



BRIDGING SYDNEY

Education Resource Kit

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SYDNEY HARBOUR BRIDGE – SITE STUDY MATERIALS (SECONDARY)

Suitable for using with Stage 4, “Investigating History”
and Stage 5, “Australia between the Wars”

These documents provide information and student tasks for a site study
on the Sydney Harbour Bridge.

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BRIDGING SYDNEY

16 December 2006 – 29 April 2007

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Cover: *Arch in the sky* (detail), Harold Cazneaux, 1930, silver gelatin photograph.
Courtesy the Cazneaux family and the National Library of Australia

CURRICULUM OVERVIEW AND INTRODUCTION

The Stage 5 History Syllabus, Topic 3, "Australia between the Wars", requires that students study one event from either the 1920s or the 1930s. One event that can be chosen is the opening of the Sydney Harbour Bridge.

Students must also complete a site study as part of their study in Stage 5 History. A site study is an inquiry-based examination of an historically or culturally significant location. A site study allows students to examine the contemporary issues (management, conservation, etc.) associated with an historical study.

The Sydney Harbour Bridge is one option available for that site study.

The information, sources and student tasks provided here cover Section C, "Event" of Topic 3, "Australia between the Wars" and the site study requirements of Stage 5.

Teachers may choose to use the material provided as a resource for the student task or guide students to complete as many of the activities that are aligned to the resource materials as they wish. The activities can be used to guide students through the information to prepare for the student task.

The unit incorporates a site study that may include visits to:

- the *Bridging Sydney* exhibition on the Sydney Harbour Bridge at the Museum of Sydney 16 December 2006 – 29 April 2007
- the Bridge itself, including a visit to the Pylon Lookout
http://www.curriculumsupport.education.nsw.gov.au/secondary/hsie/history4_5/resources/resources.htm

The resources are divided into sections with activities associated with most sections. These sections could guide students in identifying the key points to include in the student task:

- Reasons for construction of the Bridge – The 1908–1909 Royal Commission on Communication between Sydney and North Sydney.
- John Bradfield – Chief Engineer of the Bridge construction
- Construction of the Bridge
- Opening the Bridge
- Impacts

The website www.pictureaustralia.gov.au has a wealth of images that can be used in conjunction with the work in this site study. Entering the words "Sydney Harbour Bridge construction" will provide access to hundreds of images.

STUDENT TASK

STAGE 4

Topic 1 *Investigating History*

Inquiry questions:

- What is History?
- How do historians investigate the past?
- Why is conserving our heritage important?

Outcomes

- 4.4 identifies major periods of historical time and sequences people and events within specific periods of time
- 4.5 identifies the meaning, purpose and context of historical sources
- 4.6 draws conclusions about the usefulness of sources as evidence in an inquiry
- 4.10 selects and uses appropriate oral, written and other forms, including ICT, to communicate effectively about the past

STAGE 5

Topic 3 *Australia between the Wars*

Section C: Event

Inquiry question:

- What was the contribution and significance of at least ONE important event during the interwar period?

Outcomes

- 5.1 explains social, political and cultural developments and events and evaluates their impact on Australian life
- 5.4 sequences major historical events to show an understanding of continuity, change and causation
- 5.5 identifies, comprehends and evaluates historical sources
- 5.6 uses sources appropriately in an historical inquiry
- 5.7 explains different contexts, perspectives and interpretations of the past
- 5.8 locates, selects and organises relevant historical information from a number of sources, including ICT, to undertake historical inquiry

Suggested ICT

- draw conclusions about the usefulness of sources for an historian, including a website (S4)
- identify, comprehend and evaluate a range of sources, including ICT (S5)
- use ICT to record a radio broadcast from an historical period

Resources

- The materials and student activities linked within this kit
- The Historic Houses Trust website www.hht.net.au/museums/mos/bridgingsydney
- Standard Stage 5 History textbooks

Site study

This task incorporates a site study of the Sydney Harbour Bridge. It includes a visit to the *Bridging Sydney* exhibition on the Bridge at the Museum of Sydney (16 December 2006 – 29 April 2007) and to the Bridge itself including the Pylon Lookout http://www.curriculumsupport.education.nsw.gov.au/secondary/hsie/history4_5/resources/resources.htm

LEARN ABOUTS AND *LEARN TOS*

STAGE 4

- the process of historical inquiry:
 - fact and opinion
 - the usefulness of sources as evidence including a website
 - differing perspectives
 - cause and effect
 - history as the study of people
- heritage issues
- *ask historical questions*
- *distinguish between fact and opinion*
- *draw some conclusions about the usefulness of sources including a website*
- *examine differing historical perspectives and interpretations*
- *explain cause and effect*
- *identify significant people of the past*
- *examine the motives for people's actions in the past*
- *explain the consequences of people's actions*
- *describe some aspects of family/community heritage*
- *appreciate the value of preserving and conserving our heritage*

STAGE 5

- the significance of at least ONE important event eg:
 - opening of Sydney Harbour Bridge
- *outline the main features and/or developments of the chosen event*
- *explain the significance of the event to Australian history*

ASSESSMENT

This task requires students to demonstrate their learning and is an assessment for learning activity. It could be included in a school assessment schedule for assessment of learning.

Student Task

Using the linked materials, the exhibition, site visit and your own research:

- 1 Write a report on the construction and impacts of the opening of the Sydney Harbour Bridge

OR

- 2 Write a narrative from the perspective of someone involved in the construction or opening of the Sydney Harbour Bridge. For example, a journal kept over the period of construction of the Bridge.

In your report/narrative, include reference to:

- a) the key developments in the construction of the Bridge
- b) the events of the opening
- c) the impacts the opening of the Bridge had on the city of Sydney and Australia
- d) issues related to the Bridge as part of Australia's heritage.

STUDENT ACTIVITIES

1

Reasons for construction of the Bridge: The Royal Commission 1908–1909

In groups of four, read three to four of the sources on reasons for the construction of the Bridge from the 1908–09 Royal Commission. Your teacher will ensure that all sources are read by the class.

- 1 In your groups, identify the main reason given by each submission for the construction of the Bridge (e.g. to improve property values in North Sydney).
- 2 Create a class list of the reasons given, noting how frequently each reason is mentioned in the evidence.
- 3 From the list you have created, identify which YOU think are the three most convincing reasons for building a bridge. Justify your choices.

