



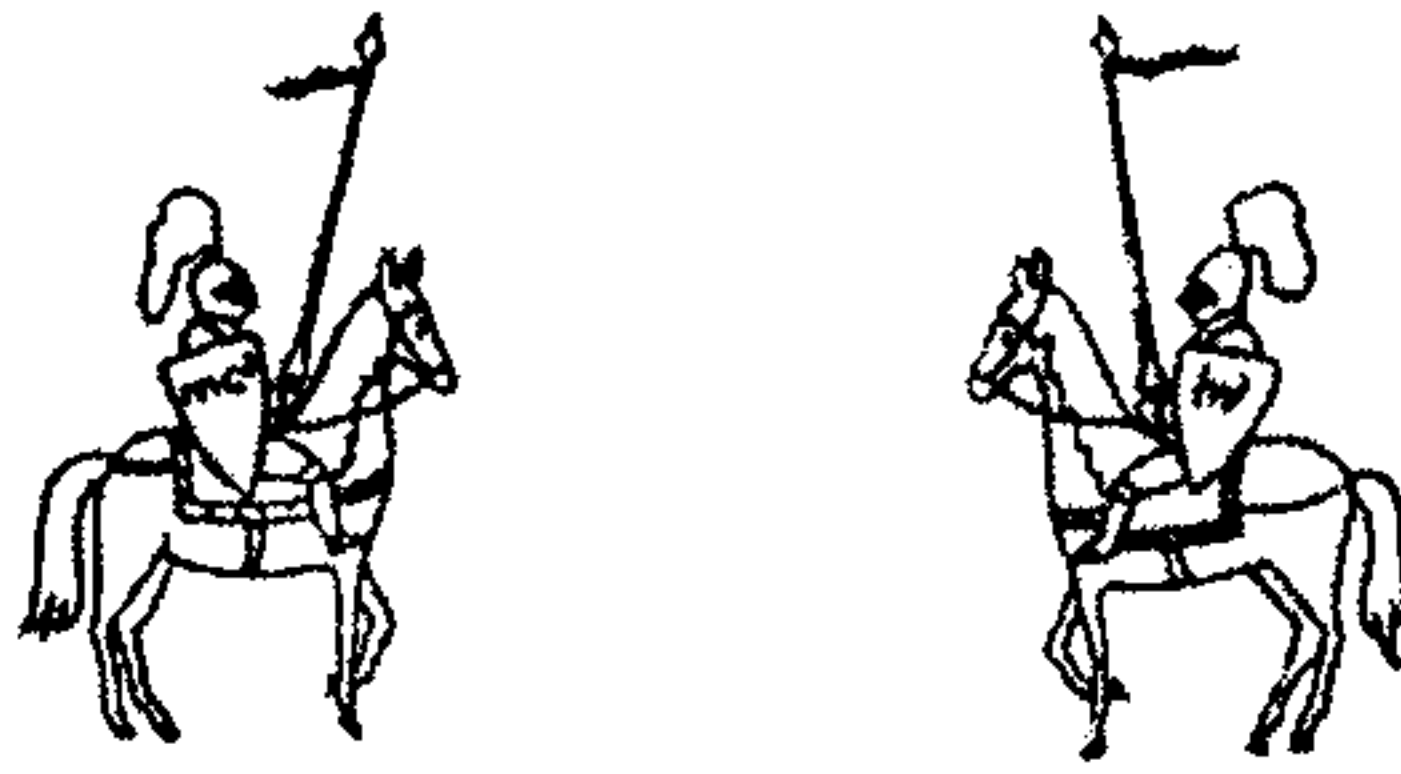
IYPT

**International
Young
Physicists
Tournament**

2004

 **Brisbane
Australia**

June 24 - July 1



The 17th International Young Physicists' Tournament

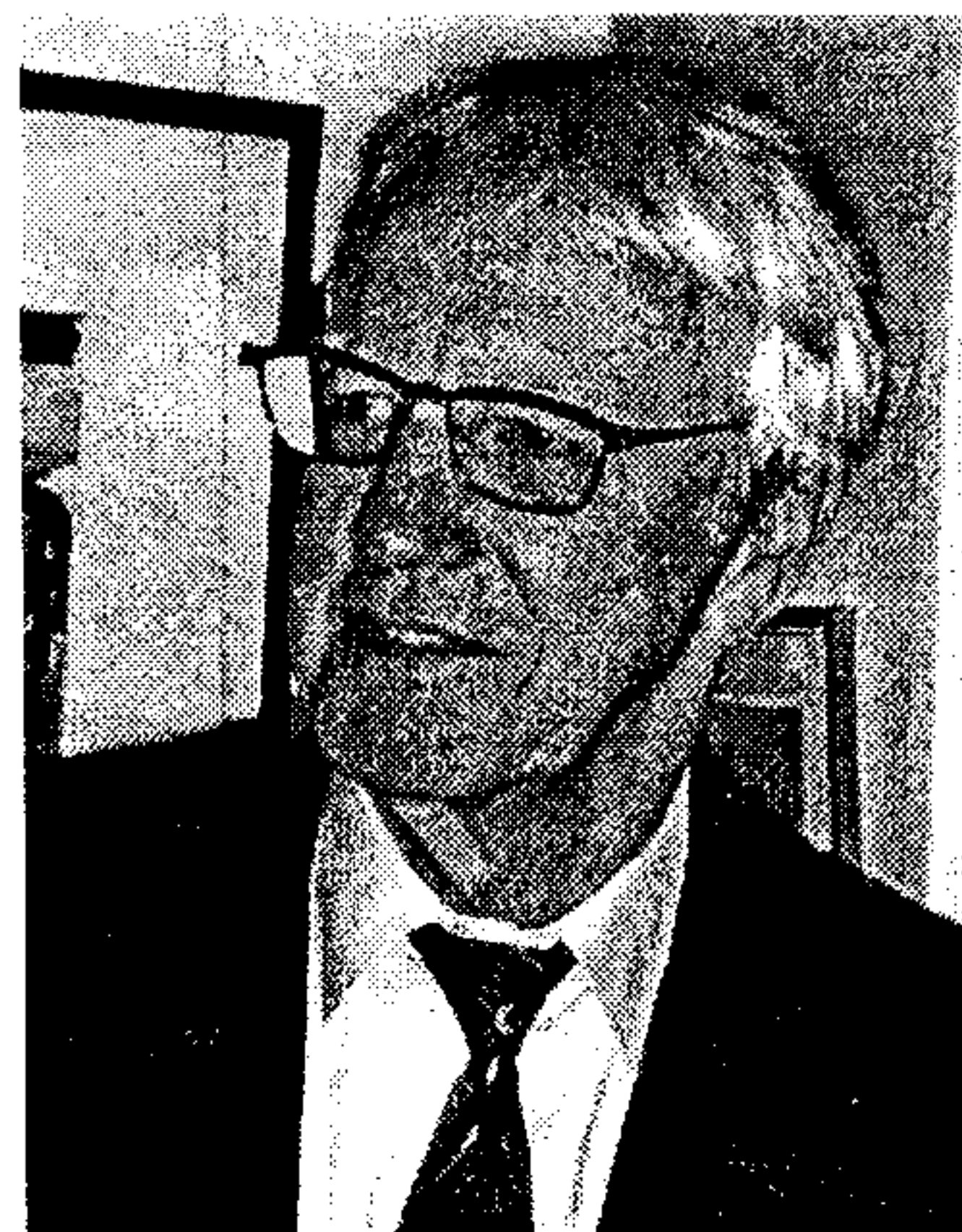
Welcome to IYPT2004

"For the IYPT event of 2004 we are very happy to have been invited to a new continent and look forward to another round of interesting competitions. The survival of IYPT depends totally on the enthusiasm and hard work of our hosts. This year they have gathered a record number of teams from a record number of countries far away; some of them appear for the first time. Let us all be encouraged to foster and spread our fascination for physics, which we think still has a very important role to play in our societies wherever we come from.

Let us also use this splendid opportunity to make friends and to keep our friendship alive for the future."

Warm regards
Gunnar

Professor Emeritus Gunnar Tibell
President IYPT
Uppsala University
Sweden



This is the first International Young Physicists' Tournament to be held in the Southern Hemisphere and 29 teams from 27 countries and six continents make this the largest event in the history of the competition.

The 29 teams competing at IYPT2004 are:

Australia 1, Australia 2, Austria, Belarus,
Bulgaria, Croatia, Cyprus, Czech Republic,
Ecuador, Finland, Georgia, Germany,
Hungary, Indonesia, Kenya, Korea,
Mexico, Netherlands, New Zealand, Nigeria,
Poland, Russia 1, Russia 2, Slovakia,
Sweden, Switzerland, Ukraine and United States of America

Our hosts are the two neighbouring schools of Brisbane Grammar School and Brisbane Girls Grammar School.

Brisbane Grammar School and Brisbane Girls Grammar School are both hosts and sponsors of the event and the LOC would like to extend our thanks to the Principals of the two schools for their support of this event:

— Ms Amanda Bell
Principal
Brisbane Girls Grammar School

Dr Peter Lennox
Principal
Brisbane Grammar School



BRISBANE GIRLS GRAMMAR SCHOOL

Brisbane Girls Grammar School is a leading secondary School for girls. Founded in 1875, it is one of the original Grammar Schools in Queensland. The School has an outstanding tradition in both educational leadership and personal achievement by its young women. The current enrolment is approximately 1100.

The School offers a liberal education that provides the basis for continuous learning and encourages girls to engage in critical thought. The School establishes the educational platform for young women to contribute confidently to their world with wisdom, imagination and integrity.

Brisbane Girls Grammar School remains one of this country's leading secular secondary Schools for girls. Our graduates include many women who have made significant contributions to the nation's development and continue to inspire young women today.



**BRISBANE GRAMMAR
SCHOOL**

Brisbane Grammar School is a non-denominational boys school of 1400 students (Years 6 - 12) located near the centre of Brisbane. The school was established in 1869 and maintains a strong tradition of academic excellence and operates an extensive extracurricular programme.

Brisbane Grammar School is committed to providing its community of learners with an academic curriculum that promotes a broad knowledge base and a global perspective, the skills of thinking, and confidence and skill in the use of technology within a challenging and supportive environment which develops individuals as both independent and collaborative learners.

Australia 1 includes students from both Schools.

Sponsors of IYPT2004

Hosts:

Brisbane Grammar School
Brisbane Girls Grammar School

Partly funded by:

GOLD Sponsorship

Education Queensland



SILVER Sponsorship



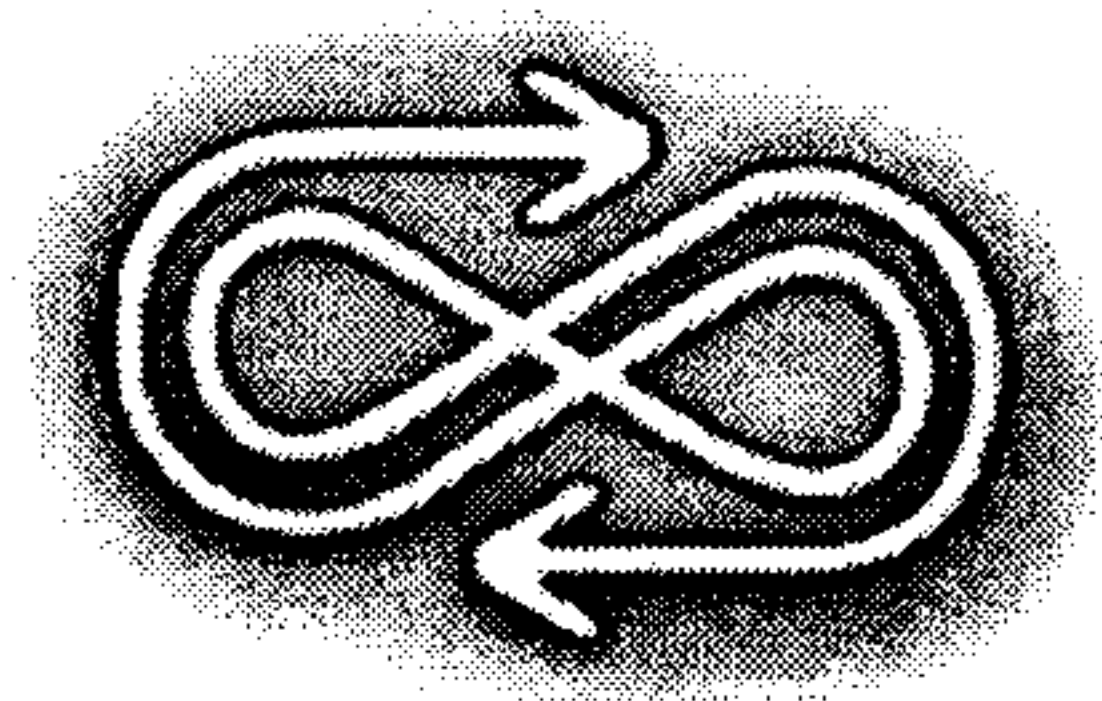
**University of Southern Queensland Faculty of
Sciences & Faculty of Engineering and Surveying**

BRONZE Sponsorship



CSIRO

Industrial Physics



**australian institute
of physics**

Other Supporters:



