

Todd's commercial contacts later served him in good stead later when, in South Australia, he helped to interest representatives of the British Australian Telegraph Company (BAT) in the possibility of a joint venture and an overland link from Darwin. Subsequently, when appointed Postmaster General in 1870, Todd housed a local representative of the Eastern Extension Telegraph Company, which had taken over the BAT, in his Adelaide Post Office to ensure close and ongoing contact with its influential managing director, John Pender. Indeed, from this perspective, the OTL can be seen as a continuation of British-based collaboration between private and public agencies. As Smithies recently concludes:

From the start, communications between the Australasian bridgehead and the imperial centre were dependent upon government sponsorship. Although commercial interests were heavily involved in proposals for the implementation of telegraph lines, these proposals invariably included a degree of either government subsidy or assurance of monopoly control of the industry.⁷³

Indeed, in the case of the OTL, much of the risk and expense fell to colonial governments, notably South Australia, which sought ongoing subsidies from the other colonies in return for its distribution service.

Todd's competing activities: networker and correspondent

The reinvention of Todd as 'time lord' meshes well, not only with the emergence of a new technocratic class across the nineteenth-century empire, but also with Todd's wide-ranging scientific activity which the telegraph facilitated. Todd's advice was much sought after in the wake of the OTL, not only by Tasmanian and Western Australian administrations but further afield. He became effectively, to use Lamberton's analogy, a modern consultant, imbued with imperial status and reputation. Australian communication historians have also begun to explore

concepts of modernity and management, with implications for Todd's entire career rather than just the OTL episode. Lamberton credits Todd with the formulation and execution of a modern management plan in tackling the daunting overland route. In personal terms, the OTL episode remains significant in the public 'making' of Todd, the colonial manager, one whom Lamberton acknowledges in his 2001 Todd Oration, as "a skilled networker, a great people person and a good strategist tuned to political events".⁷⁴ In the same oration, Lamberton went on to call for greater recognition of Todd and for his biography to be written. Todd's managerial skills enabled him to negotiate 'on-the-spot' rivalry in the Northern Territory with the stormy Charles Patterson, Todd's predecessor in the north, and subsequently an embittered local critic of the OTL scheme.

Equally in matters of communication policy, Todd's capacity to negotiate and lobby successive coalitions of colonial politicians confirms his persuasiveness behind the scenes and growing influence over time, reinforced by his own practice of colonial patronage and his high profile at inter-colonial conferences and as a witness to select committees of parliamentary inquiry.⁷⁵ In this context, a Todd career constitutes a complex blend of narratives, regional, national and global, encompassing the media and telecommunications developments recently outlined by Winseck and Pike.⁷⁶ A British World perspective on Todd's complex career helps to explain why a full-blown biography, the 'big fat book' that Lamberton anticipated, has not been forthcoming in so far as the task of constructing such a life narrative appears to be multi-dimensional.

Todd's multifaceted achievements, corresponding as they do with a complexity of character and mind, constitute a particular challenge and fascination for the researcher, intent on transcending the simple myth of Todd as quintessential outback hero. Like his combined Post and Telegraph portfolios, the sciences, in which Todd was intimately involved throughout his life, constituted a series of competing activities. Records of Todd's various endeavours, scattered

across a variety of state locations, in newspapers, proceedings of scientific societies and intercolonial conferences, are difficult to synthesise. Nevertheless, interdisciplinary historians, most notably Home and Livingston,⁷⁷ have begun to piece together his achievements in such fields as meteorology, identifying the various colonial networks and their changing links to officialdom over time. Todd's astronomical observations, undertaken during his British and Australian years, including outback travels and observations of the transit of Venus in conjunction with Greenwich, received belated recognition with his admission to the Royal Society in late career; this, in contrast with his OTL reputation as 'Telegraph Todd', achieved earlier in his career during his mid forties.

A valuable source of information, which brings Todd's scientific activity to the fore, is his extensive and often lively correspondence. With time, his scientific friendships and rivalries extended beyond South Australia to Victoria (R.L.J. Ellery), Western Australia (W.E. Cooke) and Queensland (Clement Wragge). Todd's diary,⁷⁸ which recorded his long trip to Europe and England during 1885-86, and his election to the Royal Society, attests to the assiduity with which he maintained old professional and family ties. The episodic rhythms of his correspondence are especially valuable for the intending biographer in seeking to understand the daunting range of scientific and official roles in which continued to engage over the many decades of his career. In the face of what were at times overwhelming administrative responsibilities, Todd demonstrated remarkable persistence in establishing and stocking his Adelaide Observatory on the West Parklands of the city with high quality astronomical and meteorological instruments. To achieve this, he relied heavily on his professional correspondents. Regular entreaties of colonial colleagues who were visiting Britain, were complemented by direct appeals to British manufacturers, via the intermediary of the South Australian Agent-General resident in London; for Todd himself was too hard pressed by his post and telegraph duties to plan or engage in long

trips.