Introduction

The report from the *Royal Commission on Communication between Sydney and North Sydney* published in 1909 provides an excellent cross-section of the various arguments put forward in favour of constructing a bridge or tunnel across Sydney Harbour.

Sixty-six witnesses gave evidence. They included residents of the northern suburbs, civil engineers, representatives of tram, rail, ferry and shipping interests, businessmen, the Mayor of North Sydney and a Member of the New South Wales Legislative Assembly.

As the Commission progressed the issue of whether a bridge or tunnel should be constructed came to dominate the proceedings.

In its final report the Commission recommended that there should indeed be improved communication between the northern suburbs and the city, but its recommendation that “the best practical and most economical method is by subways” was not what bridge supporters wanted to hear.

A sample summary of the evidence given at the Royal Commission follows. One letter to the editor has been included. Although it was not a submission to the Commission, it provides an argument for the construction of the bridge that is not included in the Commission evidence.

Activity 1 / Sources

- 1 *I have been here since the beginning of 1903 and I must state that the ferry traffic has interfered very much with the loading, unloading, and despatching of our steamers.*

I will tell you where an accident might occur – that is by a collision. In berthing our vessels we require tugboats. From one of those tugboats a line might part, and the tug might go bang into one of the ferry boats.

Goswin Boner, representative of a German shipping company

- 2 *At North Sydney we manufacture and provide some of the finest bricks to be found in New South Wales; yet because of the expense in getting them to Sydney, we are unable to compete in the Sydney market.*

North Sydney is also a desirable residential area. There is nothing finer under heaven than what we have at North Sydney, and in the outlying districts. If a bridge were erected these desirable sites would be occupied. If an up-to-date means of getting there, and getting there quickly, were provided, I believe that people would settle there a great deal faster.

John Brown, builder, North Sydney

- 3 *The demand for surf-bathing already takes many thousands to Manly in the season. In the summer months the population there is trebled. If an electrical rail connection were built to Manly by way of a North Sydney bridge the thousands that already go there would be multiplied many times over.*

John Cardew, a civil engineer

- 4 *I am the representative in Parliament of the electorate of St Leonards. I have been six times returned as the representative for that side of the water.*

I wish to speak on behalf of those residents in the low-lying portions of the northern suburbs. They believe that connection should be established, and established at once. They believe that there is special necessity owing to the congested nature of the present traffic. You may go to the wharf at Circular Quay at any time, and you will find traffic concentrated and congested. Last night I crossed over in the ten to 6 boat, and there was hardly standing room.

I presented a petition, the largest, I suppose, ever presented to Parliament, signed by over 87 000 persons, in favour of a bridge to Milson's Point. The signatures to that petition were obtained at the street corners in the city.

This is a very important matter for the district, because those who reside in the northern suburbs wish to live as cheaply as possible. To live cheaply it is necessary that they should be able to purchase their supplies economically. But with all the difficulties which stand in the way of the vehicular traffic, people find that it is impossible to purchase what they need as cheaply as they should. The ordinary dealers in the city will deliver produce free of charge in the city, but when it becomes a question of delivering in North Sydney, an additional charge is imposed.

Edward Clark, Member of the Legislative Assembly

Activity 1 / Sources

- 5 *Of course the Sydney Ferries are doing all they can to cope with the traffic, but if you were a daily traveller to those parts and saw the inconvenience and the waste of time that takes place to travellers on the North Shore Line, you would say, "There is no doubt about it that we ought to have a bridge."*
- Everybody knows that the North Shore is growing by leaps and bounds. People have only to go anywhere on that side of the harbour once to say, "This is without doubt the best residential part in which to live for - if we only had a bridge across which you could motor or drive".*
- I believe that private property would be very largely enhanced in value if a bridge were built. I am perfectly satisfied that a great increase would take place.*
- Hugh Duff, Secretary of the Sydney and North Shore Bridge League
- 6 *There is the danger of fogs. Only the other night, whilst I was crossing by a ferry-boat, I heard the whistle blown. The people rushed on deck, and found a steamer across our bows. By careful navigation a collision was avoided. That is a common occurrence. I am strongly in favour of the construction of a bridge.*
- Frequently, a large funeral can only get over by making two or three trips. We must have a bridge to cope with these difficulties.*
- Horatio Durand, resident, North Sydney
- 7 *It is absolutely essential for the defence of Sydney that there should be a safe means of communication between the northern shores of Sydney and the southern. I find it extremely difficult, during our manoeuvres at Easter, when getting our men out, to obtain any communication at all. From a military point of view, the Commission may take it that it is essential that some means of rapid and safe communication should exist between the northern and southern portions of Sydney.*
- Brigadier-General Joseph Gordon
- 8 *One of the greatest inconveniences we suffer when delivering goods is the loss in time crossing the harbour by the vehicular ferry. We hope that some remedy will be found. We do not care whether it is by bridge or tunnel.*
- Another thing is the excessive charge imposed for haulage by the ferry company. The time occupied in crossing is about five minutes, and for one of the large furniture vans with three horses, loaded, they charge 3 shillings.*
- David Gourlay, owner of a furniture warehouse, North Sydney

Activity 1 / Sources

- 9 *I have lived in North Sydney for twenty years, and so have seen the great increase in the ferry traffic. So far as my company's steamers are concerned, we have suffered no inconvenience from the ferries.*

I understand a slight accident occurred on Saturday, but the only time I have ever seen boats really in danger was due to a master being over-careful.

Stephen Green, Marine Superintendent for the Eastern and Australian Steamship Company

- 10 *There are obvious reasons why we should be connected by means of a bridge. First of all there is the very serious risk of accident. Accidents or narrow escapes very frequently occur. Many of them are not heard of in the press, but frequently there are some very narrow squeaks.*

William Harding, a resident, Chatswood

- 11 *You wish to see the extension of the railways on the North Shore?*

Undoubtedly.

Would part of the plan be to bring those railways from North Shore into the city of Sydney?

Certainly.

Would that bring further ferry congestion in the harbour?

Exactly.

In your opinion is the solution to this difficulty to be found in direct communication by bridge or tunnel with the City of Sydney?