**School of Physical Sciences &
School of Engineering**



Corrs Chambers Westgarth

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Brisbane BMW

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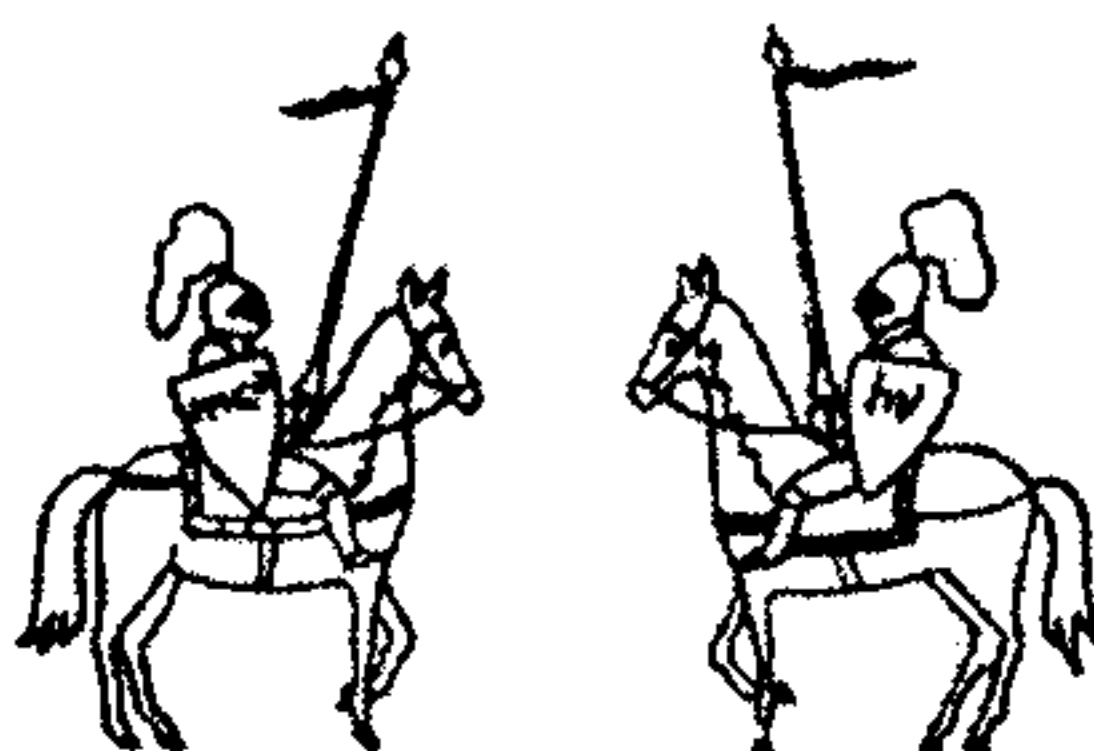
Supporters of IYPT:

Lesla & Robert Watson
Dr Caroline Mercer
Allyn & Maree Chant
Dr JB See
B.Pitts
Dickinson Shannon Family
BGGGS Old Girls Association OGA
Friends of Girls Grammar FOGG
P&F Brisbane Girls Grammar School
Mother's Group Brisbane Girls Grammar School

Friends of IYPT:

Ian & Colleen Davidson
Frances Au
Chris Lusink
Kirby Leeke
Greg Cowderoy
Helen Salisbury
Mr & Mrs Zivcic
Mr P Kotarski (Poland)
J. McCombe
Dr & Mrs Whish
The Wootton family

Official Schedule for IYPT2004



This Schedule is subject to change

A representative of each team should check for latest information each morning in the Tournament Office – E31

Wednesday June 23rd

Team Arrival/Preparation
Orientations

17.00 - 21.00

Library Open with Computer Access
Brisbane and Queensland Display

Thursday June 24th Arrival/Preparation

Lunch – subs on request

15.30

Timekeepers meeting – Gehrmann Theatre

16.00

Meeting for Guides and Helpers – Gehrmann Theatre

17.00

Orientation - BGS Middle School Courtyard

18.00

Welcome Party – BGS Middle School Courtyard

19.00 - 21.00

Library Open with Computer Access

Friday June 25th

7. 00 to 8.30	Breakfast at BGS Dining Room
9.00	Opening Ceremony at Centenary Hall, BGS Aboriginal Dance Troupe Opened by Dr Cherrell Hirst, Chancellor of QUT Setting up of groups by drawing lots
10.50	IOC meeting – Statutes and Guidelines
11.00 to 14.00	Library Open with Computer Access
12.30 to 13.30	Lunch BGGS
13.30	Meeting of Jurors
14.30	First round of competition Fight Rooms: Gehrmann Theatre, E14, E16, E23, E24, E26, E33, E34, E36
	Library Open with Computer Access
17.00 - 21.00	Dinner at BGS-Session 1 followed by Preparation
17.30	Dinner at BGS-Session 2 followed by Preparation
18.45	

Saturday June 26th

7. 00 to 8.30	Breakfast at BGS Dining Room
8.30	Meeting of IOC/Jurors
9.00	Second round of competition – 4 team groups
9.15	Second round of competition – 3 team groups
12.00 - 14.00	Library Open with Computer Access
12.30 to 13.30	Lunch BGGS
14.30	Third round of competition
17.00 - 21.00	Library Open with Computer Access
17.30	Dinner at BGS-Session 1 followed by Preparation
18.45	Dinner at BGS-Session 2 followed by Preparation

Sunday June 27th

7. 00 to 8.30	Breakfast at BGS Dining Room
8.40	Meeting of IOC/Jurors
9.15	Fourth round of competition
12.00 - 20.00	Library Open with Computer Access
12.30 – 13.30	Lunch
14.00	Half Day activities – details to come
17.30	Dinner at BGS-Session 1 followed by Preparation
18.45	Dinner at BGS-Session 2 followed by Preparation

Monday June 28th

7. 00 to 8.30	Breakfast at BGS Dining Room
8.30	Meeting of IOC/Jurors
9.15	Fifth round of competition
12.30 to13.30	Lunch
13.00 - 21.00	Final Teams Access to Computers – one lab each Other teams have access in labs
14.00	Half Day activities – details to come
18.30	Dinner at BGS

Tuesday June 29th

7. 00 to 8.30	Breakfast at BGS Dining Room
8.30	Excursion Glasshouse Mountains Kondalilla Falls/Montville Mooloolaba Beach Dusk at Mt Coot-tha
18.30	Dinner at BGS for All

Wednesday June 30th

9.00	IYPT2004 Final – BGS Centenary Hall
12.30 to 3.30	Lunch
15.00	The closing ceremony – BGS Centenary Hall
17.00	Lord Mayor's Reception – Brisbane Room, City Hall
18.30	Farewell Pizza Party

Thursday July 1st

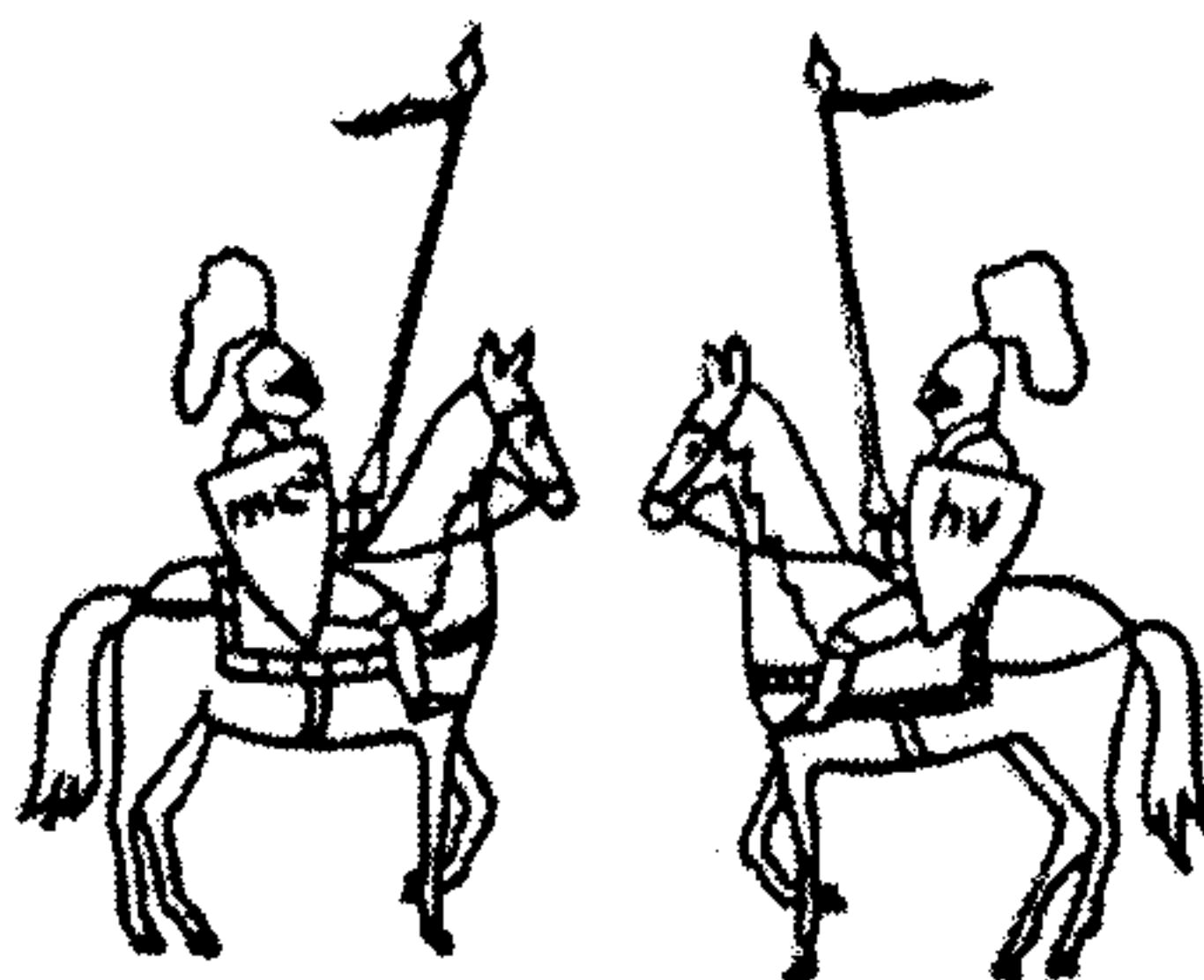
	Departure Day
7. 00 to 8.30	Breakfast at BGS Dining Room
9.00	IOC Meetings
11.30 to 1.00	Microbrewery tour and lunch at Cheers
13.30	IOC Meetings
19.00	IOC Dinner at The Grosvenor on George Street

Friday July 2nd

7. 00 to 8.30	Breakfast at Albert Park Hotel
9.00	IOC Meetings
12.00 to 1.00	Lunch at Cheers
13.30	IOC Meetings
19.00	IOC Dinner at The Chef's In on Boundary

Saturday July 3rd

7. 00 to 8.30	Breakfast at Albert Park Hotel
	IOC Departure



IYPT Problems 2004

1. Misty

Invent and construct a device that would allow the size of a droplet of a mist to be determined using a sound generator.

2. Stubborn Ice

Put a piece of ice (e.g. an ice cube) into a container filled with vegetable oil. Observe its motion and make a quantitative description of its dynamics.

3. Electric Pendulum

Use a thread to suspend a ball between the plates of a capacitor. When the plates are charged the ball will start to oscillate. What does the period of the oscillations depend on?

4. Dusty Blot

Describe and explain the dynamics of the patterns you observe when some dry dust (e.g. coffee powder or flour) is poured onto a water surface. Study the dependence of the observed phenomena on the relevant parameters.

5. Sea-shell

When you put a sea-shell to your ear you can hear 'the sea'. Study the nature and the characteristics of the sound.

6. Seebeck Effect

Two long metal strips are bent into the form of an arc and are joined at both ends. One end is then heated. What are the conditions under which a magnetic needle placed between the strips shows maximum deviation?

7. Coin

Stand a coin on its edge upon a horizontal surface. Gently spin the coin and investigate the resulting motion as it settles.

8. Pebble Skipping

It is possible to throw a flat pebble in such a way that it can bounce across a water surface. What conditions must be satisfied for this phenomenon to occur?

9. Flow

Using a dc source, investigate how the resistance between two metallic wires dipped into flowing water (or water solution) depends upon the speed and direction of the flow.

10. Two Chimneys

Two chimneys stand on a box with one transparent side. Under each chimney there is a candle. A short period after the candles are lit one flame becomes unstable. Examine the case and present your own theory of what is happening.

11. String Telephone

How do the intensity of sound transmitted along a string telephone, and the quality of communication between the transmitter and receiver, depend upon the distance, tension in the line and other parameters? Design an optimal system.

12. Kundt's Tube

In a 'Kundt's Tube' type of experiment the standing waves produced can be made visible using a fine powder. A closer look at the experiment reveals that the regions of powder have a sub-structure. Investigate its nature.

13. Egg White

White light appears red when it is transmitted through a slice of boiled egg white. Investigate and explain this phenomenon. Find other similar examples.

14. Fountain

Construct a fountain with a 1m 'head of water'. Optimise the other parameters of the fountain to gain the maximum jet height by varying the parameters of the tube and by using different water solutions.

15. Brazil Nut Effect

When a granular mixture is shaken the larger particles may end up above the smaller ones. Investigate and explain this phenomenon. Under what conditions can the opposite distribution be obtained?

16. Small Fields

Construct a device based upon a compass needle and use your device to measure the Earth's magnetic field.

17. Didgeridoo

The 'didgeridoo' is a simple wind instrument traditionally made by the Australian aborigines from a hollowed-out log. It is, however, a remarkable instrument because of the wide variety of timbres that it produces. Investigate the nature of the sounds that can be produced and how they are formed.



The Regulations of the International Young Physicists' Tournament

I. International Young Physicists' Tournament

The International Young Physicists' Tournament (IYPT) is a competition among teams of secondary school students in their ability to solve complicated scientific problems, to present solutions to these problems in a convincing form and to defend them in scientific discussions, called Physics Fights (PF).

