

# Time and Captain Cook

by

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Each historian is trained to suspect documentary evidence: he must question the motives of the author of the document; he must try to deduce what relevant contemporary knowledge was shared by its author, and speculate on whom were expected to read it. Such elementary precautions prevent the automatic acceptance of everything that is written as necessarily true, and should be applied to every part of all documents including their ostensible dates. Thus a man might intentionally mislead, for instance by pre-dating a cheque written after the due date for paying an account; or he might deliberately try to delude his audience, perhaps by pretending to have travelled faster than his predecessor to claim a record; or he might unconsciously err, for example on a long sea voyage or land journey if he lacked instruments to check time.

The errors of time in James Cook's journals of his famous voyage of discovery between 1768 and 1771 were not intended to mislead or delude, for Cook was a conscientious and careful recorder who realised how important time was in aiding subsequent utilization of his discoveries; nor should unconscious mistake be expected with such a skilled navigator well versed in technical advances of scientific equipment. Yet he did unintentionally err, a mistake complicated by contemporary practice in recording time on board ships. Surprisingly he erred, and did not for a long period correct his error, when he crossed the 180° meridian from west to east without making the necessary adjustment for having gained a day; while consistently when at sea he began a new day at noon instead of at midnight.

The combination of this error and the difference between sea and land time led to one of the few questions about Australian history ever to reach the Australian parliament. On 17 November 1959 the interrogatory proceedings of the Senate were enlivened—or at least varied for surrounding answers dealt with the future of rifle clubs, the possibility of abolishing national service, and the censorship of television programmes—by a report on Captain Cook's dates. In reply to Senator Maher the present prime minister (then Senator Gorton) solemnly pronounced on Cook's time.

*Senator MAHER.*—My question is directed to the Minister for the Navy. I have discussed with him, and also with Lieutenant-Commander Hume of the Royal Australian Navy, the differing historical opinions as to the exact date when Captain Cook landed on Possession Island, near the tip of Cape York Peninsula, Queensland, and formally took possession of the east coast of Australia in the name of the then ruling monarch, King George III. Is the Minister now in a position to make an authoritative statement that will resolve all doubts concerning the date in the year 1770 when Cook landed and hoisted the English colours on Possession Island?

*Senator GORTON.*—The honorable senator's question arises from a desire to put beyond doubt the true date on which Captain Cook took possession of the eastern coast of Australia. He has raised the matter with me before. He raised it with me on the occasion that the Navy stated to me that the correct date was 22nd August, 1770, and he

did so because that statement was at variance, and is at variance, with the beliefs of members of the Queensland Historical Society, amongst others, who believe that the true date was 23rd August, 1770. Those who believe that it was 23rd August base their belief on the fact that although Captain Cook entered in his journals that he took possession between the hours of 4 p.m. and 6 p.m. on 22nd August, he made no allowance for the fact that, on sailing westward across the Pacific and crossing the International Date Line, he had gained a day; that he made no adjustment for his gain until he reached Batavia; and that therefore what he entered as 22nd August was in fact, according to their reckoning, 23rd August. There is no question as to the accuracy of the entry of 22nd August, or as to the fact that Captain Cook did gain a day and did not make allowance for it until he reached Batavia. But there is another fact to be taken into consideration which ought to alter the beliefs of the Queensland Historical Society. That is that Cook, in his journals, ran his days from mid-day, so that he ruled his journal at mid-day on the day that was 21st August ashore and dated and began the day, which he called 22nd August; so that the time shown in his log as between 4 p.m. and 6 p.m. on 22nd August was, ashore, between 4 p.m. and 6 p.m. on 21st August. If we add the day gained when he crossed the International Date Line, 4 p.m. on 21st August, shore reckoning, becomes 4 p.m. on 22nd August, shore reckoning, which was the date on which Cook took possession of Australia at Possession Island.

I have, Sir, a number of extracts from Cook's journals, together with explanations of them, which bear on this matter, and with the concurrence of honorable senators I shall incorporate in "Hansard". They are as follows:—

## DEPTFORD DOCKS.

(a) At 11 a.m. 27 May 1768 Captain Cook hoisted the Pendant and took charge of Endeavour.

Note: at this hour Ship Date and Civil date coincide.

(b) At 12 noon Captain Cook ruled off his diary and commenced a new day May 28th. Thereafter all days begin with P.M. entries and close with A.M. entries.