Certainly.

Tom Johnson, Chief Commissioner of Railways

- 12 *At the present time if we have 12-ton loads we have to go round by the Gladesville Bridge because the ferry boats will not take the loads.*

Why is that?

Because the boats will not take the loads.

Is there much carting round by Gladesville?

Yes, a lot.

There must be a very good reason why the traffic goes so very far round, over a steep road, than across by the ferries?

It is very simple. If I take from 2 to 5 tons in a load by the ferries, I have to pay either 6 shillings or 7 shillings in ferry charges. It pays me better to go round by road.

James McMahan, carrier

- 13 *It is not only the danger on the ferries, but the great inconvenience a large number of people have to put up with. There is tremendous inconvenience getting on and off the boats.*

Many thousands come down everyday in the northern suburbs trains and trams, and if a bridge were built they would be carried right into the city. Very few people would use the boats if they could get trains and trams across.

John A Minnett, resident, North Sydney

- 14 *A great many people would, if the bridge existed, drive into town, especially those with motor cars. Motor cars have come to stay. There are lovely sites on the north side that cannot be reached by trams, but which present no difficulty to the motorist, the cyclist, or those who drive in other vehicles. All these people would use the bridge.*

Source 14. John Purves, M.A., estate agent

Activity 1 / Sources

- 15 *Many people are at present prevented from living on the North Shore because they are frightened. I am not a nervous individual; and whenever I cross the harbour in the North Shore ferry I generally take care, if the boat is crowded, to get near the gangway. There have not been many collisions, because the ferry employees are careful, alert, and skilled men, but it is always the unexpected which happens, and some day there will be a dreadful loss of life in connection with this ferry traffic.*

Norman Selfe, civil engineer

- 16 *The figures I have prepared are in connection with the growth of population in the northern suburbs*

Municipality	Census 1891	Census 1901	Census 1907
North Sydney	15 649	22 040	29 320
Mosman	1 457	5 691	11 440
Willoughby	2 296	6 004	10 650
Lane Cove	1 115	1 918	3 790
Kuring-gai Shire	1 427	4 509	9 410
Total	21 944	40 162	64 610

Horace Smith, Acting Chief Assistant in the Bureau of Statistics

Activity 1 / Sources

- 17 *The worst collision we have ever had was between the "Wallaroo" and the "Narrabeen".*

One man was injured when the "Wallaroo" and the "Narrabeen" collided. That was entirely his own fault, because, although he was warned, he persistently remained looking over the side of the "Wallaroo" to see what would happen. He died from his injuries. That was the only death from collision that we have had in thirty years.

I have heard of narrow escapes at times when I have been on board, and when there have been thirty or forty feet between the vessels. Some timid passengers were afraid their lives were in imminent danger when the vessels were that far apart. In my opinion, there is infinitely more risk from motor cars and trams and buses in the street.

I think we have a unique record. We have carried 200 000 000 people, and have not had one fatal accident that can be blamed on our boats.

William Todd, Manager, Sydney Ferries

- 18 *Part of my duty is to organise the delivery of parcels and goods purchased from our firm. We employ a number of horses, carts and wagons. Great inconvenience is caused in getting across to North Shore by the vehicular ferry. Frequently the cart gets to the ferry in time to see it go off. That means a wait of a quarter of an hour during the day and half an hour during the night. The trip itself is not a very pleasant one – sometimes the horses get frightened and begin to back, and the tailboards of the carts have to be repaired. The loads taken over by the ferry are limited to 6 tons. If the loads are more than that they have to go round by the bridges. There is no ferry between*

12.30 a.m. and 4.30 a.m. Instances have occurred in which carters have had to camp out all night on the North Shore.

The night trips across the harbour by the ferries are the cause of a very great disagreeable feeling amongst numbers of the passengers. You frequently hear the remark, "There will never be a bridge here until a boat filled with 1200 people goes down".

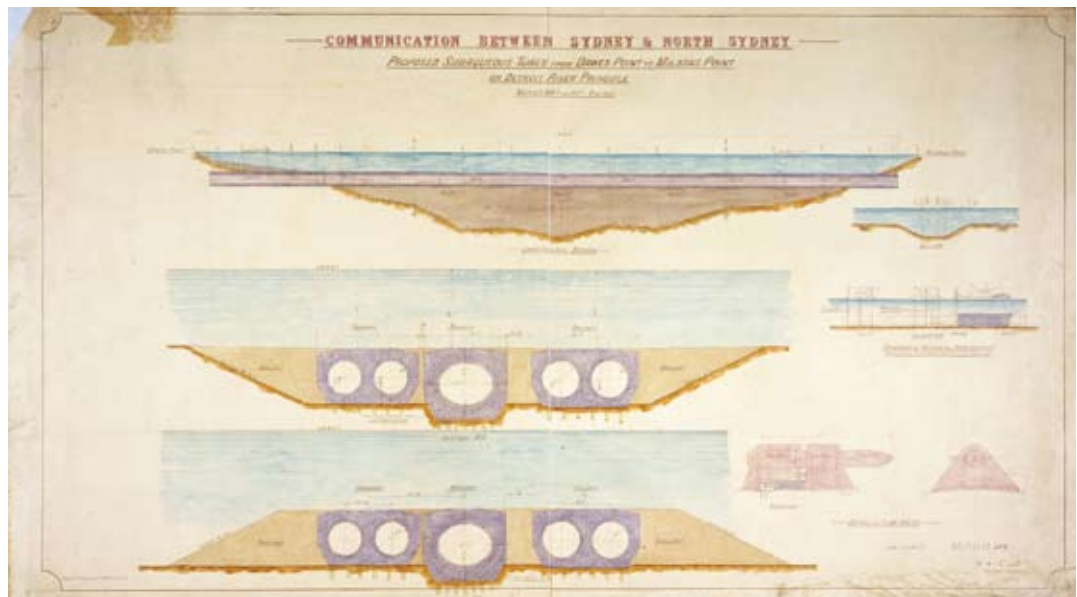
Thomas Watt, in charge of warehouse deliveries

- 19 *Sir, I submit that, as a memorial worthy of being regarded as a national tribute to the birth of Australia into nationhood is required, the present is an appropriate time to commence the bridge connecting the City of Sydney with the North Shore, thus providing a Public Work which might employ returned men and others, and further the progress of our State. Also the structure might be named the Anzac Bridge,*

