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# The telegraph and the beginnings of telemedicine in Australia

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## The Tyranny of Distance

Blainey G, The tyranny of distance, Sun Books, Melbourne, 1969.  
 Image of G. Blainey - *The Age*

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## Communications Technologies - from 1780s

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1879

S. Aronson, The Lancet on the Telephone 1876-1975, Medical History, 21(1977):69-87.

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1876

- Mr Watson - come here, I want you.

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### 1860s - telegraph

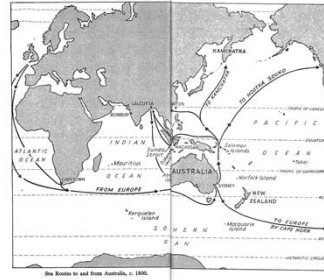
- American Civil War
  - Care of wounded
  - Arranging transport



R.L. Bashshur, G.W. Shannon, History of Telemedicine: Evolution, Context, and Transformation, Mary Anne Liebert, Inc. Publishers, New Rochelle, New York, 2009.



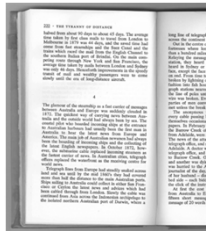
### The tyranny of distance



Blainey G, The tyranny of distance, Sun Books, Melbourne, 1969.



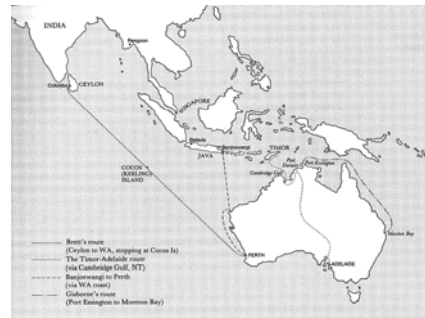
### Getting the news



The glamour of the steamship as a fast carrier of messages between Australia and Europe was suddenly clouded in 1872. The quickest way of carrying news between Australia and the outside world had always been by sea. The coastal pilot who boarded incoming ships at the entrance to Australian harbours had usually been the first man in Australia to hear the latest news from Europe and America. The main job of Australian newsmen had always been the boarding of incoming ships and the collecting of the latest English newspapers. In October 1872, however, the submarine cable replaced incoming steamers as the fastest carrier of news. In Australian cities, telegraph offices replaced the waterfront as the receiving centre for world news.

Telegraph lines from Europe had steadily snaked across land and sea until by the mid 1860's they had covered more than half the distance to the main Australian ports.

Blainey G, The tyranny of distance, Sun Books, Melbourne, 1969.



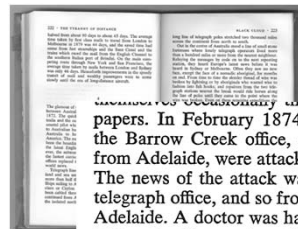
Charles Todd - Astronomer and Superintendent of Telegraphs, 1855.



The Overland Telegraph and the East-West lines



### The Barrow Creek incident



...occasionally thrust into the headlines of newspapers. In February 1874 some of the telegraph men at the Barrow Creek office, out in the nowhere 1200 miles from Adelaide, were attacked by aborigines and wounded. The news of the attack was transmitted south to the next telegraph office, and so from office to office until it reached Adelaide. A doctor was hastily summoned to the Adelaide telegraph office, and medical advice was transmitted back to Barrow Creek. One of the telegraph men was dead,

Blainey G, The tyranny of distance, Sun Books, Melbourne, 1969.



### Sunday 22<sup>nd</sup> February, 1874

*'This Station has been attacked by natives at 8. Stapleton has been mortally wounded, one of the men, named John Franks, just died from wounds. Civilised Native Boy has had three spear wounds. Mr Flint, assistant operator one spear wound in leg, not serious. Full particulars in morning.'*



Northern Territory Times and Gazette (Darwin, NT: 1873 - 1927), Friday 27 February 1874



### James Stapleton

- After four years at the Katherine River station, he was travelling on the 2,000 mile journey to Adelaide for a reunion with his wife and four young children.
- At Barrow Creek he found the resident stationmaster seriously ill, so he sent him on to the city for treatment and elected to occupy his position until a replacement could be organised.