Note: NOW it continues to be May 27th until midnight for civilians on land, while it is May 28th for sailors on ship.

(c) This manner of Day Keeping continued until 13th April 1769 when Captain Cook arrived at Georges Island, and was resumed when he departed on 14th July, 1769.

## GEORGES ISLAND

(a) Because "the most material transactions at this island must happen in the Day time" Cook decides "he will conveniently record each day on Georges Island" in civil time to "begin and end at midnight".

Note: He makes his adjustment from Ship to Civil Time by letting Thursday 13th April 1769 run on for 36 hours—P.M., A.M., P.M.

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(b) Friday 14th April, begins at midnight and the record begins A.M. and closes P.M. thereafter, until he leaves the Island on Friday 14th July, when he reverts to Ships Time.

Note: He makes the adjustment by allowing 14th July to run for only 12 hours—from midnight to noon.

(c) Cook continues to record in Ships Times and Dates, first recording P.M. and then A.M. events each day, until he anchors in Batavia Roads on October 10th 1770.

### 180th MERIDIAN

(a) From the record of October 7th 1769 it is clear that Cook had crossed 180° W Long when, according to his Ship's Log, he still had 3°6' to travel.

(b) At 2 p.m. October 7th after taking observations on Sun and Moon he charted his true position 180°55' W.

(c) However he made no date adjustments in his journal. From Tahiti to Batavia the days continue in numerical sequence, beginning and ending at noon, opening with p.m. entries and closing with a.m. entries. During this period he charted New Zealand and the eastern coast of Australia.

### PROCLAMATION OF POSSESSION

(a) Between the hours of 4 p.m. and 6 p.m. Wednesday August 22nd 1770, Captain Cook anchored, landed on Possession Island, hoisted the Colours, and formally took possession of the Eastern Coast of Australia, in the name of His Majesty, King George III.

(b) As this time is P.M. Ships Time, the date will have to drop one day to conform to Civil Time. That is 4-6 p.m. August 22nd Ships Time, is 4-6 p.m. August 21st Civil Time.

(c) We next need to make the adjustment referred to by Scott and the Queensland Historical Society, and add one day for the day lost in crossing 180th Meridian. That is 4-6 p.m. August 21st Civil Time becomes 4-6 p.m. August 22nd Civil Time—the correct date and time of landing and taking possession of the east Coast of Australia.

### BATAVIA ROADS.

(a) In October 1770 Cook's journal records the following: "Wednesday 10th, according to our reckoning, but by the people here Thursday 11th".

(b) Captain Cook telescopes his entries for October 10th and October 11th into one day and begins the next day as Friday October 12th. He has here added one day to compensate for travelling west across the date line, and he continues his entries without further date adjustments to London.