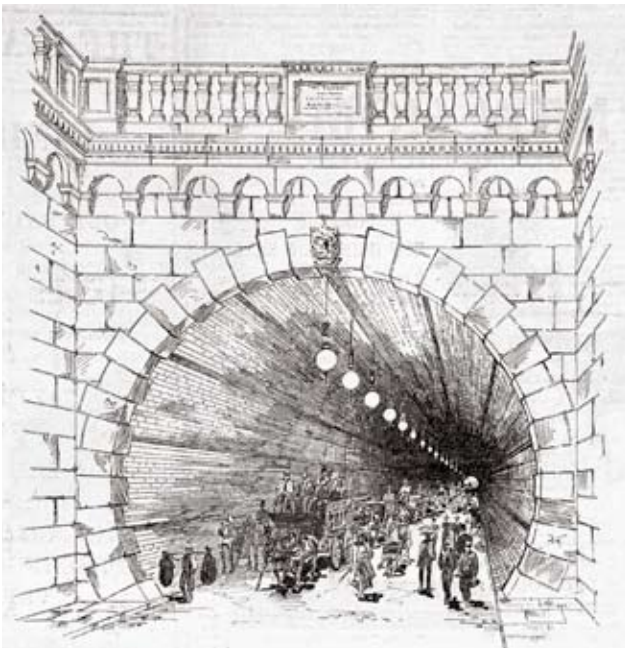
Vera Lambert.

The source above was not a submission to the Royal Commission, but a letter published in the *Sydney Morning Herald* on 4 July 1919.

Activity 1 / Images



Proposed subaqueous tubes from Dawes Point to Milsons Point on Detroit River Principle
H H Dare, 1908, pen, ink, watercolour and wash on paper, State Records NSW



Main entrance to roadway; A carriage on the tunnel railway; The proposed North Shore tunnel and roadway, The Sydney Mail, 30 May 1896, State Library of New South Wales



Central Station and Belmore Park, R C Robertson, 1926, printed from glass plate negative, State Records NSW

Activity 1 / Images



Plan showing the location of bridge and tunnel proposals submitted to the Royal Commission on Communication between Sydney and North Sydney, H E C Robinson, 1908, ink on linen-backed paper, State Records NSW

STUDENT ACTIVITIES

2

John Bradfield Chief Engineer of the Bridge's construction

Read the sources on John Bradfield and answer the questions below.

- 1 Which source(s) make reference to:
 - a) the Bridge
 - b) the City Railway
 - c) making Sydney a better city?
- 2 Do each of the sources present a positive or negative view of Bradfield (and his involvement in the construction of the Bridge)? Justify your view by identifying the language used that gives this impression

Introduction

John Job Crew Bradfield was born in Queensland in 1867. In 1912 he was promoted to Chief Engineer for Metropolitan Railway Construction in Sydney. In 1915 he wrote his Report on the Proposed Electric Railways of Sydney. He suggested electrifying all existing railways, constructing new railway lines, and building a bridge across the harbour to link the northern railway system and trams with the city. Due to the War, the idea of building a bridge was abandoned in 1916. However, in November 1922 the New South Wales Parliament passed the Sydney Harbour Bridge Act.

Tenders were invited for the construction of a bridge. Six companies submitted twenty designs by the closing date in 1924. Dorman Long and

Company Limited of Middlesborough in England submitted seven different designs. Bradfield recommended one of these. It was the second cheapest of the designs. Many of the materials could be produced in Australia, and it could be fabricated in Sydney.

John Bradfield was heavily involved in the construction of the Sydney Harbour Bridge, although there is some debate about how much credit he should receive. The highway which crosses it, the shortest highway in Australia, is named after him.

STUDENT ACTIVITIES

Construction:

Outline of the construction of the Bridge

On 28 July 1923, the ceremony, “the turning of the first sod” took place on the north shore where two workshops would be erected.

The first work on the Bridge was the construction of the Bridge approaches and the approach spans. By September 1926 concrete piers had been built to support the approach spans on each side of the harbour. An estimated 469 buildings – homes and businesses on the north side of the harbour – were demolished with little or no compensation to make way for the construction of the Bridge.

During this time, work began on preparing the foundations that would carry the entire weight of the arch span and its loading. The angled foundations were built into the side of the abutment towers. The abutment towers were made of concrete, but faced with granite from a quarry at Moruya.

A giant ‘creeper crane’ was built on each side to move forward on the arches they would help construct. They were used to lift men and materials in a cradle and position them while erecting steelwork.

On each shore tunnels were excavated through which steel cables were passed to fix to the upper chords of each of the half arches to prevent their collapse as they extended out toward each other.

On 26 October 1928 the erection of the arches began.

On 19 August 1930 the two halves touched for the

first time. The top and bottom cords were riveted together. The arch now supported itself, and the cables could be removed.

On 20 August 1930 the flags of Australia and the United Kingdom were flown from the jibs of the creeper cranes to celebrate the completion of the arch.

As each creeper crane made its way back down the arch, it hoisted hangers into position. Each pair of hangers supported crossbeams, which in turn carried the deck on which the railways and roads were to be built. The deck was in place by June 1931, and the creeper cranes were dismantled.

Now the rails were laid for trains and trams. Then the deck was surfaced using concrete topped with asphalt for wheeled traffic.

The two pylons at each end were now built on top of the abutment towers. The last piece of granite was added to the north-west pylon on 15 January 1932.

In February the Bridge was test loaded. All four of the rail tracks were loaded with up to 96 steam locomotives placed end to end. After three weeks of tests the Bridge was declared to be safe for traffic and was ready to be opened.