SA State Library, 1852

<http://outbackvoices.com/stuart-of-the-territory/the-barrow-creek-affair>



### Monday 23<sup>rd</sup> February, 1874

- *'... We are informed by Mr. Told that during Sunday night Dr. Charles Gosse at his request attended at the Telegraph Office and gave instruction as to the proper treatment of the wounded'*



### Monday 23<sup>rd</sup> February, 1874

- *'... and up to about 11 o'clock all were progressing favorably. Later in the day, however, a change for the worse took place in Mr. Stapleton's condition, and notwithstanding all the aid that it was possible to render him, he sank under the effect of his injuries, and died, very quietly, at a quarter to 6 o'clock in the evening.'*



Muddyboots, Bonzle.com



### Monday 23<sup>rd</sup> February, 1874

to Barrow Creek. One of the telegraph men was dead, and another was dying, and so the wife of the dying man was hurried to the Adelaide office where, according to a journalist of the day, she heard 'the exhortations by wire of her husband - distant 1200 miles, the wire at his very bed side - each bidding an eternal adieu to the other by the click of the instrument'.

Mr. Stapleton, the Stationmaster, was also fatally injured. He was wounded in the left side, the size of the wound being reported to be about an inch broad and three inches deep. He also received a nasty injury in the left thigh. The first reports announced that Mr. Stapleton was mortally wounded; but subsequently it was hoped that a decided improvement had taken place in his case, his pains being eased by the kindness of Dr. C. Gosse, who, at the instance of Mr. Told, attended at the head office to prescribe for the patient.

Mr. J. L. Stapleton, we regret to report, died on Monday afternoon. Dr. Gosse gave full medical instructions up to near the officer's end, and when he appeared to be getting worse, Mrs. Stapleton, who resides at North Adelaide, was sent for by Mr. Told. She conversed with her last-sinking husband by wire, and while messages were still being sent from here making for further information, a telegram came announcing his decease. Mr. Stapleton, who was an

South Australian Register, 28 Feb 1974



### Remote WA - 13<sup>th</sup> August, 1917

- Jimmy Darcy - internal injuries after fall from horse.
- Taken to Fred Tuckett - telegraphist at Halls Creek, who had some 1<sup>st</sup> aid training
- Dr John Holland in Kalgoorlie diagnosed rupture of urethra
- Operation needed
- Conducted by Tucker using morphia, pocket knife and razor, under instruction over Morse code





## RFDS - 1929

- Inspiration for John Flynn to set up the RFDS in 1929
- Alfred Traeger - engineer and experimenter in Adelaide
- Developed the pedal-powered wireless
- 1932 - keyboard



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## The beginnings - what could be done

- Advice for the wounded
- Care for the family
- Remote surgery

**OPERATION BY A LAYMAN**  
 Perth, August 13  
 A remarkable operation was performed by Postmaster Tuckett of Halls Creek on a man named Darcy who was injured by a fall from a horse. Dr. Holland instructed Mr. Tuckett by telegraph what to do, and the latter carried out an operation with a razor, and although Darcy's condition was very serious he is progressing. The doctor left by the Molra on Thursday for Hall's Creek.

Northern Times, Carnarvon, WA., Saturday 18 August 1917

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## Today...

*Necessity is the mother of invention*  
*?Plato*

- Our situations encourage us to innovate
- The most basic means of telecommunication can be used for telemedicine
- Use what you have at your disposal - people, networks, equipment



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 G Blainey, The Tyranny of Distance, Sun Books.  
 Muddyboots, Bonzle.com  
 Clear across Australia  
 A Moyal, Clear Across Australia - A History of  
 Telecommunications, Thomas Nelson  
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