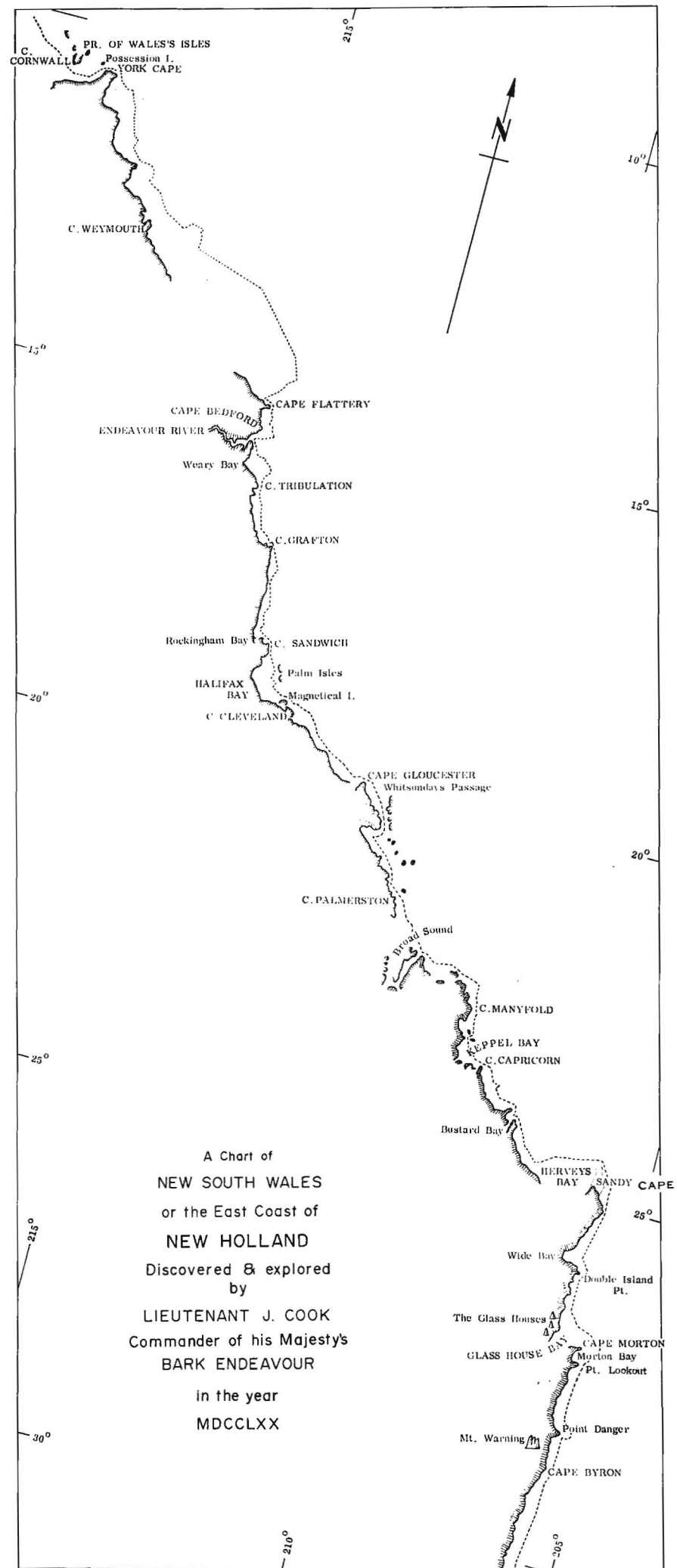
(c) The entries in the Journal from Batavia to London require no further adjustment by the historian than those required to convert from Ship Time Date to Civil Time Date.

(d) All entries however from 180th Meridian to Batavia, approximately October 1769 to October 1770, require two corrections by the historian.

- (i) Add one day for crossing the 180th Meridian.
- (ii) Deduct one day from all dates shown alongside P.M. times to translate Ship Dates to Civil Dates.

Using the "authoritative statement" of our leading politician a table can be constructed giving corrected times for Cook's visit to the eastern coast of Australia. In addition the times in Sir Joseph Banks's *Journal* can be adjusted, for although he used "shore reckoning" rather than ship time, he erred by following Cook's failure to adjust for crossing the 180th meridian.

The following table compares adjusted times with those given by Cook and Banks for the landings and sightings of the Australian coast:



A simplified copy of part of Cook's chart.