Activity 2 / Sources

- 1 *Mr Bradfield is looked upon not only in Australia but in the engineering profession throughout the world as one of the most competent men associated with bridge work, and I do not know of any man who could be better qualified to advise the government in regard to the design of the bridge.*

R. T. Ball, NSW Minister for Public Works, 1922

- 2 *The name of Dr. J. J. C. Bradfield will be associated for all time not only with the conception and planning for Sydney Harbour Bridge and the City Electric Railway, but for stimulating the imagination of the people to think of Sydney as a City Beautiful and to realise its great future.*

Town Planning Association of NSW, *Annual Report*, 1926

- 3 *I realised that he was a dreamer. But behind it all was his belief that he was planning the greatest city in the Southern Hemisphere. As he talked you could almost see the new city emerging.*

Jack Lang, *I remember*, 1956

- 4 *Neither the City Railway, the Sydney Harbour Bridge, nor any scheme of Suburban Railway can really be claimed to be the thought or the work of any individual. These works, when completed, were the results of the best thoughts of a considerable number of able men.*

Robert Gibbons, *Improving Sydney*, in *Twentieth century Sydney: studies in urban and social history*, edited Jill Roe, 1980

Activity 2 / Images



South pylon, R C Robertson, 20 May 1931
printed from glass plate negative
State Records NSW



Mr R T Ball, Minister for Works and Railways, performing the ceremony of turning the first sod of the northern railway approach to the bridge. Beside him is Mr J J C Bradfield, photographer unknown, 28 July 1923
Sydney Harbour Bridge Photographic Albums, vol 1, State Records NSW



Northern Side from Southern Creeper Crane, photographer unknown, 20 June 1930, Sydney Harbour Bridge Photographic Albums 1923–1933, Main Bridge vol 5, State Records NSW



View from Lavender Bay, photographer unknown, 8 July 1930, Sydney Harbour Bridge Photographic Albums 1923–1933, Main Bridge vol 5, State Records NSW

Activity 2 / Images



Levelling floor of pylon, photographer unknown, 30 June 1931, Sydney Harbour Bridge Photographic Albums 1923–1933, vol 8, State Records NSW



J J C Bradfield, Falk Studios, Sydney, c1924
silver gelatin photograph, 20 x 14.4 cm
State Records NSW



Bird's-eye view of Sydney showing the proposed city and suburban electric railways
from Bradfield's doctoral thesis, 1924, Bradfield Collection, Rare Books and Special Collections
Library, University of Sydney

STUDENT ACTIVITIES

3a

The opening

Use the attached sources, as well as your own research (and visit to the site) to complete one of the following tasks. The plaques that were unveiled at the opening can be seen on the visit to the Bridge, and will provide further information about who was there.

- 1 Design a poster or record a radio broadcast advertising the opening of the Sydney Harbour Bridge. Your advertisement should include:
 - a) a suitable illustration (for the poster)
 - b) details of significant people who will be there
 - c) information about the pageant
 - d) reasons why people should attend.

OR

- 2 Research and write a newspaper report about the events of the day of the opening of the Sydney Harbour Bridge on 19 March 1932. Be sure to include relevant background information on the New Guard. Your report should include suitable photographs or drawings and be written in the correct format for a news article.

STUDENT ACTIVITIES

3b

The opening (The New Guard)

Answer the following questions about the New Guard:

- 1 Suggest a reason why Sources 2 and 3 contain conflicting information.
- 2 What phrase in Source 3 tells you that the New Guard leaders did not know what de Groot intended doing during the opening?
- 3 Highlight two phrases in Source 3 which suggest that Eric Campbell supported what de Groot had done?

3c

A visit to the Pylon Lookout

Student activities for a visit to the Pylon Lookout can be accessed via the Curriculum K–12 Directorate of the NSW Department of Education and Training's website

<http://www.curriculumsupport.education.nsw.gov.au/pylonwillbehere>

STUDENT ACTIVITIES

The opening of the Sydney Harbour Bridge

19 March 1932

Premier Jack Lang's government decided that the opening of the Bridge would be a public holiday, so all of Sydney could join in the celebrations.

The Bridge would be declared open by Premier Lang himself. Some thought this was inappropriate and that a member of the Royal Family, perhaps even King George V himself, should be cutting the ribbon. For example, the leader of the New Guard (a kind of political party formed along military lines), Eric Campbell, hated Jack Lang and declared: "Mr Lang will not open the Bridge!"

Brilliant sunshine greeted the crowds as they assembled on opening day. It was the largest crowd ever gathered in Sydney. Paramedics were kept busy: around 2,500 fainted due to the heat.

The ceremony began at 10am. Sir Philip Game, the Governor, read a short message from King George V, and unveiled two plaques naming the structure the Sydney Harbour Bridge and the roadway across it the Bradfield Highway. Premier Lang then addressed the crowd and unveiled a tablet declaring he had opened the Bridge – although he had yet to cut the ribbon.

It was at the end of the Premier's speech that Captain Francis de Groot, a member of the New Guard, (who had managed to avoid security and join the cavalry guard of Sir John Isaacs, the Governor-General) launched forward and slashed the blue ribbon with his sword. "In the name of the decent and loyal

citizens of New South Wales I declare this bridge open," he shouted. Most of the crowd had no idea who he was. Only one cameraman was able to capture the moment.

De Groot was bundled from his horse and led away. The ribbon was hastily retied and this time officially cut by Lang.

Aeroplanes flew over in salute, sirens rang out, guns fired a salute, and the official party drove across Sydney Harbour Bridge to see Alderman Primrose cut the ribbon on the northern approach. (Since the alderman was a member of the New Guard, the organisation could claim to have opened the Bridge at both ends.)

The ceremony was followed by a pageant across the Bridge. The procession was reckoned to be around 2 kilometres long and covered a route of 8 kilometres. After the procession, an estimated one million pedestrians crossed the Bridge. That night the Bridge was lit up by searchlights. In the harbour there was a Venetian Carnival of illuminated boats and a fireworks display.

(Francis de Groot spent a week in a Darlinghurst psychiatric hospital. He was declared to be sane and was fined 5 pounds for offensive behaviour on the Bradfield Highway. A charge that he had caused 2 pounds worth of damage to a ribbon was dismissed.)

Activity 3 / Sources

- 1 *Expectations that the New Guard would attempt to prevent the Premier, Mr Lang, from performing the official ceremony of opening the Sydney Harbour Bridge were fulfilled to some extent today. While the preliminary speeches were being made, Captain Francis de Groot, dressed in military uniform, and wearing medals, rode forward and slashed the ribbon with his sword, thus technically forestalling Mr Lang.*

By a clever ruse that baffled the 1400 police and the vast army of officials, de Groot reached a position from which he carried out his daring act before 20,000 or 30,000 people.