II. The problems of the IYPT

The problems are formulated by the International Organizing Committee (IOC) and sent to the participating countries not later than in October. These problems may be used in regional and national tournaments. To compose the problems a meeting of the IOC may be held in the host country.

III. The participants of the IYPT

1. The national teams

Any invited country is represented by one team. The host country may be represented by two teams.

2. The teams of regions, towns, colleges etc.

The decision about the participation of such a team is taken by the Local Organizing Committee (LOC).

3. The membership of the teams

The IYPT team is composed of five secondary school students. The secondary school graduates could participate in the IYPT in the year of their graduation. The participation of university students is not allowed. The LOC may allow participation of teams of four or three students. The composition of the team cannot be changed during the Tournament. The team is headed by a captain who is the official representative of the team during the PF.

4. The team is accompanied by two team leaders.

IV. The Jury

The Jury is nominated and organized by the LOC. It consists of members of different countries.

Team leaders (one from each team) are included in the Jury. The team leaders cannot be members of the Jury in the PF where their teams participate and should not, if possible, grade the same team more than twice.

V. The agenda of the IYPT

The IYPT is carried out in a period determined by the LOC (from May to July).

All teams participate in five Selective PFs. Selective PFs are carried out according to a special schedule, following the rule that, if possible, no team meets another team more than once. This schedule should be known before numbers are ascribed to the teams by lot. The best teams participate in the Final PF.

The host country provides a cultural program for the participants.

VI. The Physics Fight regulations

Three or four teams participate in a PF, depending on the total number of teams. In the course of a PF the members of a team communicate only with each other.

Before the beginning of a PF, the Jury and the teams are introduced.

The PF is carried out in three (or four) Stages. In each Stage, a team plays one of the three (four) roles: Reporter, Opponent, Reviewer (Observer). In the subsequent Stages of the PF, the teams change their roles according to the schemes:

Three teams PF

	Stage		
Team	1	2	3
1	Rep	Rev	Opp
2	Opp	Rep	Rev
3	Rev	Opp	Rep

Four teams PF

	Stage			
Team	1	2	3	4
1	Rep	Obs	Rev	Opp
2	Opp	Rep	Obs	Rev
3	Rev	Opp	Rep	Obs
4	Obs	Rev	Opp	Rep

VII. The Stage regulations

The performance order in the Stage of a PF: Reserved time in minutes
English

English/Russian

The Opponent challenges the Reporter for the problem 1 1

The Reporter accepts or rejects the challenge 1 1

Preparation of the Reporter 5 5

Presentation of the report 12 12

Questions of the Opponent to the Reporter

and answers of the Reporter 2 3

Preparation of the Opponent 3 3

The Opponent takes the floor, maximum 5 min. (E) or 8 min. (E/R),
and discussion between the Reporter and the Opponent . . .15 20

Questions of the Reviewer to the Reporter and the Opponent and answers to the questions	2	3
Preparation of the Reviewer	2	2
The Reviewer takes the floor	3	5
Concluding remarks of the Reporter	2	3
Questions of the Jury and grading	2	2

In the Final PF the procedure of challenge is omitted.

The official language of the IYPT is English. The report has to be presented in English. In the subsequent parts teams can choose to use Russian.

VIII. The team performance in the Stages

The Reporter presents the essence of the solution to the problem, attracting the attention of the audience to the main physical ideas and conclusions. Standard devices for presentation are blackboard, overhead and slide projectors. For further devices the teams should consult the organizers.

The Opponent puts questions to the Reporter and criticizes the report, pointing to possible inaccuracy and errors in the understanding of the problem and in the solution. The Opponent analyses the advantages and drawbacks of both the solution and the presentation of the Reporter. The discussion of the Opponent should not become a presentation of his/her own solution. In the discussion, the solution presented by the Reporter is discussed.

The Reviewer presents a short estimation of the presentations of Reporter and Opponent.

The Observer does not participate actively in the PF.

During one PF only one member of a team takes the floor as Reporter, Opponent or Reviewer; other members of the team are allowed to make brief remarks or to help with the presentation technically. No member of a team may take the floor more than twice during one PF or, as Reporter, more than three times in total during all Selective PFs.

IX. The rules of problem-challenge and rejection

1. All problems presented in the same PF must be different.

2. *Selective PF*

The Opponent may challenge the Reporter on any problem with the exception for a problem that:

- a) was presented by the Reporter earlier;
- b) was opposed by the Opponent earlier;
- c) was presented by the Opponent earlier.

If there are less than five problems left to challenge, the bans c), b), a) are successively removed, in that order.

During the Selective PFs the Reporter may reject the challenge of three different problems in total without penalty. For every subsequent rejection the coefficient of the Reporter (see section X) is decreased by 0.2. This reduction continues to apply during the following PFs.

3. *Final PF*

Within four hours after the announcement of the results of the Selective PFs the teams participating in the Final choose their problems. In case teams choose the same problem, priority is given according to the order of presentation in the Final (see section XII). The choice should be made public immediately.

X. The grading

After each Stage the Jury grades the teams, taking into account all presentations of the members of the team, questions and answers to the questions, and participation in the discussion. Each Jury member shows integer marks from 1 to 10. If the Jury consists of more than six persons the highest and the lowest marks are withdrawn. If the Jury consists of five or six persons, the lowest mark is withdrawn in the evaluation of the mean mark. The remaining marks are taken into account in all further calculations. The mean marks are multiplied by various coefficients: 3.0 or less (see section IX) for the Reporter, 2.0 for the Opponent, 1.0 for the Reviewer and then transformed into points.

XI. The resulting parameters

1. *For a team in the PF*

The sum of points (SP) is the sum of mean marks, multiplied by the corresponding coefficients and rounded to one decimal.

2. *For a team in the Tournament*

The total sum of points (TSP) equals the sum of SP of the team in all Selective PFs. The highest TSP , denoted as $HTSP$, serves as reference (see section XIII).

XII. The Final

The three teams having the highest TSP in the Selective PFs participate in the Final. In case teams have equal TSP , their participation in the Final is decided by the most balanced teamwork during the Selective PFs, in case of equality by lot.

The order of presentation in the Final is also determined by the TSP , in case of equality by the most balanced teamwork, in case of continued equality by lot: the higher the TSP , the lower the number in the scheme of section IV.

XIII. The final team ranking of the IYPT

The winner of the Final obtains the 1st place. If two or three teams have the same *SP* result in the final, the winner is nominated according to the highest *TSP*. The other two teams participating in the Final share the 2nd place. For teams not participating in the Final, the LOC decides, according to the *TSP* obtained, which teams will share the 3rd place.

XIV. The status of the regulations of the IYPT

The regulations are established by the IOC and may be changed only by the IOC.

Harmonia, 18th October 2003

Keeping you out of trouble in Brisbane

Smoking

In Queensland, the legal age for smoking is 18. Retailers are legally bound to refuse to sell tobacco to anyone suspected of being underage. They require ID. Acceptable proof of age is a photographic driver's licence (Australian), proof of age card (Australian) or passport.

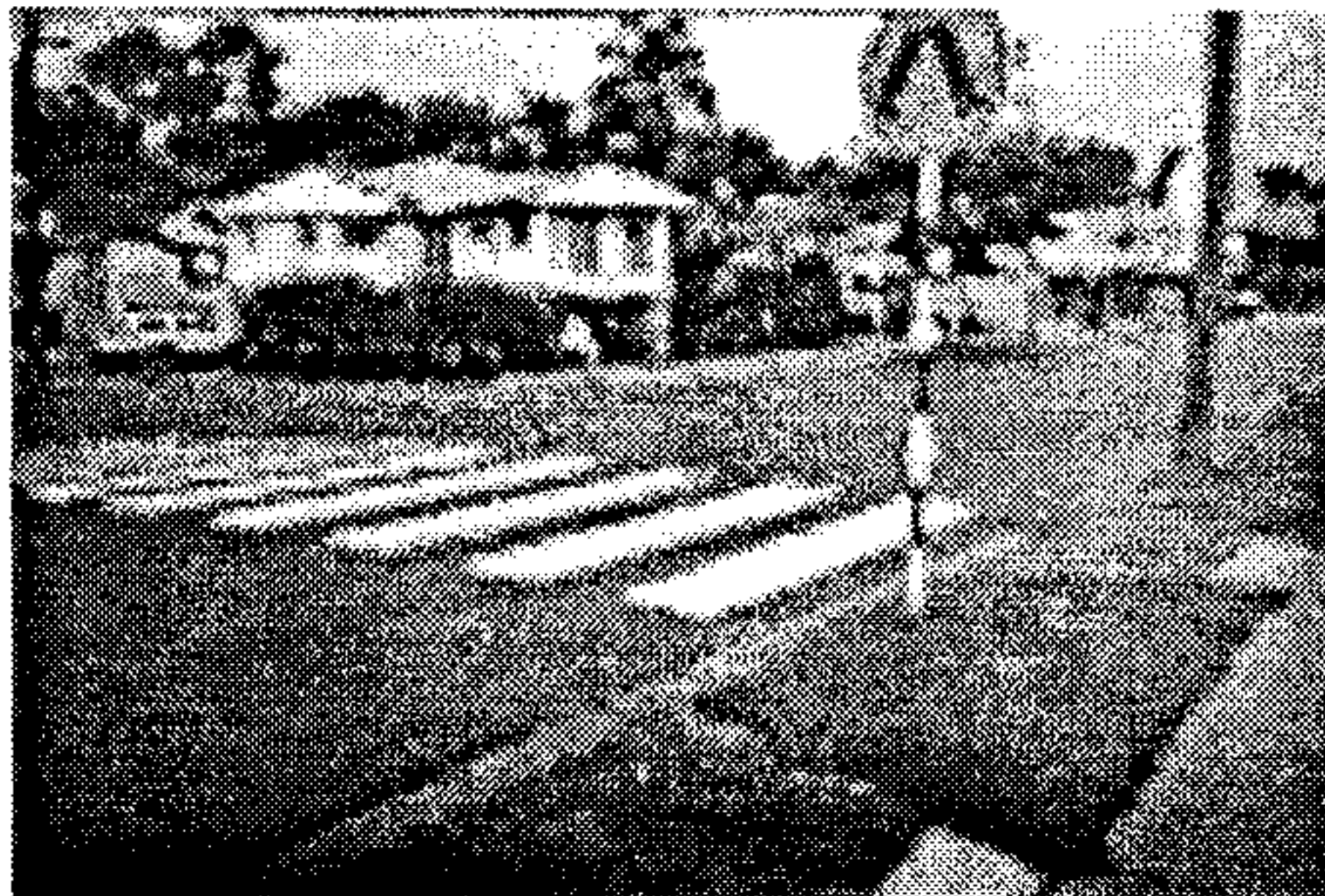
Alcohol

- The legal age for drinking alcohol is 18 years.
- Underage drinking or using fake ID could land you with a \$1875 fine.
- It is an offence to be drunk and disorderly or behave in a riotous or indecent manner in a public place
- It is an offence to be drunk or disorderly or create a disturbance on licensed premises.
- It is an offence to consume liquor in a public place (eg. road, footpath, park etc).
- It is an offence to use indecent or **obscene** language in or near a public place if a person in a public place might hear it.
- Liquor may not be sold, supplied and consumed on licensed premises and in public places to or by persons who are under 18 years of age.
- Liquor may not be sold, supplied and consumed on licensed premises by persons who are unduly intoxicated and/or disorderly. Unduly intoxicated means, "that because of the consumption of alcohol, a person is acting in a way that a normal person would not act".
- Minors (under 18 years of age) cannot be on licensed premises unless they are accompanied by a responsible adult or eating a meal.
- A licensed premises can refuse entry and/or service to any person at any time.
- When asked to leave a licensed premises, it is an offence to fail to do so or to resist eviction.
- In Queensland, most drugs are governed by laws and regulations, and the penalties for misusing drugs can be harsh.

Road Rules

Be careful when crossing roads. Australians drive on the left side of the road.

When walking around busy towns and city centres, be careful when crossing roads. As a pedestrian, the traffic closest to you should be approaching you from your right hand side. Before crossing the road, look to your right first, then left, then right again. It seems like common sense to most, but if you are used to traffic flowing the other way, it is easy to forget to look to the right first. Where available, use traffic lights or pedestrian crossings to cross the road safely. It is an offence to cross a road within 20m of a marked crossing. On zebra crossings you have right of way but you must wait for traffic to stop before stepping on to road.



Personal Safety Strategies



Remember we all have the right to feel safe all of the time. The only limit to the activities you undertake should be your feelings of safety, that is if you feel safe doing it, enjoy your right to choose what you do and when you do it. Common sense, of course, should play a part in these decisions.

Always appear confident. Offenders target vulnerability. If you display uneasiness with your surroundings through poor body language, you are more likely to attract their attention.

Portray confidence through positive body language such as adopting good posture, walking with a purpose and being aware of your surroundings. Being able to look people in the eye, even for a brief moment, indicates that you are not intimidated by them. The idea is to look 'streetwise' and confident rather than uneasy or vulnerable.

Even if you don't feel confident, by using strong body language you appear confident and avoid looking like an easy target. You are also likely to feel more confident.

Automatic teller machines (ATMs)

When withdrawing money from an ATM, try to stand where you have the best view of what's going on around you while you are waiting for your transaction to process. This way you avoid looking like an easy target. Also, if you need to use an ATM at night, try to find one at a location that is well lit and not isolated.

Making a Phone Call

Some people have trouble with phonecards they purchase in their own countries before departure. Please inform a member of the Local Organising Committee if you are having trouble phoning home. Committee members can be found in the tournament office, E31, during business hours.

Mobile Phones

Mobile phones should work well in Brisbane if you have international roaming switched on.

To make a **local call** within Australia, dial the local number.

To make a **national call** within Australia, dial the area code then the number.