<i>Nature of Contact</i>	<i>Places</i>	<i>Cook's Journal (Ship Time)</i>	<i>Banks's Journal (Civil Time)</i>	<i>Adjusted Time (for Cook's Journal)</i>
sighted anchored off	PT. HICKS CAPE HOWE	19 April 6-8 a.m. 20 April 6 p.m.-4 a.m.	19 April 6-8 a.m. 19 April p.m.	20 April 6-8 a.m. 20 April 6 p.m. to 21 April 4 a.m.
sighted sighted sighted	CAPE DROMEDARY BATEMAN BAY PT. UPRIGHT	21 April 6 a.m. 21 April north at noon 22 April 5 p.m., anchored 12-4 a.m.	21 April a.m. 21 April p.m. 21 April evening	22 April 6 a.m. 22 April noon 22 April 5 p.m., anchored 23 April 12-4 a.m.
sighted attempted landing	JERVIS BAY [nr. BULLI] [nr. entrance LAKE ILLAWARRA]	25 April north in p.m. 28 April p.m. back to ship 5 p.m.	24 April 27 April p.m. after dinner	25 April p.m. 28 April 5 p.m.
landed	[KURNELL] BOTANY BAY	29 April p.m. to 6 May daylight a.m.	28 April p.m. after dinner to 6 May a.m.	29 April p.m. to 7 May a.m.
sighted sighted sighted sighted sighted sighted	PORT JACKSON BROKEN BAY PORT STEPHENS CAPE HAWKE CAPE BYRON COOK IS. [off FINGAL HEAD], MT. WARNING behind, POINT DANGER	6 May noon 7 May sunset p.m. 11 May ca 4 p.m. 11 May 8 a.m. 15 May north at noon 16 May ca 6 a.m.	— — 10 May p.m. — 15 May p.m.	7 May noon 7 May sunset 11 May ca 4 p.m. 12 May 8 a.m. 15 May noon 17 May ca 6 a.m.
sighted sighted	POINT LOOKOUT MORTON BAY (? riverbanks) actually E. coasts of MORETON & STRADBROKE ISS.	17 May p.m. 17 May p.m.	16 May a.m. 17 May 10 a.m.	17 May p.m. 17 May p.m.
sighted sighted sighted sighted sighted	CAPE MORTON GLASS HOUSES [NOOSA HEAD] DOUBLE ISLAND POINT INDIAN HEAD [FRASER IS.]	17 May a.m. 17 May a.m. 17 May north at noon 18 May 6-10 p.m. 20 May 10 p.m.	— 17 May — —	18 May a.m. 18 May a.m. 18 May noon 18 May 6-10 p.m. 20 May 10 p.m.
sighted	SANDY CAPE [FRASER IS.]	20 May noon	20 May daybreak	21 May noon
sighted	BREAK SEA SPIT	21 May 2 p.m.	20 May 2 p.m.	21 May 2 p.m.
landed	BUSTARD BAY	23 May 8 p.m. anchored 23 May a.m. landed 24 May p.m. ashore 24 May a.m. sailed	22 May night anchored 23 May a.m. landed 23 May p.m. ashore 24 May daybreak sailed	23 May 8 p.m. anchored 24 May a.m. landed 25 May a.m. sailed
sighted anchored	CAPE CAPRICORN round S. head of KEPPEL BAY	25 May 9 a.m. 26 May after 4 p.m.	— 26 May 1 p.m.	26 May a.m. 26 May after 4 p.m.
sighted	CAPE MANYFOLD	27 May north at noon 28 May passed at 3 p.m.	— —	28 May north at noon 28 May passed at 3 p.m.
sighted landed	CAPE TOWNSHEND PIER HEAD, THIRSTY SOUND	28 May 9 a.m. 29 May 6 p.m. anchored outside  29 May 5 a.m. sailed 29 May 9 a.m. anchored inside	— 29 May 9 a.m. anchored, landed after breakfast	29 May 9 a.m. 29 May 6 p.m. anchored outside  30 May 9 a.m. anchored inside 30 May landed after breakfast 31 May ashore 1 June 6 a.m. sailed
		30 May ashore 31 May 6 a.m. sailed	30 May ashore 31 May a.m. sailed	