With a glitter of lances and the flash of red and white pennons, the military escort of the Governor-General, Sir Isaac Isaacs, clattered past the dais. At their head rode an officer with a gleaming sword.

As the cavalcade trotted past and on toward the blue ribbon, about 200 yards away, another officer on horseback brought up the rear. He rode a chestnut horse and also carried a sword.

It struck me as being an unusual position for an officer to take. The escort clattered on. I noticed the officer in the rear fall farther back and linger near the ribbon, which was then rolled up at the concrete wall of the bridge approach.

Speeches went on and on, bands crashed out anthems; planes roared and storms of cheers swept this way and that.

De Groot, who is a British Hussar officer, was wearing the uniform of a captain. He sat calmly on his horse within a few feet of 30 policemen, who were busy checking the tickets of guests and turning back those people without tickets from the stairways by which the southern end of the Bridge is approached,

The Premier had officially declared the Bridge open, and had pressed a button which unveiled a bronze tablet recording the fact. All that remained for him to do to complete the ceremony was to cut the ribbon with the golden scissors.

In the midst of glittering pageantry, and in spite of the vigilance of police and detectives, the Premier was forestalled in the actual cutting of the ribbon across the approach of Sydney Harbour.

Swinging his sword aloft, Captain F. E. de Groot, mounted on his prancing chestnut horse, slashed the wide blue ribbon in two places, 10 minutes before the time appointed for Mr Lang to cut it with a pair of golden scissors.

First Captain de Groot had sought to break the ribbon by pressing his horse against it. The horse took fright, however, and bounded back from the ribbon. The officer urged the horse forward again, and under the eyes of 50 policemen, who were taken by surprise, slashed the ribbon with his sword.

'I declare this bridge open in the name of His Majesty the King, and of all decent people', shouted Captain de Groot, as his sword flashed in the sunlight.

Twenty policemen leapt at the horse and its rider. Inspector MacKay, Chief of the Criminal Investigation Branch, was first to reach the captain. He dragged him from his horse amid a tremendous hubbub of mingled hoots and cheers.

Captain de Groot, borne down by the weight of policemen, fell on his back from the saddle.

De Groot was hustled into a car with half-a-dozen detectives, and was driven down the Bridge Highway between great banks of excited faces.

Activity 3 / Sources

Strenuous efforts were made by officials to have all newspaper references to the incident suppressed. Then began a feverish hunt by detectives along the Bridge approaches for other persons who, it was thought, might slash the ribbon again.

Hugh Buggy worked as a reporter for the *Melbourne Herald* and had been sent to Sydney to cover the opening ceremony. This is his report on the events of the day.

2 *NEW GUARD: No action contemplated*

“Mr Eric Campbell, the leader of the New Guard, stated last night that the Council of Action of the New Guard, having carefully considered the whole position, had determined that no action should be taken by the New Guard in connection with the Bridge opening ceremony.”

From the *Sydney Morning Herald*, Saturday 19 March 1932:

3 *“Mr Eric Campbell in a statement to the Herald last night declared that Captain de Groot acted with the full approval of the executive council of the National Guard, but that the idea was entirely his own. ‘Captain de Groot’s conduct throughout was dignified and orderly’, said Mr Campbell. ‘He merely rode up the street without breaking any law in so doing. Even when he passed the Governor’s stand, he saluted as an officer should, and the salute was returned.’”*

From the *Sydney Morning Herald*, Monday 21 March 1932:

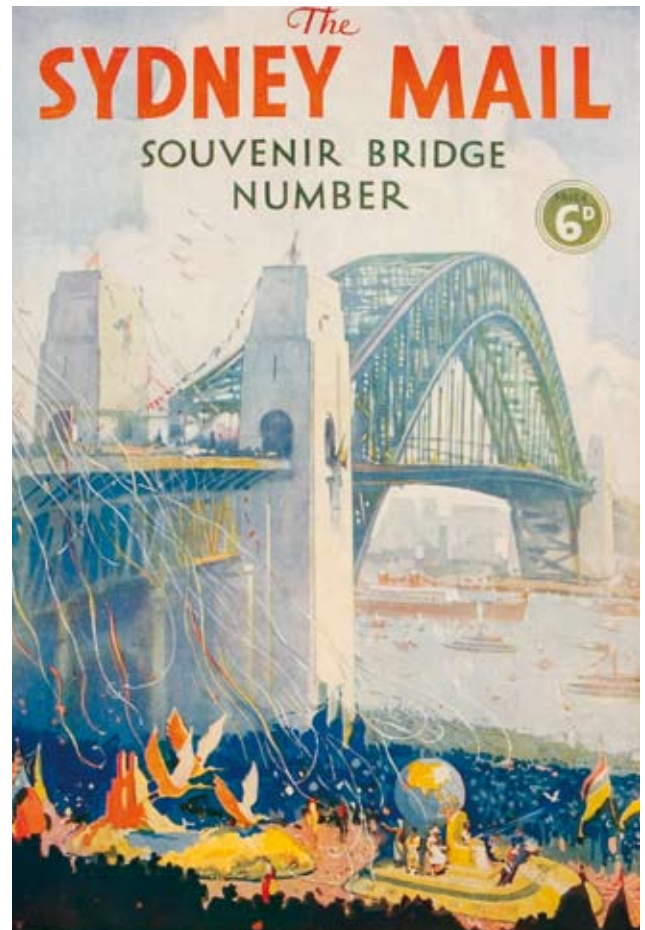
Activity 3 / Images



The Federation Float outside Parliament House, Jim Howarth Studios, Marrickville, 19 March 1932, Courtesy Daphne Pardey