To make an **international call**, dial + or the international access code to call from Australia 0011, then the country code, area code, and number.

Please note that you usually do not dial the first digit of the area code or the mobile number if it is 0.

International Access Code + Country Code + Area Code + Local Number

For example: To make a call from Australia to local number 555 3344 in Limerick, Ireland you need to know the country code of Ireland (353) and the area code of Limerick (061). You do NOT dial the 0 of the area code. So you would dial:

0011 353 61 555 3344

To call mobile number 0411 333444 in Ireland, you dial:

0011 353 411 333444

Dialling + will automatically dial the international access code of the country you are in.

+ 353 411 333444

Public telephones

Safety

Maintain an awareness of your surroundings by casually turning around to face passers-by once you have dialled. This prevents the possibility of someone approaching you unnoticed, and gives you a 'streetwise' appearance.

To make a call

1. Lift handset and wait for dial tone. Dial tone sounds like ddddd in Australia.
2. Insert coins or card.
3. Dial number. The + in your phone number becomes 0011 for Australia.

Busy tone sounds like: beep beep beep

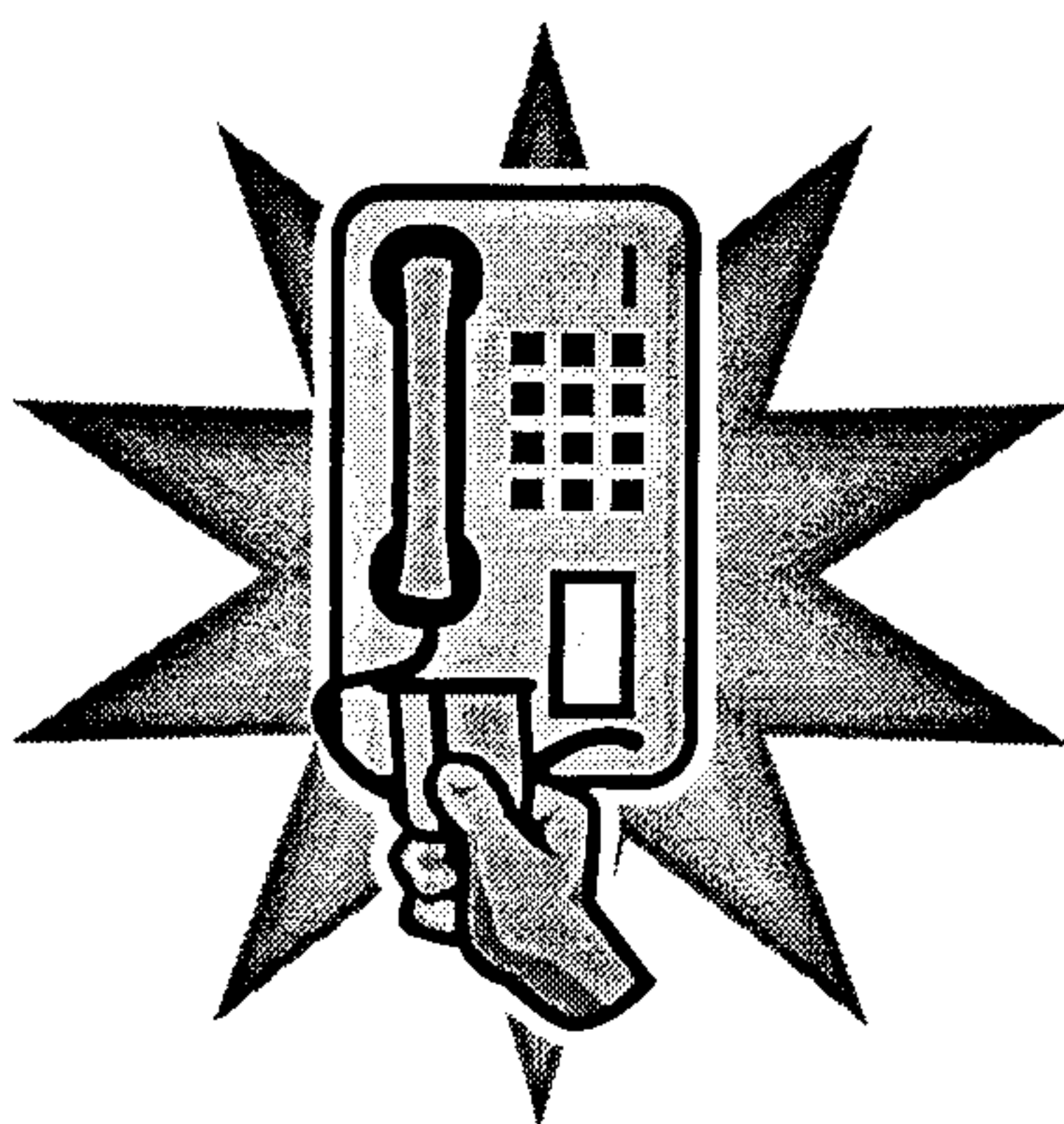
PhoneAway Cards

PhoneAway works with most touchtone phones. If a touchtone phone is not available, the call will go through to an operator who will assist you in placing your call.

PhoneAway cards cannot be used to make calls to 1800, 190, 005 or 13 numbers, operator assisted calls, or calls from public credit card only phones.

To make a call from Australia

- Dial 18933 or **1800 150 117**. These are usually free calls.
- Select from one of the language options. (Press 1 for English)
- Enter your 12-digit PhoneAway card number.
- Listen to hear your remaining credit.
- Enter the telephone number you wish to call for calls in Australia including the STD area code (even for local calls) followed by #. To call overseas dial 0011, then enter the country code, area code and the number you wish to call followed by the #.
- You will hear a beep when your remaining credit is low.
- To make another call (follow-on calling), simply wait until the other person hangs up OR press # followed by * for an immediate follow-on call.

**Calls Made in Australia****Local, National Long Distance, Mobile Calls made from a fixed phone**

Untimed Local calls within Australia	49c Verification fee
National long distance (flat rate 24 hours, 7 days)	21c per min*
Calls to mobiles within Australia	44c per min*
Fixed to mobile overseas	Refer to rate table

* Plus 49c verification fee applies

Calls made to mobile phones in some countries attract a higher per minute rate.

Calling overseas from Australia* (GST inclusive)**Add 49c verification fee per call**

Country	Country Code	Calls to Fixed Line Number Per minute rate	Calls to an International Mobile (Non-Roaming) Number Per minute rate
		GST Included	GST Included
Austria	43	\$0.55	\$0.88
Belarus	375	\$1.20	\$1.20
Brazil	55	\$1.05	\$1.32
Bulgaria	359	\$1.35	\$1.35
Croatia	385	\$0.85	\$1.19
Cyprus	357	\$0.75	\$0.75
Czech Republic	420	\$0.85	\$1.11
Ecuador	593	\$1.40	\$1.40
Finland	358	\$0.65	\$1.07
Georgia	995	\$1.55	\$1.55
Germany	49	\$0.40	\$0.77
Hungary	36	\$0.60	\$0.833
Indonesia	62	\$0.90	\$1.012
Kenya	254	\$1.50	\$1.50
Korea Rep of (South)	82	\$0.80	\$0.94
Mexico	52	\$1.10	\$1.10
Netherlands	31	\$0.45	\$0.87
New Zealand	64	\$0.21	\$0.614
Nigeria	234	\$1.35	\$1.35
Poland	48	\$0.85	\$1.274
Russia	7	\$1.50	\$1.50
Slovak Republic	421	\$0.75	\$0.75
Sweden	46	\$0.50	\$0.863
Switzerland	41	\$0.50	\$0.95
Ukraine	380	\$1.05	\$1.05
USA	1	\$0.21	\$0.21

* 49 cent verification fee applies in addition to the advertised per minute rate.

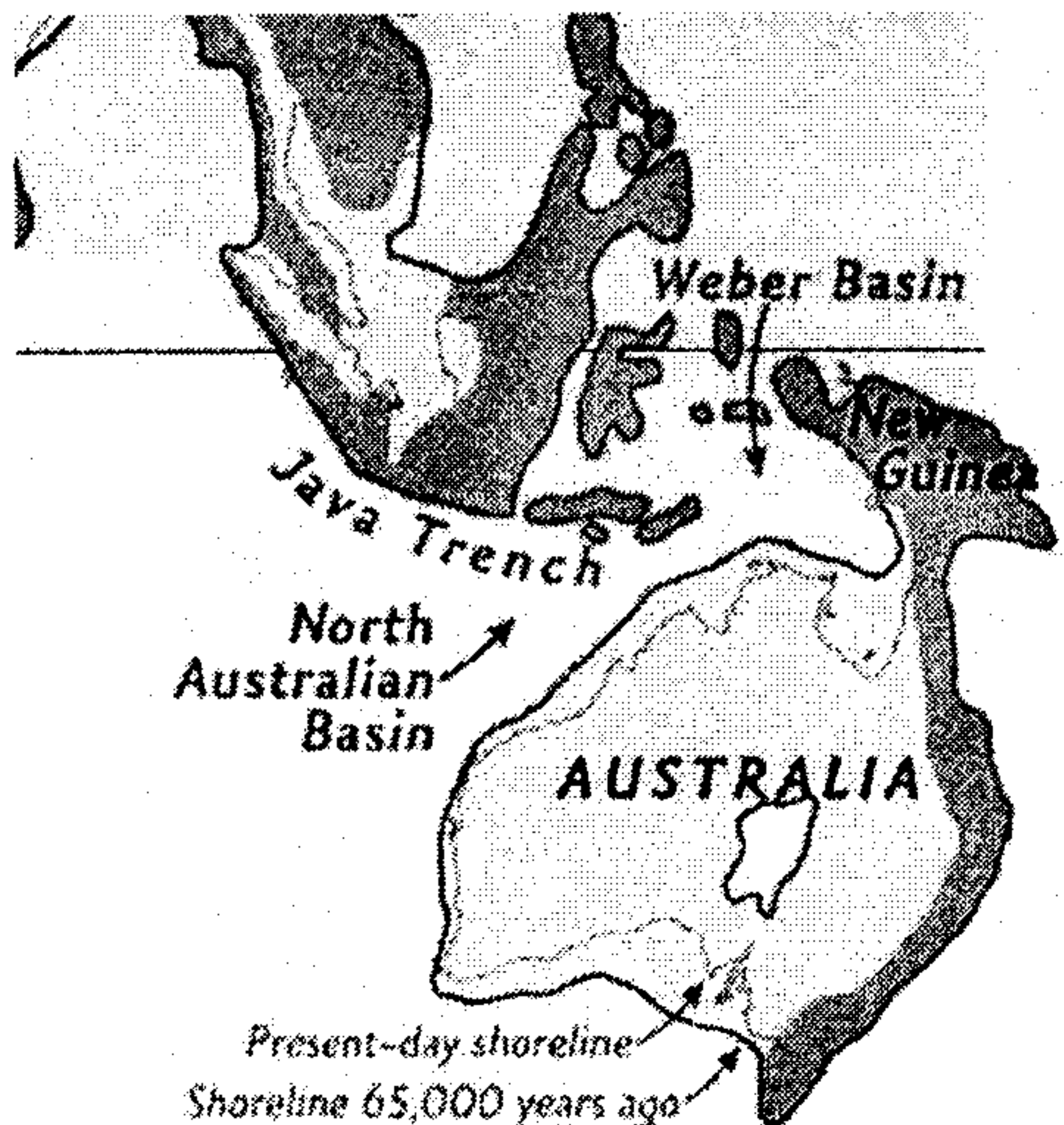
* Calls to an international mobile (non-roaming) number means calls to services using an international mobile (non-roaming) number such as international mobiles, pagers, voicemail and personal number services.

History of Australia

Unlike most other parts of the world, where modern humans evolved from earlier forms, the Aborigines probably came to Australia as modern human beings 40,000 to 60,000 years ago. Some people believe that the Aborigines have existed on Australia for 120,000 to 150,000 years, but have not been able to find conclusive evidence to support their theories. 40,000 years ago the world looked very different. An ice age was just ending and there were huge amounts of ice at the poles of the Earth. The large ice caps on the north and south poles caused the oceans to be 120 to 180 metres (400-600 feet) lower than they currently are, letting Australia extend much farther into the ocean than it currently does. Australia, New Guinea and Tasmania were all part of one continent leaving the widest possible gap of water between Australia and the Asian landmass at just 130km (80 miles). The most probable reason for the

existence of people in Australia is that people who had already spread throughout the Indonesian islands were able to see the smoke of naturally-occurring Australian brush fires from Borneo. The indigenous people of the Indonesian islands today are excellent watercraftsmen and swimmers. It is very likely that the ancestors of these people realized when they saw smoke in the distance that there was land there and sailed to find it. Once people landed in Australia they spread along the coastline to southern Australia, with some people crossing a land bridge to

Tasmania. Eventually Aborigines inhabited every part of Australia. Even though modern day Aborigines originated from a single group of people, the extremely diverse geography of Australia has greatly shaped the different groups of Aborigines living within Australia. Different groups evolved differently in different parts of Australia, and today there are hundreds of cultures and languages which are different but share the same basic beliefs.



www.teachers.ash.org.au/mrlaneis/z_z_maps_landbridge_oz.jpg

Aboriginal heritage

Australian Aboriginal culture is complex and extraordinarily diverse. It is one of the world's longest surviving cultures, which goes back at least 50,000 years (some think it is closer to 150,000 years).

There were over 500 different clan groups or 'nations' around the continent, many with distinctive cultures and beliefs. Hundreds of languages and dialects existed (although many are now extinct), as well as a variety of different customs and rituals, art forms, styles of painting, forms of food, and hunting habits.