<i>Nature of Contact</i>	<i>Places</i>	<i>Cook's Journal (Ship Time)</i>	<i>Banks's Journal (Civil Time)</i>	<i>Adjusted Time (for Cook's Journal)</i>
sighted	CAPE PALMERSTON	1 June north at noon	—	2 June north at noon
sighted	CAPE HILLSBOROUGH	2 June west at noon	—	3 June noon
anchored	REPULSE BAY	3 June 8 p.m.	2 June p.m.	3 June 8 p.m.
sighted	WHITSUNDAY IS.	4 June p.m.	—	4 June p.m.
traversed	WHITSUNDAY'S PASSAGE	4 June 6 p.m.	—	4 June 6 p.m.
sighted	CAPE GLOUCESTER	4 June daylight a.m.	—	5 June daylight
	HOLBOURN IS.			
	EDGCUMBE BAY			
sighted	CAPE UPSTART	4 June noon		5 June noon
		sighted		sighted
		5 June 6 a.m.	4 June night	6 June 6 a.m.
		abreast		abreast
sighted	CLEVELAND BAY	6 June noon	—	7 June noon
landed	PALM IS.	8 June p.m.	7 June after dinner	8 June landed
		returned 7 p.m.	almost dark	returned 7 p.m.
sighted	POINT HILLICK	8 June 3 a.m.	—	9 June 3 a.m.
	[E. point of HINCHINBROOK IS.]			
	ROCKINGHAM BAY	8 June	—	9 June
	CAPE SANDWICH	8 June 6 a.m.	—	9 June 6 a.m.
	[N.E. HINCHINBROOK IS.]			
sighted	FRANKLAND ISLES	9 June 6 a.m.	—	10 June 6 a.m.
sighted	CAPE GRAFTON	9 June noon	—	10 June noon
anchored off	GREEN ISLAND	10 June p.m.		10 June p.m.
	[MISSION BAY]	10 June p.m.	9 June after	10 June p.m.
		landed	midday dinner	landed
		10 June 12 night	10 June early	10 June midnight
		sailed	in the morn	sailed
sighted	TRINITY BAY,	10 June a.m.		11 June a.m.
	CAPE TRIBULATION			
struck	ENDEAVOUR ROCKS	11 June 11 p.m.	10 June 11 p.m.	11 June 11 p.m.
		struck		
		12 June 10.20 p.m.	11 June 10 p.m.	12 June 10.20 p.m.
		refloated		
sighted	HOPE ISLANDS	13 June 9 a.m.		14 June 9 a.m.
sighted	WEARY BAY	14 June 3 p.m.		14 June 3 p.m.
landed	ENDEAVOUR RIVER	18 June 1 p.m.	17 June evening	18 June 1 p.m.
	[COOKTOWN]	4 August ca 7 a.m.	4 August a.m.	5 August 7 a.m.
sighted	CAPE BEDFORD	4 August noon		5 August noon
		to 10 August		to 10 August
sighted	CAPE FLATTERY	10 August noon		11 August noon
landed	POINT LOOKOUT	11 August after 1 p.m.	10 August afternoon	11 August after 1 p.m.
landed	LIZARD ISLAND	12 August 1.30 p.m.	11 August to	12 August 1.30 p.m.
		to 13 August 2 p.m.	12 August	13 August 2 p.m.
landed	EAGLE ISLAND	13 August after 2 p.m.	12 August	13 August after 2 p.m.
passed through	PROVIDENTIAL CHANNEL	17 August after	16 August 4 p.m.	17 August 2 to 4 p.m.
		2 p.m. to 4 p.m.		
sighted	CAPE WEYMOUTH	17 August 4 p.m.		17 August 4 p.m.
sighted	FORBES ISLES,	19 August noon		20 August noon
	BOLT HEAD,			
	CAPE GRANVILLE,			
	TEMPLE BAY,			
	SIR CHARLES			
	HARDY'S ISLES,			
	COCKBURN'S ISLES			
anchored	BIRD ISLES	20 August 6.30 p.m.		20 August 6.30 p.m.
		to 6 a.m.		21 August 6 a.m.
sighted	[HALFWAY IS. and EAST ISLANDS]	20 August noon		21 August noon
sighted	YORK CAPE,	21 August noon		22 August noon
	NEWCASTLE BAY,			
	YORK ISLES			
landed	POSSESSION ISLAND	22 August 4 p.m.	21 August p.m.	22 August 4 p.m.
		6 p.m. ceremony		
		possession of east coast		
		later called New		
		South Wales		
		sailed 10 a.m.		

Note: [ ] indicate modern placenames.

Even if cynically many are bored with the amount of attention given to the bi-centenary of Cook's visit to Australia, or if justifiably some plead for more consideration of attempts to ascertain whether and when he was preceded by Asian or other European Navigators, or if others argue for more research to determine with precision when the Aborigines arrived (whether by carbon dating or other methods), certain general deductions give significance to these details of time. For they stress that every document must be studied carefully, and that historical research invariably must go beyond the mere interrelationship of documents. The historian needs more than "scissors and paste" to reconstruct the past; he must for instance study contemporary scientific knowledge.

Beyond this lesson the inescapable romance of sea travel is augmented by attention to such details. Modern ships in constant radio communication with the shore might not be able to make

such errors of date, but their basic navigation still depends on using instruments improved by intrepid pioneers such as Cook on his long isolated voyages. Perhaps we should stress more the infrequency of his errors rather than emphasizing these minor temporal variations. Certainly sailing across the unchanged vastness of the Pacific Ocean one marvels again at the accuracy of his landfalls and of his charts of what he saw.

#### SOURCES

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2. J. C. Beaglehole, ed.—*The Endeavour Journal of Joseph Banks, II*. Sydney, 1962.
3. *Commonwealth Parliamentary Debates*, Senate, 8 Eliz. II, S.16, 1531-2.