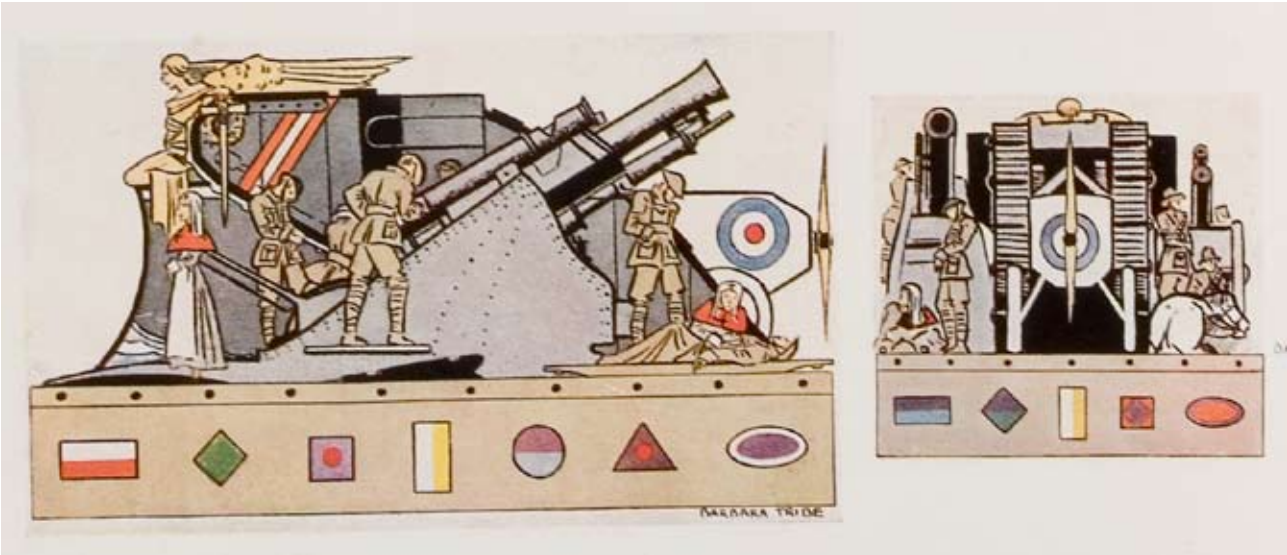
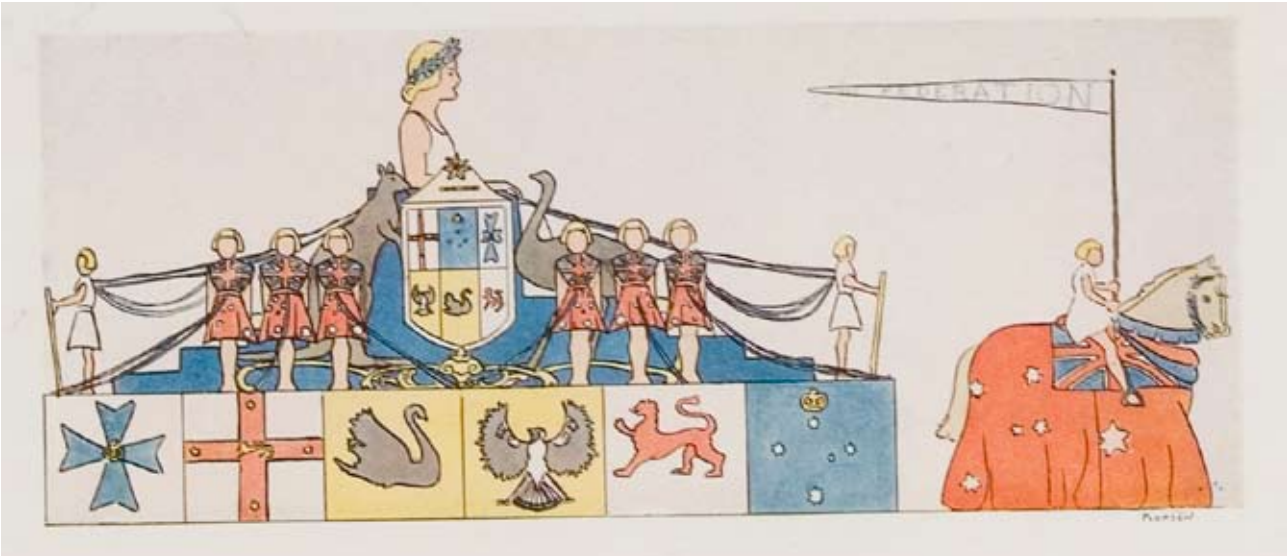


De Groot cuts the ribbon and is arrested soon after, photographer unknown, 19 March 1932, silver gelatin photographs, 15.8 x 20.7 cm Bradfield Collection, Rare Books and Special Collections Library, University of Sydney



Sydney Mail souvenir bridge number, Cover design by 'FW', 16 March 1932, Roads and Traffic Authority Archive

Activity 3 / Images



The Federation float; The Great War float, designs by Barbara Tribe and Betty Kopsen from 'Sydney Bridge Celebrations 1932', published by Art in Australia Ltd, 16 March 1932, Caroline Simpson Library & Research Collection, Historic Houses Trust

STUDENT ACTIVITIES

4

Impacts:

Impact of the opening of the Sydney Harbour Bridge on the city of Sydney and Australia

In groups of three or four, read four of the sources about the impacts of the opening of the Bridge. Your teacher will ensure all sources are read by the class.

- 1 In your groups, outline the main impact(s) of the Bridge that are mentioned in each source.
- 2 Create a class list of these impacts.
- 3 Write a paragraph describing what you believe to be the most significant impacts the Bridge had on the people of Sydney. You should include reference to positive and negative impacts.

Activity 4 / Sources

1 *During the years of the Depression, the Bridge was known as ‘the iron lung’, for it kept so many people breathing. It gave work to a fairly constant number of 1400 men on the site, as well as thousands more in the steel, cement, sand and stone trades which supplied the immense quantities of materials.*

Ruth Park, Sydney, 1999

2 *The final link of the city railway system was completed with the opening of the Sydney Harbour Bridge in 1932. The Bridge brought the north side of the harbour into full suburban development and its building was a source of great pride to Sydney dwellers who saw it as crowning their city.*

E C Fry, *Australian capital cities*, 1978

3

Municipality	1921	1933	1947
North Sydney	48 438	49 752	60 379
Mosman	20 056	23 665	27 562
Willoughby	28 067	42 511	51 945
Lane Cove	7 592	15 138	19 817
Kuring-gai	19 209	27 931	39 874

North Sydney population statistics (Peter Spearritt, *Sydney since the twenties*, 2000)