A common heritage

Before Europeans came to Australia, the very distinctive and culturally unique groups that made up Aboriginal Australia shared a number of common traits. Two examples are:

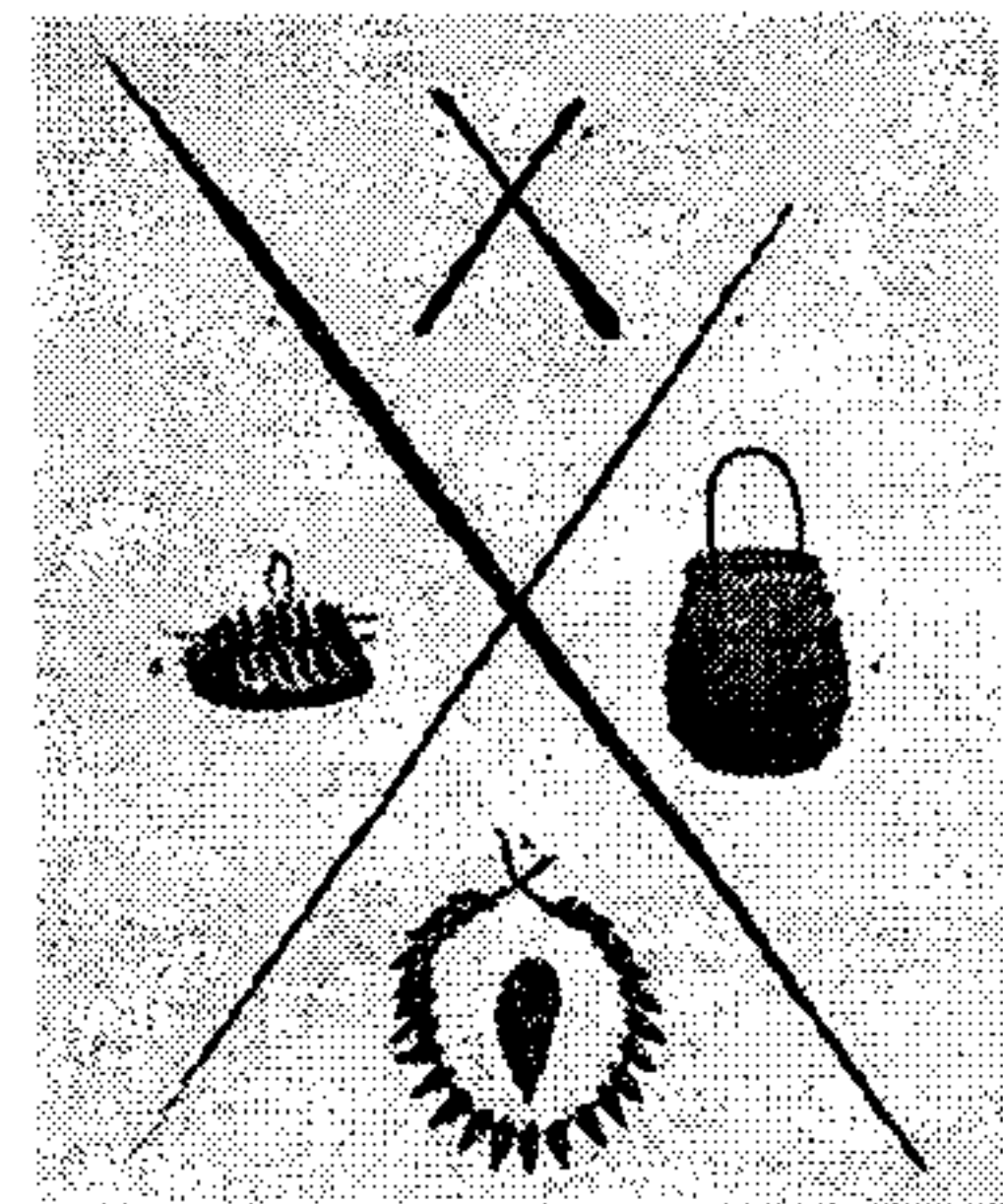
Hunters and gatherers

All of Australia's Aboriginals were semi-nomadic hunters and gatherers, with each clan having its own territory from which they 'made their living'. These territories or 'traditional lands' were defined by geographic boundaries such as rivers, lakes and mountains. They all shared an intimate understanding of, and relationship with, the land. It was the basis of their spiritual life.

It was this affinity with their surroundings that goes a long way to explaining how they survived for so many millennia. They understood and cared for their different environments, and adapted to them.

Tool technology

While their tools varied by group and location, Aboriginal people all had knives, scrapers, axe-heads, spears, various vessels for eating and drinking, and digging sticks. Not all groups had didgeridoos and, contrary to popular belief, many did not have boomerangs. Some groups developed more tools than others.



Tasmanian aboriginal implements
Claude-Marie-François Dien, 1787-
1865

Image courtesy of the National
Library of Australia

Cultural diversity

Languages

There were between 200 and 250 aboriginal languages spoken, with many different dialects, producing up to 700 varieties. This makes Aboriginal Australia one of the most linguistically diverse areas on the planet. Within the space of 80 kilometres you can still pass through the territories of three languages 'less closely related than English, Russian and Hindu.' (*The Oxford Companion to Australian History*, 1998)

Language is vitally important in understanding Aboriginal heritage as much of their history is an oral history. Interestingly, various oral histories have been backed up by geological data, such as the flooding of Port Phillip Bay which occurred about 10,000 years ago!

Climate and location

Aboriginals were supremely expert in adapting to their environments. There were coastal and inland tribes. Their 'territories' ranged from lush woodland areas to harsh desert surroundings. Different groups needed to develop different skills and build a unique body of knowledge about their particular territories.



Spearthrower, Victoria River,
Northern Territory
Arthur Groom, 1904-1953
Image courtesy of the National
Library of Australia

Their tools and implements reflected the geographical location of these different groups. For example, it is known that coastal tribes used fishbone to tip their weapons, whereas desert tribes used stone tips.

Land – at the core of belief

Land is fundamental to the well-being of Aboriginal people. The 'dreamtime' stories explain how the land was created by the journeys of the spirit ancestors.

Living within the landscape

For Aboriginal people all that is sacred is localised in the landscape:

Our story is in the land ... it is written in those sacred places ... My Children will look after those places, that's the law.

Bill Neidjie, Kakadu elder

The relationship between a clan and its 'territory' involves certain rights, such as the right to use the land and its products. With these rights comes a duty to tend the land through the performance of ceremonies.

Individuals within the clan also have special relationships with places in their territory. Where a person's mother first became pregnant may mean an ongoing responsibility, in terms of right and duties, towards that place.

In a nutshell, the land and identity are inseparable.

Sacred sites

The creation stories, which describe the marks the spiritual ancestors left on the land, are integral to Aboriginal spirituality. Particular places hold special meaning. These are the sacred sites.

Knowledge of a clan's law and the dreamtime is accumulated through life. Ceremonies, such as initiation ceremonies, are avenues for passing on this knowledge.

Kinship

The system of kinship puts everybody in a specific kinship relationship, each of which has roles and responsibilities attached to it. It can influence marriage decisions and governs much of everyday behaviour. By adulthood people know exactly how to behave, and in what manner, to all other people around them.

Kinship is therefore about meeting the obligations of one's clan, and forms part of Aboriginal Law.

Source:

<http://www.cultureandrecreation.gov.au/articles/aboriginalheritage/>

European Settlement

Europeans began to visit Australia in the 16th century: Portuguese navigators were followed by Dutch explorers and the enterprising English pirate William Dampier. Captain James Cook sailed the entire length of the eastern coast in 1770, stopping at Botany Bay on the way. After rounding Cape York, he claimed the continent for the British and named it New South Wales.

In 1779, Joseph Banks (a naturalist on Cook's voyage) suggested that Britain could solve overcrowding problems in its prisons by transporting convicts to New South Wales. In 1787, the First Fleet set sail for Botany Bay under the command of Captain Arthur Philip, who was to become the colony's first governor. The fleet comprised 11 ships, 750 male and female convicts, four companies of marines and supplies for two years. Philip arrived in Botany Bay on 26 January 1788, but soon moved north to Sydney Cove, where there was better land and water. For the new arrivals, New South Wales was a harsh and horrible place, and the threat of starvation hung over the colony for at least 16 years.

Australia never experienced the systematic push westward that characterised the European settlement of America. Early exploration and expansion took place for one of three reasons: to find suitable places of secondary punishment, like the barbaric penal settlements at Port Arthur in Van Diemen's Land (now Tasmania) and on Norfolk Island; to occupy land before anyone else arrived; or in later years, because of the quest for gold.

Free settlers began to be attracted to Australia over the next decades, but it was the discovery of gold in the 1850s that changed the face of the colony. The huge influx of migrants and several large finds boosted the economy and irrevocably changed the colonial social structures. Aborigines were ruthlessly pushed off their tribal lands as new settlers took up land for farming or mining. The Industrial Revolution in England required plenty of raw materials, and Australia's agricultural and mineral resources expanded to meet the demand.

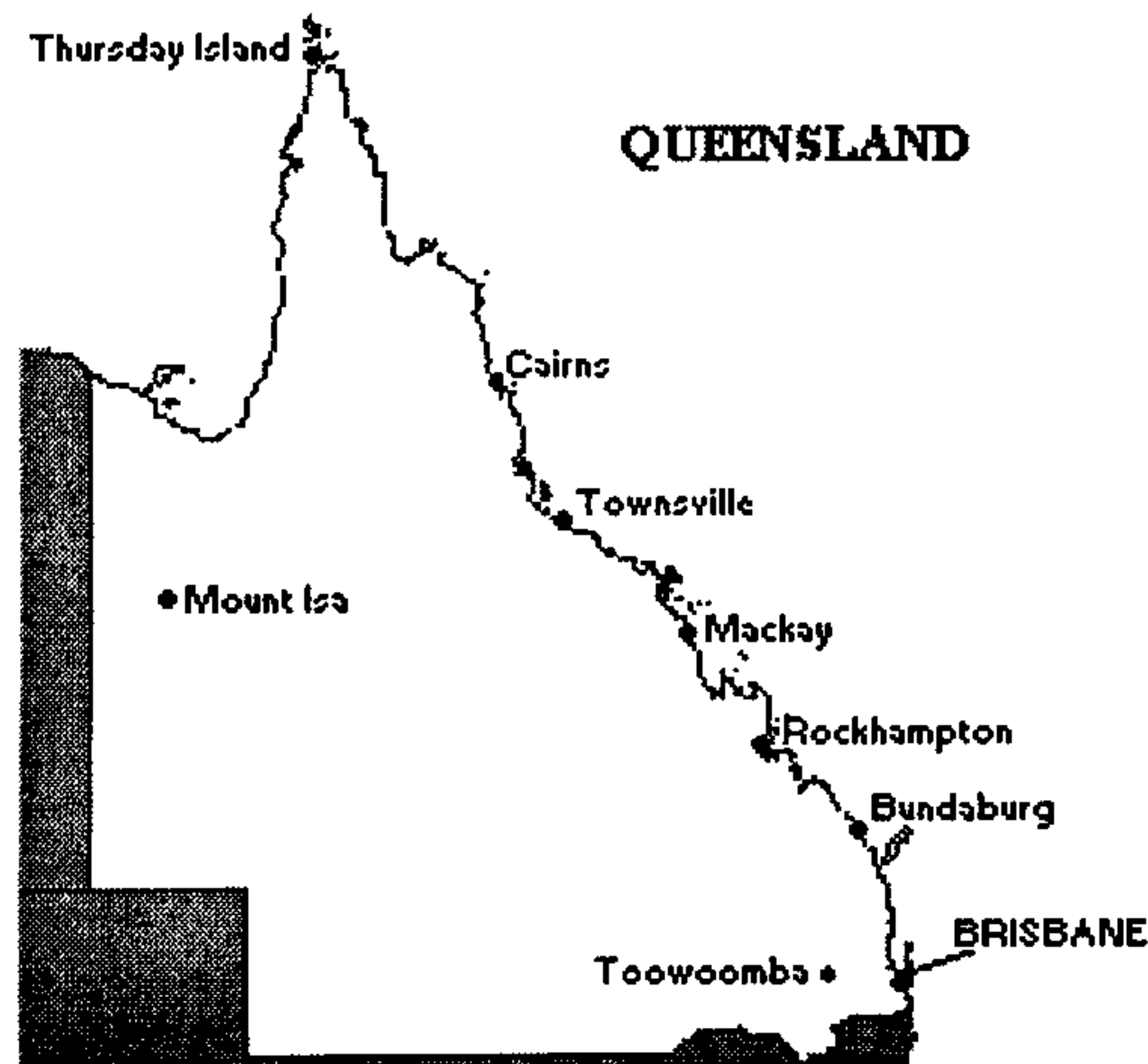
Australia became a nation when federation of the separate colonies took place on 1 January 1901 although many of the legal and cultural ties with England remained.

Queensland

After the settlement of Australia in 1788 by Captain Arthur Phillip and the "First Fleet", it wasn't until 1797 that Matthew Flinders made an exploration of Moreton Bay and a landing at what today is Woody Point at Redcliffe.

Later in 1823, John Oxley set out in the "Mermaid" to explore Port Curtis (Gladstone) and Moreton Bay. After meeting up with two shipwrecked timbergetters, Pamphlet and Finnegan, he proceeded some 100km up what he later name the Brisbane River in honour of the then Governor, Sir Thomas Brisbane.

Brisbane was established when Sydney and the colony of New South Wales needed a better place to store its more recalcitrant convicts. The tropical country further north seemed a good place to put them and in 1824 a penal settlement was established at Redcliffe Point on Moreton Bay. This location was soon abandoned in favour of the riverside site to the south where Brisbane's business district now stands. The penal settlement was abandoned in 1839 and the area was thrown open to free settlers in 1842. As Queensland's huge agricultural and mineral resources were developed, Brisbane grew into a prosperous city, and in 1859 the state of Queensland separated from the colony of NSW. Brisbane was declared its capital.