Time was a scarce resource indeed for Todd in his early South Australian years, when he was expected to develop a telegraphic network in the colony as a high priority. Yet from the outset of his Adelaide appointment, Todd had also requested a telescope of the Astronomer Royal to assist him in his time-keeping role as Government Observer and Astronomer. By the 1870s, with his telegraph work progressing satisfactorily, Todd wrote to Airy thanking him for his dispatch of electric clocks, now “working perfectly” and renewed his requests for a “small transit circle” and a “ten foot equatorial telescope”.⁷⁹ Airy, an autocratic but efficient administrator, demurred. Over several months, as on other occasions, he rendered his former employee exemplary assistance, to the point of dispatching hard-pressed Greenwich staff to northern England to examine the instruments at first hand, and test the apparatus before supervising its packing for the long sea voyage. Throughout, Todd’s correspondence with his patron remained formal, acknowledging their long association only in rare moments; on receipt of the “much awaited instruments,” Todd, for example, concludes on a more personal note, extending his “deepest sympathy with you in the death of Lady Airy”.⁸⁰ A benevolent autocrat in his later years, Todd continued to acknowledge his debt to Airy and Greenwich in matters administrative as well as scientific.

Todd’s reputation and colonial influence

As this article argues, a British World perspective encourages a more comprehensive interpretation of Todd’s colonial achievements, including the OTL itself. From a strategic viewpoint, the international telegraph opened Australia and New Zealand to overseas traffic, while increasing the likelihood of settlement on Australia’s largely deserted northern coastline. Todd’s original intent to bring the line via Western Australia was abandoned in favour of a landline which dissected the interior and created a spine of small outback posts around which

both white settlers and indigenous inhabitants would congregate. Jackson, in discussing expansions in imperial communication, remarks that such networks not only centralised power, but at the same time, facilitated the creation of “regional power centres”.⁸¹ In the case of the OTL, it may be more accurate to speak of regional hubs; for while Melbourne emerged as one such Australian centre by mid century, Adelaide, through which traffic was funneled to the larger centres of Melbourne and Sydney, also constituted an integral part of the OTL hub. In political terms, Todd’s achievement was to bind South Australia to its larger neighbours, to the exclusion of Queensland and New Zealand.

The full implications of this arrangement have only recently been spelt out by Australian communication historians. Livingston, for example, states that the OTL ensured Australia’s protracted dependence on the powerful Eastern Telegraph Company. The same author calls for a wider examination of the role of colonial Postmasters General, including Todd, in consolidating the expensive monopoly of the Eastern Company for well over half a century, through a more detailed investigation of their official correspondence with British companies involved and with their interstate counterparts.⁸² More recently, Putnis⁸³ echoing Lamberton⁸⁴ has questioned the strategic value of the overland route, involving as it did an expensive rerouting of east coast cable traffic for international purposes. The part which Todd played in these development, including his ability to uphold maintenance of existing cable and colonial arrangements to the detriment of the eastern sea-board colonies, is of renewed interest, placing him out of step with British and Australian movements to democratise communications at turn of the century.⁸⁵

Todd’s position at intercolonial conferences on the value of the OTL was emphatic. He argued that the construction and ongoing losses incurred by the Line, for which South Australia extracted its own transit charges, had been to the benefit of all the colonies. As such he implied a collective

moral responsibility on behalf of other colonies to sustain the arrangement with the Eastern Extension company, in preference to a Pacific 'All Red' route advocated by New Zealand and Queensland, with Canadian government backing.⁸⁶ The personal and political stakes were high. Todd was undoubtedly known to Pender through former associates like Latimer Clark, and the two men were re-acquainted when Todd visited London in 1885-86, on the eve of the electric telegraph jubilee.⁸⁷ The continuing influence which this connection gave him at intercolonial conferences, where he represented South Australia as Postmaster General, should not be underestimated. Indeed, at the 1890 Conference, when the issue of reduced international cable rates arose, Todd acted a broker on behalf of the colonies in dealing with the Pender group, protecting South Australia's interests in the process.⁸⁸ Despite growing criticism of the Eastern Extension both in Australia and London, Todd continued to uphold the longstanding value of such private-partnerships, consistent with his public sector beliefs that communication monopolies were more efficient than competition, especially in the high risk, capital intensive cable industry. For the last decades of the nineteenth-century, Todd defended this position, buttressed by belated imperial honours, including a Master of Arts awarded by Cambridge University in 1886, and a knighthood bestowed on him in 1893.