4 *Technically, it is an engineering design and achievement of international importance. In terms of span it is now the third longest steel arch in the world; but it is still known as the greatest steel arch because of its combination of span, width and load bearing capacity. Historically, the building of the bridge was taken as evidence of Australia’s industrial maturity.*

Sydney Harbour Bridge: conservation management plan, 1998

5 *The bridge has a special place in the life of Sydney. It has been called many names. They used to call it ‘the iron lung’ because it kept so many people alive and in work for the 8 years of its construction. The bridge gave people a sense of awe and pride just to look at it, especially if they worked on it.*

Sydney Harbour Bridge: conservation management plan, 1998

6 *The focus on the bridge at times of national and local celebrations (e.g. the Bicentennial, New Year’s Eve fireworks) keep it in the public eye and evoke memories of the opening ceremony when the largest ever gathering of people in Sydney took place.*

Sydney Harbour Bridge: conservation management plan, 1998

7 *The Bridge proved to Australians that they too could become a great industrial society, as the United Kingdom, Western Europe and the United States before them. It was evidence of our growing technological prowess.*

Peter Spearritt, *The Sydney Harbour Bridge: a life*, 1982

8 *The Bridge symbolises a young nation’s daring and achievement. It has forged our national identity and is a focus and a gathering point at times of national celebration.*

Sydney Harbour Bridge Workers: Honour Roll, 1922–32, 2000

Activity 4 / Sources

- 9 *Sydney Ferries Limited's traffic dropped from the 1927 figure of 47 million to about 15 million in 1933, showing how immediate was the effect of the Bridge.*
Graeme Andrews, *Ferries of Sydney*, 1994
- 10 *The ferry service from Milson's Point was discontinued the night the Bridge opened. The last ferry left without ceremony at midnight. There was the usual rush for the last boat. And the last passenger, a young woman, rated a cheer as she jumped aboard after the gangway was cleared. It was the end of an era.*
David Ellyard & Richard Raxworthy, *The proud arch*, 1982
- 11 *One effect has been to encourage the development of office development in the northern suburbs, particularly at North Sydney and Chatswood, in an attempt to lessen journey times by reducing the number of people travelling to work in the city centre and beyond it.*
The Australian Encyclopaedia, 1996
- 12 *Construction of the Sydney Harbour Bridge was not a universally popular undertaking. Hundreds of residents on either side were dislocated because land was needed for approach roads and workshops. The minimum amount of notice was given. For many there was a struggle to find new homes. Some of the city's historic streets were lost forever.*
Lucy HughesTurnbull, *Sydney: biography of a city*, 1999
- 13 *Wynyard and Town Hall underground stations opened in 1932 at the same time as the completion of Sydney Harbour Bridge. Shoppers and workers now travelled directly to the city centre by tram and train, instead of changing tram or bus at central Station, or journeying by ferry to Circular Quay.*
Max Kelly, *Pleasure of profit: the eastern suburbs come of age, 1919–1929*, 1980
- 14 *The Bridge destroyed the North Shore community of Milson's Point. There was no protection for the 500 homes demolished to make way for the Bradfield Highway. Letters of protest were pointless in the face of forced evictions. The government did not look favourably on any suggestion that the displaced should be compensated, in fact only five were.*
John Birmingham, *Leviathan: the unauthorised biography of Sydney*, 1999
- 16 *The bridge has changed the quality of Sydney's life. The old leisurely procession of ferry steamers up and down and across the harbour has sadly shrunk. One can still go to most points on the North Shore by ferry, but now that it is possible to rush to and fro, people rush. The great charm of an older Sydney was that it took so long to get from place to place, and that one's journeys often required a pleasant water passage. But now one rips about by electric train and bus and car, and loses one's temper in the traffic queues, and imagines that one is contributing to the general well-being by always being in a flurry. Sydney has lost its fine flavour of leisure.*

Source 16. Paul McGuire, *Australian journey*, 1943

Activity 4 / Images



General progress view, Wynyard Square, R C Roberston, 1928, printed from glass plate negative, State Records NSW



Sydney Harbour Bridge View Showing Southern Approaches, Robert Charles Given Coulter, 1921, pen, ink and wash hand-drawn on paper backed with linen, 88 x 182 cm, State Records NSW



New Year's Eve fireworks, Geoff Ward, 31 December 2005, digital photograph, Courtesy of the Roads and Traffic Authority

Activity 4 / Images



Area to be acquired for Sydney Harbour Bridge and approaches, NSW Department of Public Works, c1924, pen and coloured ink on paper, State Records NSW

STUDENT ACTIVITIES

5

Since the opening: Work for a visit to the Bridge

Read this extract from an article titled “Sydney of 1950 and later” by J. J. C. Bradfield, published on the day the Bridge opened, 19 March 1932, and answer the questions that follow.

The Bridge will make it possible for upwards of a million people to reside in the northern suburbs, and will provide adequate facilities by rail and road for the transit of this population to and from the city.

The city proper will become a New York in miniature, with skyscrapers exceeding 150 feet, whilst North Sydney and Mosman will merge into a second Brooklyn with property values in places equalling those of the City.

Within the next twenty years the population of Metropolitan Sydney should increase by over 1.25 million, of whom about half will find homes on the northern side of the river.

- 1 Write one or two sentences summarising the impact Bradfield says the Bridge will have on the city of Sydney.
- 2 Note two predictions Bradfield made which were fairly accurate.

On your visit to the Bridge, answer the following questions.

- 3 Find the three plaques that were unveiled at the opening of the Bridge.
 - a) What do they tell us about who was present at the opening?
 - b) What do they tell us about who worked on the design and construction of the Bridge?
- 4 While walking across the Bridge make notes about things you see that indicate what it might have been like to work on its construction (e.g. Is it windy?). How might these differ from working on the Bridge today (can you see anyone working on the Bridge)?
- 5 Watch the traffic on the Bridge for a short period making notes about what you see (include pedestrians, cars, trucks, trains etc.).
- 6 Have a look at the water below the Bridge and make notes about the boat traffic that you see going under.
- 7 Write one or two paragraphs commenting on what would happen to this traffic (both on and under) if there was no Bridge?
- 8 In groups, brainstorm everything you can think of the Bridge is used for (e.g. tourism). For each item on your list, predict what would be the impact if the Bridge were destroyed or had never been constructed.