Sources:

www.lonelyplanet.com/destinations/australasia/australia/history.htm
members.ozemail.com.au/~gmcbryde/explorer/qldhist.html
www.about-australia.com/qldmap.htm

The Glasshouse Mountains and the Dreamtime Legend

The Glasshouse Mountains were named by Captain James Cook, who thought they resembled the glass foundries near his Yorkshire home, but more importantly they stand as a timeless reminder of Kabi Aborigines, for whom they had enormous Dreamtime significance. The Kabi Aborigines were quickly displaced by European settlement, but some of the names they gave the mountains are perpetuated in Beerwah, Tibrogargan, Ngungun and Coonowrin.



In the time of the tribe's Dreaming, before the mountains were made, Tibrogargan was a large man, the father of a family. Beerwah was his wife. One day they took their children with them to look for food. Carrying their spears and throwing-sticks, Tibrogargan and his eldest son, Coonowrin, walked along the slope of a valley while they searched for wallabies and fat lizards. Beerwah stayed near the creek, showing the younger children how to find grubs and roots that were good to eat.

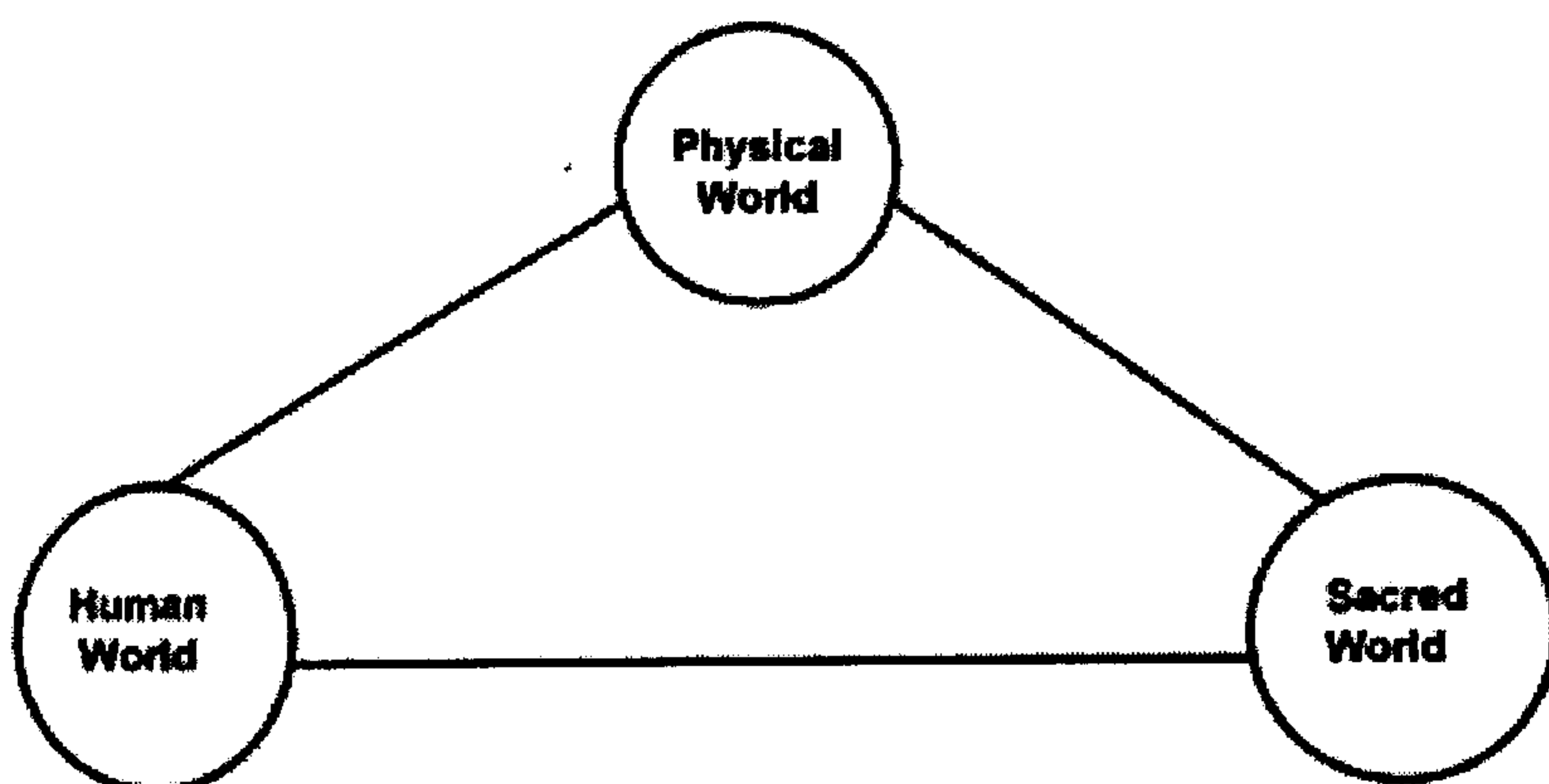
Tibrogargan and Beerwah had many children – Coonowrin, Beerburrum, the Tunbubudla twins, Coochin, Ngungun, Tibberoowuccum, Miketeebumulgrai and Elimbah. There were also Round who was fat and small and Wild Horse who was always straying away to paddle in the sea.

On that fateful day, Tibrogargan was gazing out to sea when he noticed a great rising of the waters. Hurrying off to gather his younger children in order to flee to the safety of the mountains which lay to the west, he called out to Coonoowrin to help his mother, who was again with child. Looking back to see how Coonoowrin was assisting Beerwah, Tibrogargan was greatly angered to see him running off alone. He pursued Coonoowrin and, raising his club, struck the latter such a mighty blow that it dislocated Coonoowrin's neck and he never been able to straighten it since.

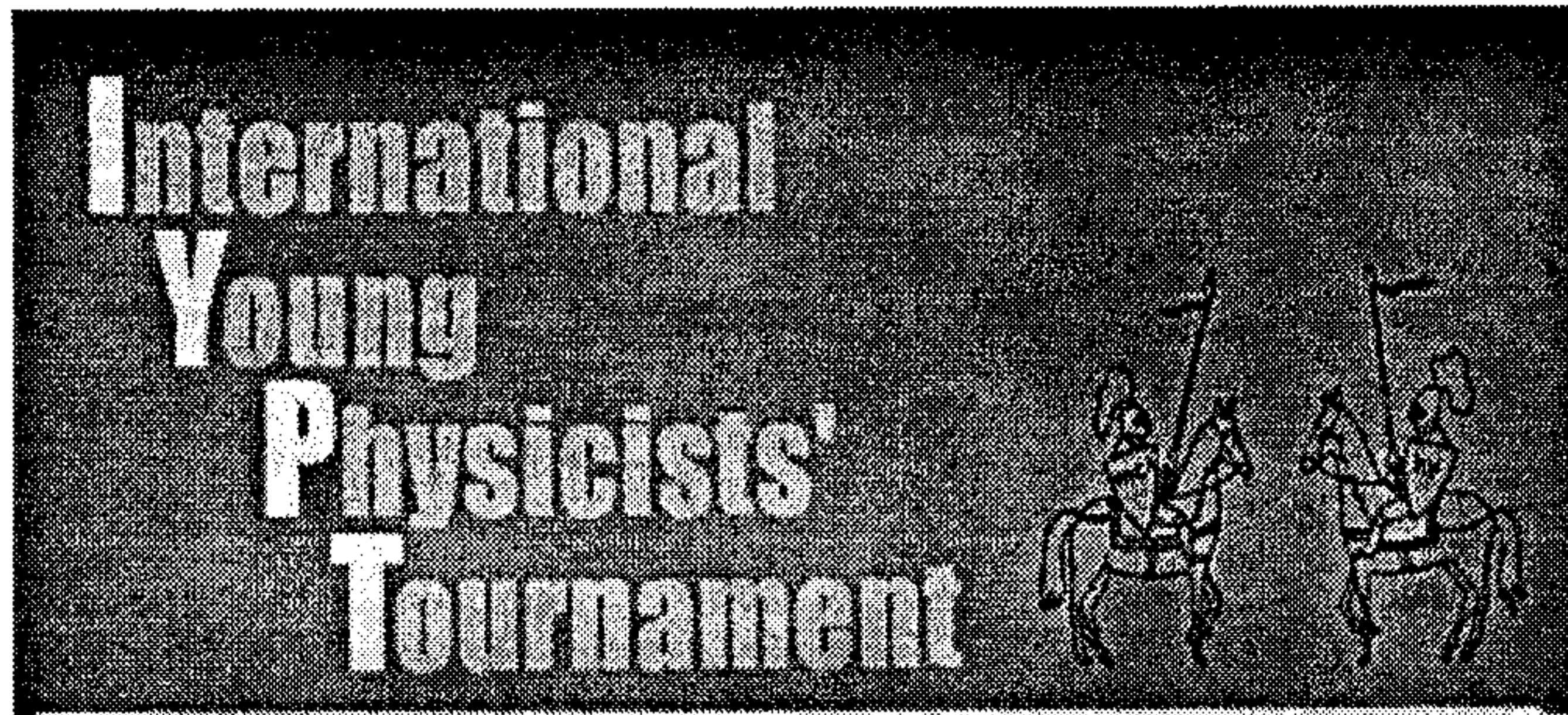
When the floods subsided and the family returned to the plains, the other children teased Coonoowrin about his crooked neck. Feeling ashamed, Coonoowrin went to Tibrogargan and asked for forgiveness, but filled with shame at his son's cowardice, Tibrogargan could do nothing but weep copious tears, which, trickling along the ground, formed a stream which flowed into the sea. Then Coonoowrin went to his brothers and sisters, but they also wept at the shame of their brother's cowardice.

The lamentations of Coonoowrin's parents and his brothers and sisters at his disgrace explain the presence, to this day, of the numerous small streams of the area. Tibrogargan then called Coonoowrin, asking him why he had deserted Beerwah; at which Coonoowrin replied that as Beerwah was the biggest of them all she should be able to take care of herself. He did not know that Beerwah was again pregnant, which was the reason for her great size. Then Tibrogargan turned his back on Coonoowrin and vowed that he would never look at him again.

Even today, Tibrogargan gazes far out to sea and never looks around at Coonoowrin, who hangs his head and cries, his tears running off to the sea. His mother Beerwah is still heavy with child - it takes a long, long time to give birth to a mountain.