Moyal⁸⁹ is undoubtedly correct in stating that Australian historians have systematically neglected the careers of administrators and scientists in favour of politicians and explorers. Like the dynamic career of H.P Brown, the twentieth-century Director General of Post and Telegraphs, Todd's earlier achievement invites a wider examination beyond the remarkable OTL episode to include both earlier and later decades of his public life. Aided by a remarkable facility for administration and the use of statistics, his "bureaucratic capital", Todd was able to overawe his fellow Postmaster Generals and rivals on matters of postal and telegraphic services, using what Beaud and Prevost have called a "panoptical view of communications systems".⁹⁰ His

accumulation of portfolios and capacity to run the Adelaide Observatory while managing the relentless Post and Telegraphs departments, without ministerial supervision, placed him in a unique colonial position, one which was recognized and at times resented by his contemporaries.

Through the assiduous cultivation of British World connections, Todd proved adept at securing patronage for his own purposes, but the consequences of popular acclaim could be also fraught. Even the OTL was a ready target, both personal and political, for provocation and controversy, most notably from his embittered critic, Charles Patterson, but also from senior politicians and officials in South Australia and the other colonies. As Livingston⁹¹ has indicated, controversies and power struggles between individuals, bureaucracies and emerging colonial networks decisively influenced Todd's own decisions and actions. In his later years, his continuing support for the Eastern cable route undoubtedly made him a target, in Australia and overseas, for critics opposed to the existing cable monopoly exercised by the Eastern Extension company, and for long-time advocates of an alternate Pacific route in Queensland and New Zealand. Again the changing political climate of the 1890s appeared to favour Todd, for once New Zealand withdrew from federation negotiations, Queensland remained the only dissenting voice to the existing Eastern telegraph arrangements. Such a position, however, did not take sufficient account of the role played by Canada's Sir Sandford Fleming in lobbying and pushing ahead with construction of an alternate Pacific cable route.

In the context of federation and national identity, Todd has been regarded somewhat ambivalently as both an advocate of federal co-operation and a champion of state rights, depending on which aspect of his career is being examined. Livingston, using the proceedings of the intercolonial conferences in the pre-federation years, describes him as a pivotal figure in late nineteenth-century moves towards what he calls 'technological federalism',⁹² and affirms Todd's

ongoing influence in pre-federation years. Yet the regional communications hub which Todd had done so much to establish and maintain for the rest of the century was equally a source of growing inter-colonial rivalry, with the steady growth of population, shipping and commerce on Australia's eastern seaboard. In Queensland, federation found only lukewarm support, while New Zealand's decision to break with the federation movement may well have been the outcome of similar frustrations. In Joseph Ward, New Zealand's Premier and Postmaster General, Todd faced a formidable opponent in ongoing inter-colonial discussions, but his advocacy of standard time in the antipodes was acknowledged by all parties.⁹³

In the field of colonial science, more so than in telegraphy, Home and Livingston⁹⁴ regard Todd as an advocate of co-operation and consensus. In part, this was due to the regular information-sharing put in place by Airy and his successor, William Christie, and to Todd's reliance on the continuing good will of colleagues at the Melbourne and Sydney Observatories. In meteorological matters, as with telegraphy, Todd faced a persistent challenge from Queensland rival, Clement Wragge, who insisted on publishing his own Australia-wide weather charts without reference to the work of his southern counterparts. Such was the tightness of these early colonial networks that Wragge (like William Cracknell the New South Wales Postmaster General) had begun his career in Adelaide under Todd's influence.⁹⁵ Todd's dislike of open personal controversy was manifest, socialized as he had been into a more hierarchical British scientific culture, but he was moved to deplore Wragge's tactics.⁹⁶

Federation saw a decline in Todd's longstanding influence, with his absorption into the Commonwealth bureaucracy, coupled with more centralised control over science and the fragmentation of his diverse portfolios. With the new century, Todd's reputation persisted through the OTL, albeit mostly at state level, until the Todd pioneer brand was adopted nationally

by Telecom in the wake of the OTL centenary. Conversely, with the marriage and return to England of two of his daughters, Todd's British networks were strengthened in later life through family and professional ties with Cambridge and Cambridge University. The remarkable scientific career of his gifted son-in-law and grandson-in law, recounted in detail by Jenkin,⁹⁷ confirms Todd's continuing use of his British professional connections, this time on behalf of his redoubtable son-in-law W H Bragg. Jenkin argues that as late as the 1890s, well after his OTL exploits, Todd remained the most prominent public figure in Adelaide, surpassing even the talented Bragg, a future Nobel prize-winner. Incursions into seismology, meteorology and broadcasting, some in collaboration with Bragg, confirm Todd's remarkable longevity as a public figure and highlight significant omissions in our assessment of his protracted career. While both local and national narratives remain pertinent, it is nevertheless clear that a British World perspective, in line with current scholarship, provides a particularly effective means of understanding Todd's remarkable influence.

Notes

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