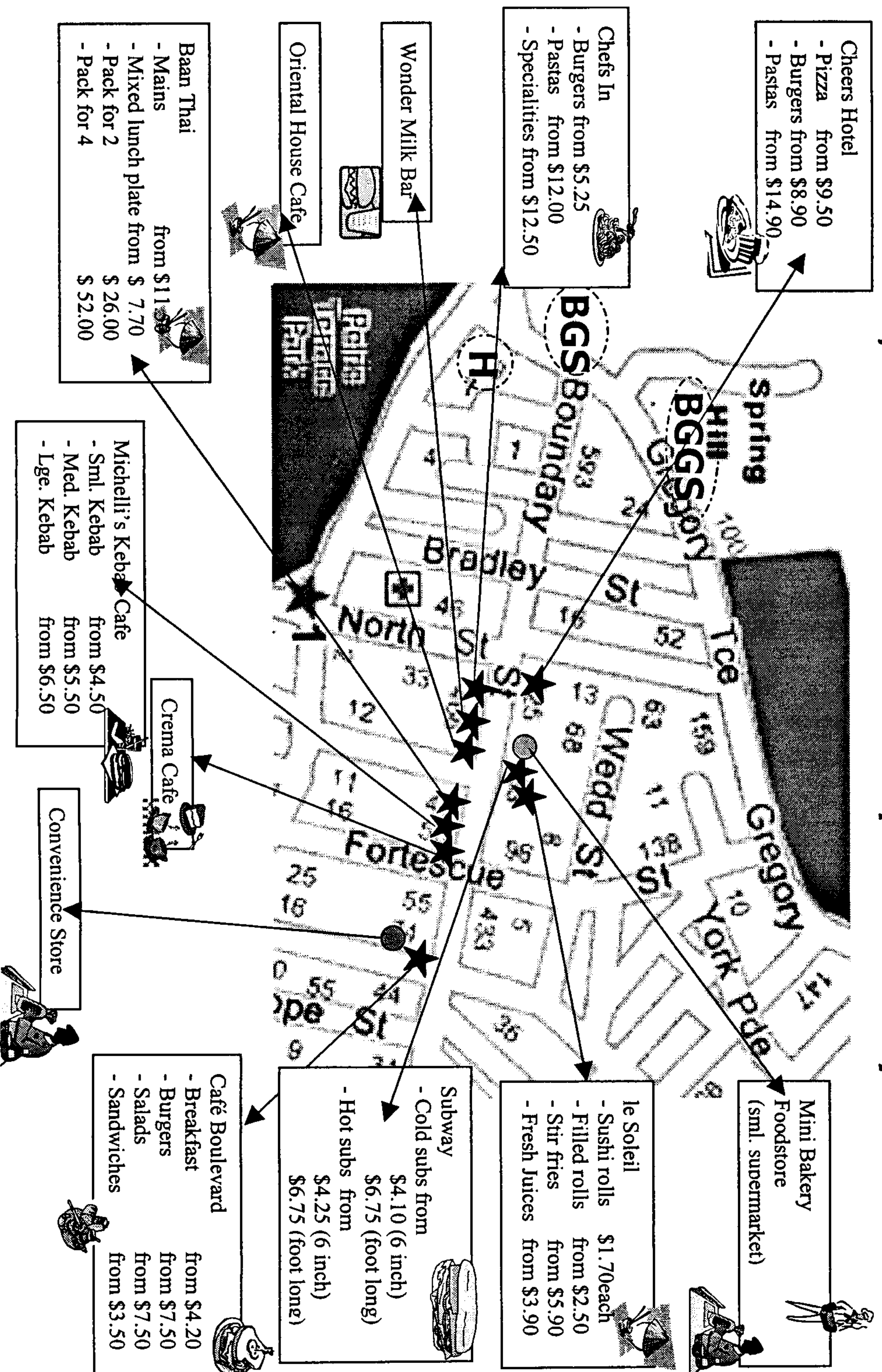


Local Dining Options



June 23rd to July 1st
2004

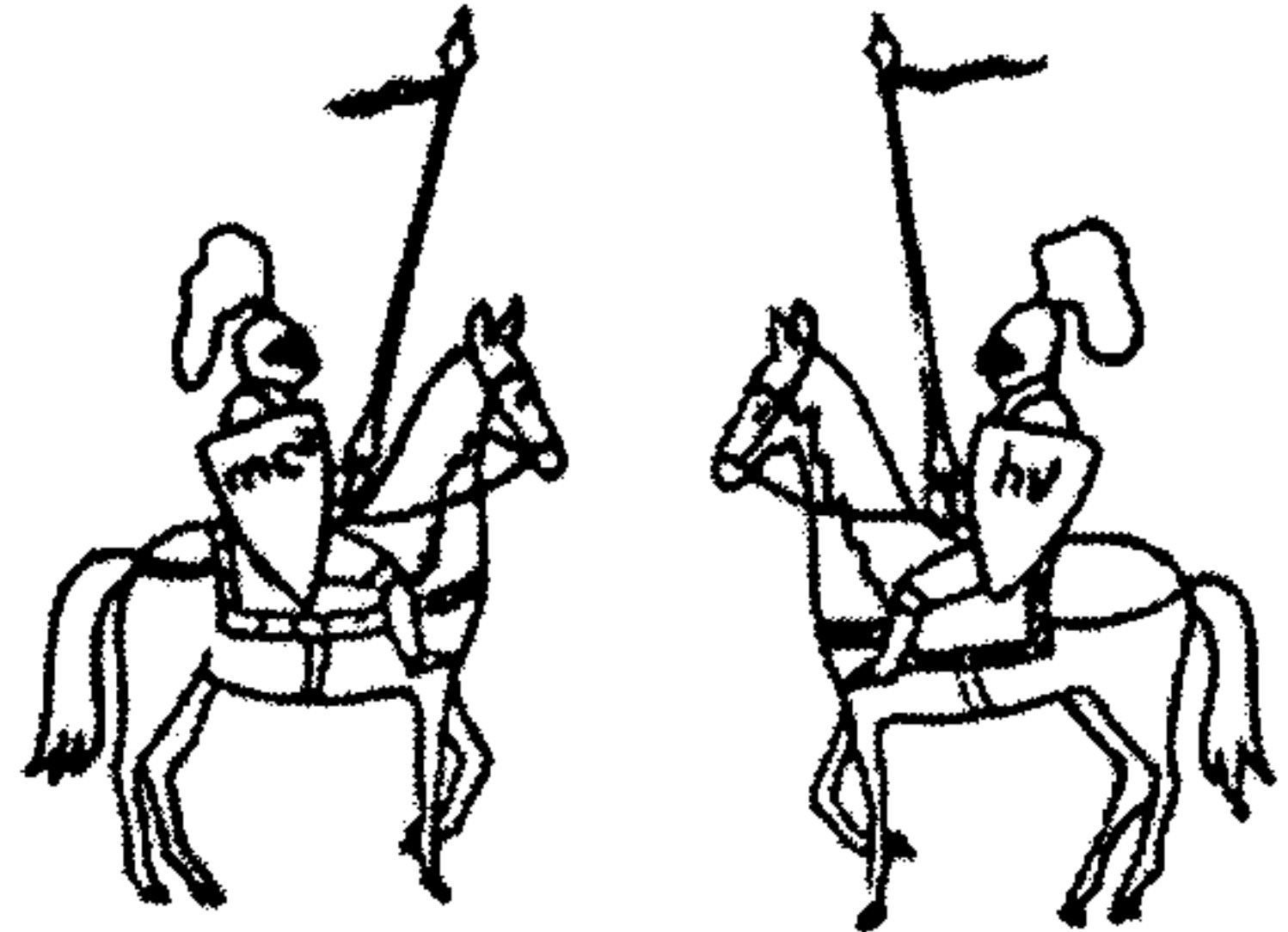
Cafes, Restaurants and Food Shops on Boundary Street.



Dining Options

We are sorry that we are unable to cater for the early arrivals.

The following guide may be useful



There are a variety of dining options available to you, many of them nearby.

1. The Boundary Street Precinct

Chefs In (BYO)

The Chefs In on Boundary is a small restaurant serving good food. It is a BYO restaurant. This means you have to purchase wine or other alcohol of your choice elsewhere and bring it with you. The restaurant will open the bottles, put white wine on ice and provide glasses but will charge a corkage fee to do so (about \$2.50 per person).

The IOC group will dine here on one of the days at the end of the competition

Sample Dishes:

Fettuccini Bolognaise	\$12.00
Grilled Vegetables Fetta Gourmet Burger	\$ 7.50
Risotto	\$16.00
Chicken Caesar Salad	\$12.50

Wonder Milk Bar

A very basic takeaway! You can get sandwiches made to order, pies, bacon rolls, etc

Modest cost

Oriental House Café

Basic Chinese takeaway food

Baan Thai

A Thai restaurant, **BYO**, open for lunch and dinner. Also sells food to takeaway. Modern Australian food has many Thai influences and this restaurant shows typical Thai dishes.

Sample Dishes:

Mussaman Nua (Sweet Beef Curry)	\$12.50
Goong Rad Prik (Prawns with Chilli)	\$13.50
Moo Naam Tok (Thai grilled pork salad)	\$12.00
Coconut Rice	\$ 2.80

Michelli's Kebab Café

Cheap and tasty kebabs from \$4.50

Crema Café

Coffee, cakes and small savouries in modern setting.

Convenience Store

At the end of the precinct is a 24hour convenience store selling, food, toiletries, odds and ends

Café Boulevard

Provides an excellent choice for breakfast or lunchtime. The food is simple but varied and is always well done. Sit indoors or outdoors for a meal or just a coffee. Best long black coffee in the area.

Sample Dishes:

Sausages, Bacon and Eggs	\$8.90
Cheese Omelette	\$6.10
Club Sandwich with chips	\$8.50
Chicken Fillet Burger	\$9.00
Sandwiches from	\$2.50

Le Soleil

Is a cheap place to get a variety of Asian food, including Ramens (noodle soups), Sushi, Teriyaki and curries.

Sample Dishes:

Shaoyi Ramen (Pork noodle soup)	\$6.90
Braised beef with rice	\$5.90
Sweet Chilli Tuna Sushi Roll	\$1.70 ea

Subway

This chain specialises in hot and cold sandwich rolls (Subs). You can buy a six-inch long freshly baked roll with lots of salad and your choice of filling for \$3.35 to \$5.85. Enough to fill most people but the really hungry can try a footlong sub from \$5.85 to \$8.35.

Buy a Footlong Sub and tear it in half for two cheaper six-inch subs!

We will be using Subway to provide lunchtime sandwiches on Thursday.

Mini Bakery and Food store

Fresh bread and a small range of foodstuffs.

Cheers Hotel

Cheers Taverns are a range of hotels in Australia providing food and drink. A menu is supplied in Team Leader and Juror packs.

The IOC will visit the Microbrewery and have lunch here during their meetings at the end of the tournament.

2. The City

Another option is to walk down to the City Centre.

This is a short ten-minute walk and there are a wide variety of eating options, including McDonalds, Hungry Jack's, Kentucky Fried Chicken, Coffee Club, quality restaurants and numerous Food Courts.

The Food Courts provide you with huge variety of food styles around central seating areas at a reasonably low cost.

3. The Albert Park Hotel

The Albert Park Hotel has a number of catering options available to you during your stay with us. We pride ourselves on our two-time award winning Restaurant, and would be delighted if you enjoyed one of the many culinary delights on offer.

Both A La Carte dining and Room Service dining is available for Lunch and Dinner, until 09:30pm every night. For bookings and enquiries:

Restaurant – Dial 121 Room Service – Dial 123

A buffet breakfast is held daily in our On The Park Restaurant, located on Level 1 of the Hotel. The opening hours are as follows:

Weekdays	6:30am – 09:30am
Weekends	7:00am – 10:00am

If you would like to arrange room service breakfast, please fill out the menu located on the back of your door, and leave on your doorknob on the outside. This must be placed out on your doorknob the night before.

Note that a room service fee of \$5.00 will apply.

Please note if you take advantage of room service breakfast the cost is payable by you.

IYPT will not take responsibility for room service charges.

If you have any queries, you are most welcome to contact our 24-hour Reception on Extension 9. We hope that you enjoy your stay.

Sample LUNCH MENU

Breads

Vine ripened tomato and roast garlic bruschetta with Spanish olive oil \$ 7.00

Entrées

Duck Liver and Bacon Pate \$ 8.90

With Roasted pizza bread, cornichons and rosemary

Natural Tasmanian Oysters	1/2 dozen	Dozen
With sweet cucumber & lime drizzle	\$12.00	\$22.00

Whole Crystal Bay Prawns \$16.50

Beside Vietnamese herb & crab salad with caramelized lime & ginger drizzle

Mains

Pan-fried Tasmanian Salmon Fillet \$27.50

With potato and chive rosti, grilled asparagus, scented scallops and red Vodka butter

Grain Fed Eye Fillet of Beef \$26.50

With Kipfler wedges, slow roasted chardonnay onions, grilled Nashi pear and spiced jus

Sample Dinner Menu**Breads & Light Snacks**

Vine ripened tomato and roast garlic bruschetta with Spanish olive oil	\$ 7.00
Olive tapenade and rocket on crisp baked flat bread	\$ 6.20
Warmed croissants, baked quickly with fresh garlic butter	\$ 5.50

Oysters

Our oysters are delivered fresh daily from all over Australia and New Zealand, ensuring variety and freshness

	1/2 Dozen	Dozen
Natural With sea salt and fresh lemon	\$11.50	\$21.00
Kilpatrick With grilled bacon, smoky sauce	\$13.00	\$24.00
Thai With sweet cucumber/lime salsa	\$12.00	\$22.00

Entrées

Seared Prawns in Thai Basil Pesto	\$16.00
With lime coriander rice and cress	
Cracked Pepper Tartlet	\$13.50
Of hot buttered leek, grilled asparagus & creamy fetta with Balsamic red onion jam	

Mains

New Season Lamb Rump	\$25.50
Roasted with chunky ratatouille, crisp green beans & cashew pesto	
Coriander & Lime Grilled Chicken	\$24.50
Atop Saigon vegetable medley with coconut broth & steamed jasmine rice.	
Seared Gungel Farm Pork Fillet	\$24.50
With Berlotti bean mash, sage roasted pumpkin and whole mustard sauce	

Desserts \$9.50

Tarte Au Citron	
Albert Park's Classic lemon curd tart, light and creamy, accompanied by Crème Anglaises.	
Frozen Grand Marnier Soufflé With fresh raspberries and double cream.	

Activities

Sunday 27 June 2.00 – 5.00pm

The following pages will give you an idea of the sorts of activities that are available to you on this day.

Monday 28 June 2.00 – 5.00pm

A sports afternoon has been organised. You can register to participate in one of the following activities.

Cycling: 34 students only. No beginners.

Rockclimbing: 20 students only
You must have shoes with non-marking soles.

Soccer: 1 field
40 students

Tennis: 6 courts
30 students

Volleyball: 2 courts
40 students
You must have shoes with non-marking soles.

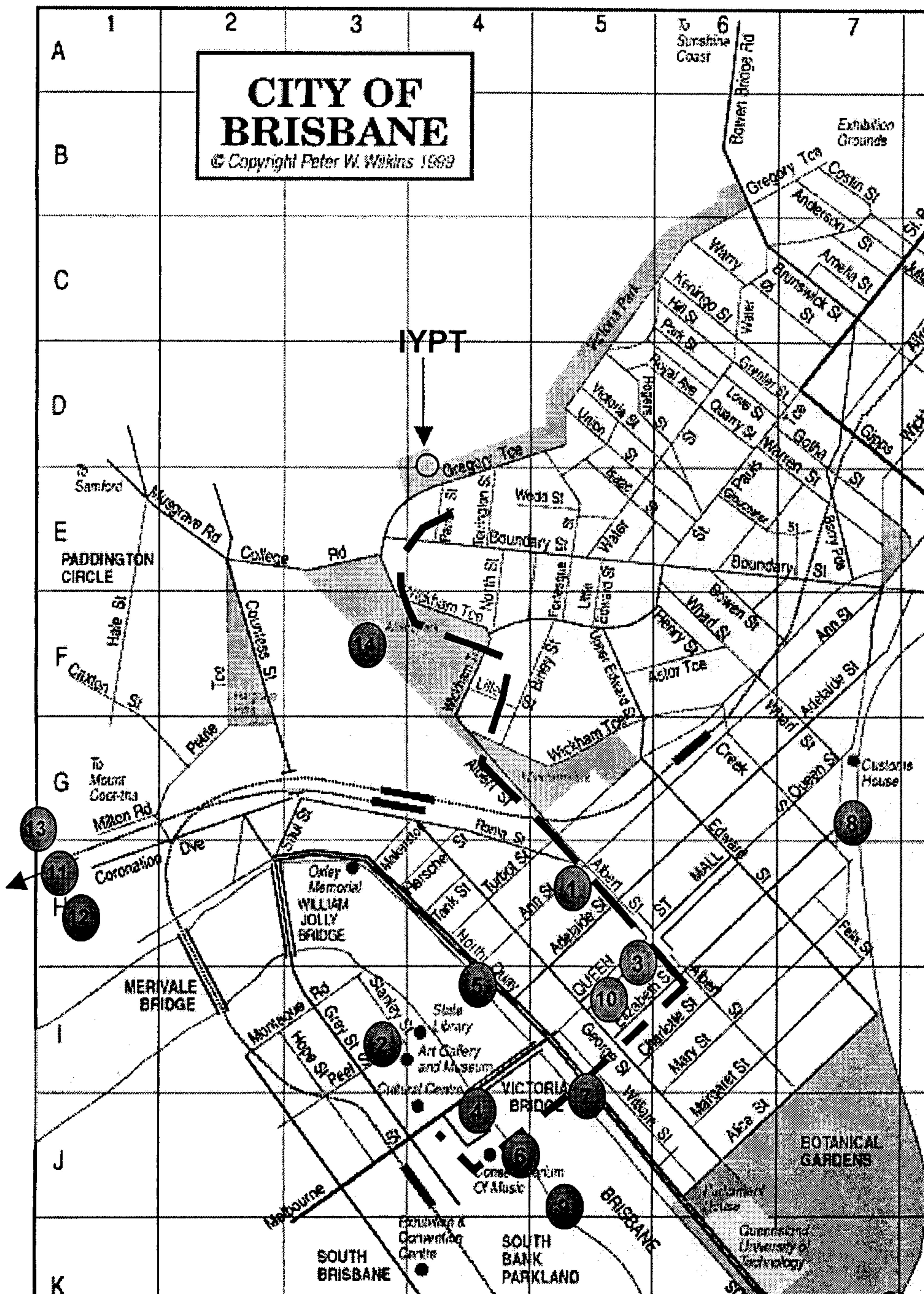
Tuesday 29 June

This excursion gives visitors to Australia a chance to experience some of the diversity of the Australian landscape. You will visit the Glasshouse Mountains, which are of historical and cultural significance; the quaint bohemian township of Montville; a beautiful rainforest; a glorious beach; and watch as the city changes from day to night.

CITY OF BRISBANE

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IYPT



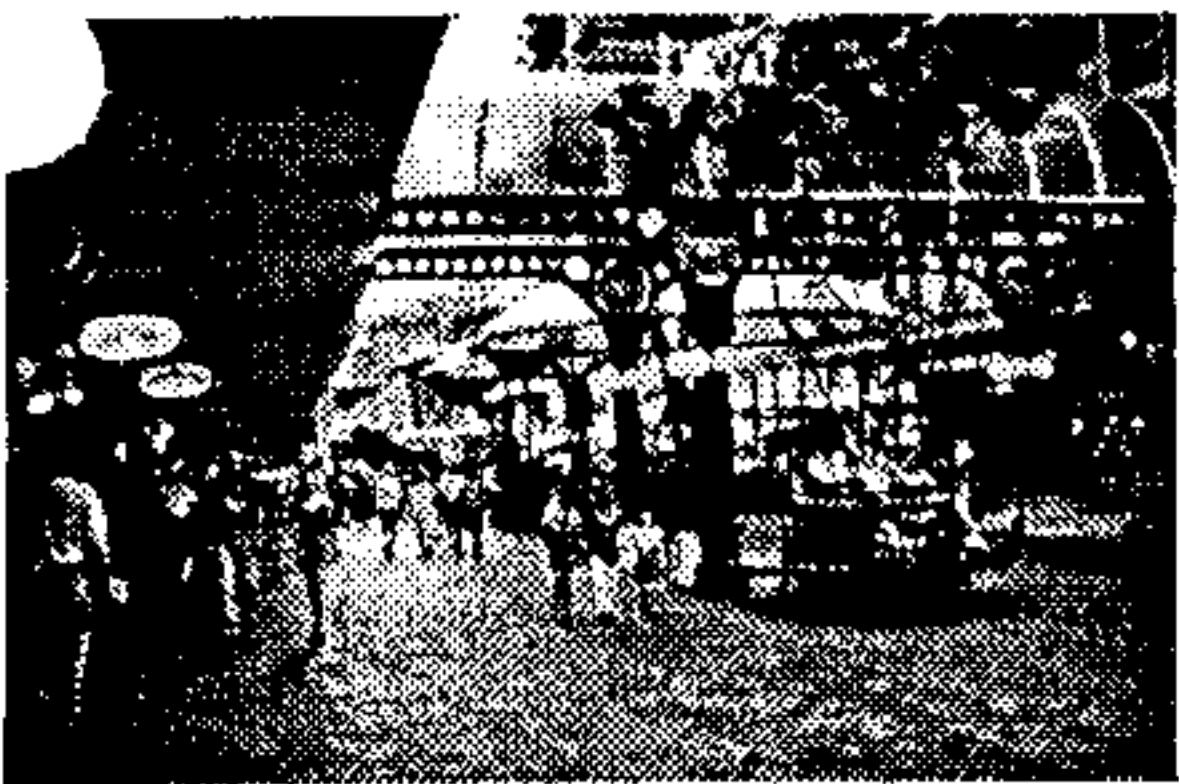
1

Museum of Brisbane	Description: The Museum of Brisbane celebrates the city's contemporary culture, heritage and people. The museum's displays combine social history, visual arts, craft and design. Museum of Brisbane's exhibitions feature local and international artists, writers and craftspeople.
	Location: Ground floor of Brisbane's iconic City Hall in King George Square.
	Opening Times: 10:00 am to 5:00 pm, seven days a week
	Cost: Entry is FREE!

2

Queensland Museum - South Bank 	Description: Expand your mind and broaden your horizons as you explore and discover the many marvels of the Queensland Museum ... a museum of natural history and cultural heritage, of science and human achievement. The Museum records and reflects the changing story of Queensland.
	Location: The Queensland Museum is situated within the Queensland Cultural Centre, in the heart of the South Bank precinct. The Queensland Museum is on the corner of Grey and Melbourne Streets—a short walk across Victoria Bridge from the city heart. It is a leisurely 30 minute walk from BGGS.
	Car parking is available underneath the Queensland Museum. The City Cat ferry also stops close by. Get off at the Convention Centre Stop (Stop 13) and then walk past the Queensland Performing Arts Centre to the Queensland Museum. It is approximately a five minute walk.
	Opening Times: Open 9:30 am to 5:00 pm, seven days a week
Cost: Entry is FREE!	

3

Queen Street Mall 	Description: 1000 shops in just two blocks. The Queen Street Mall – a half kilometre retail superhighway is the perfect place to start, and to stop, for that matter. There's a strong café culture, as well as great eateries, bars and major department stores. Arcades and side streets house secret retail gems, including elegant and rare outlets for jewellery, art, food and chocolate.
	Location: Queen Street in the heart of the city. The mall is a leisurely 15min stroll down Albert Street, through King George Square and up one more block to Queen Street.
	Opening Times: Monday-Thursday 9:00am –5:30pm; Friday (late-night shopping) 9:00am until 9:00pm; Saturday 9:00am – 4:00pm; Sunday 10:00am – 4:00pm.
	Cost: How much you want to spend is up to you!

4

City Sights Bus Tour

Description: Hop on, hop off bus tours, featuring 19 stops at places of interest. A fun and affordable way to see the best Brisbane has to offer at your own pace.

[www.transinfo.qld.gov.au/qt/PubTrans.nsf/ReferenceLookup/CitySights.pdf/\\$file/CitySights.pdf](http://www.transinfo.qld.gov.au/qt/PubTrans.nsf/ReferenceLookup/CitySights.pdf/$file/CitySights.pdf)

Location: See Appendix 1 for Map. Closest stops to IYPT are Stops 4 and 5.

Opening Times: Pickup for Stop 4 is 2.05 or 2.50 and Stop 5 is 2.08 or 2.53.

Cost: Adults \$20; Students with ID \$15

5

RiverWalk



Description: RiverWalk connects more than 20km of pathways along the Brisbane River, with new sections continually evolving. Along the way you'll see public art, riverside parks, various pockets of greenery and the opportunity to have loads of fun. RiverWalk connects to Brisbane's network of bikeways. At times you may find yourself sharing the path with cyclists and other times you'll need to use roads, parks or CityCats and Ferries to complete your journey. It's a great way to walk, cycle or rollerblade that provides access to wharves, jetties and other maritime features as part of the river experience. It's a journey that's well worth the effort.

Location: Along the Brisbane River

Opening Times: Only walk during daylight and with someone else.

Cost: The beautiful fresh air and lovely views are free!

6

South Bank



Description: South Bank is a great place for food, entertainment or relaxation. Take a dip in the beach, and get together your family and friends around the BBQ and picnic facilities. Or let someone else wait on you at one of the many cafés, kiosks or restaurants. South Bank is another exceptional place for entertainment and culture in Brisbane with the Queensland Art Gallery, Queensland Museum, Performing Arts Centre, State Library, Conservatorium of Music and the Brisbane Convention and Exhibition Centre all within a quick walk.

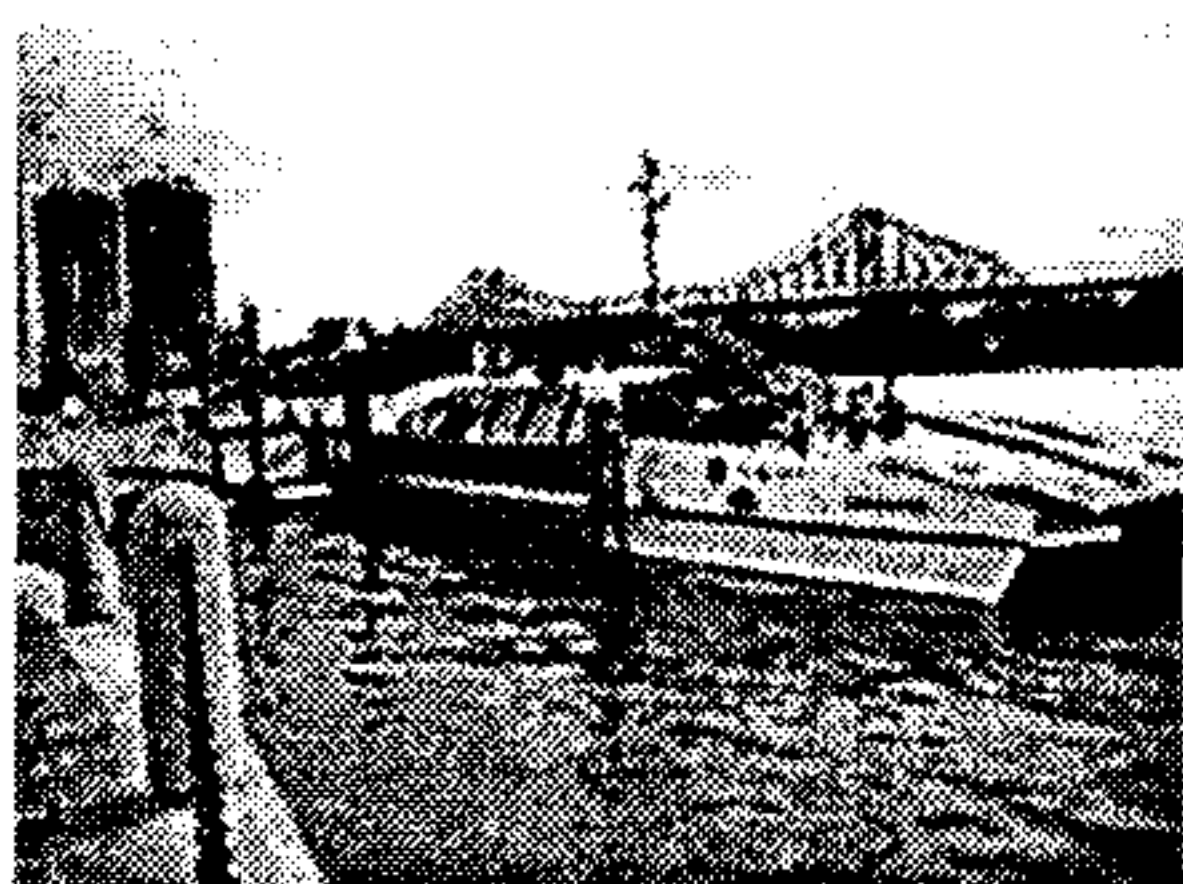
Location: Across river from CBD

Opening Times: Never closes

Cost: Free

7

CityCats



Description: To explore the river by boat, take a ride on the CityCat, a high-speed ferry that stops all along the river from St Lucia to Brett's Wharf at Hamilton. Jump on and off at a number of stops to see a range of sights, or stay on board and enjoy the full trip.

You can buy your CityCat and City Ferry tickets from bus and ferry operators.

Location: Nearest terminal to BGGs is near Victoria Bridge on corner of Queen and William Streets.

Opening Times: CityCats operate from 5.50am until 10.30pm every day. See Appendix 1 for CityCat Schedule.

Cost: See Appendix 1 for fares.

8

Eagle Street Pier Craft and Deli Market



Description: Over 100 stalls of handmade and imported art and craft - includes artwork, accessories, clothing (kids and adults), tarot reading, plants, woodwork, homewares, pottery, as well as gourmet deli lines.

Location: Riverside Centre & Eagle St Pier, Brisbane City
Map Reference:

Opening Times: Sunday 8am - 4pm

Cost: Entry is free

9

South Bank Art and Craft Markets



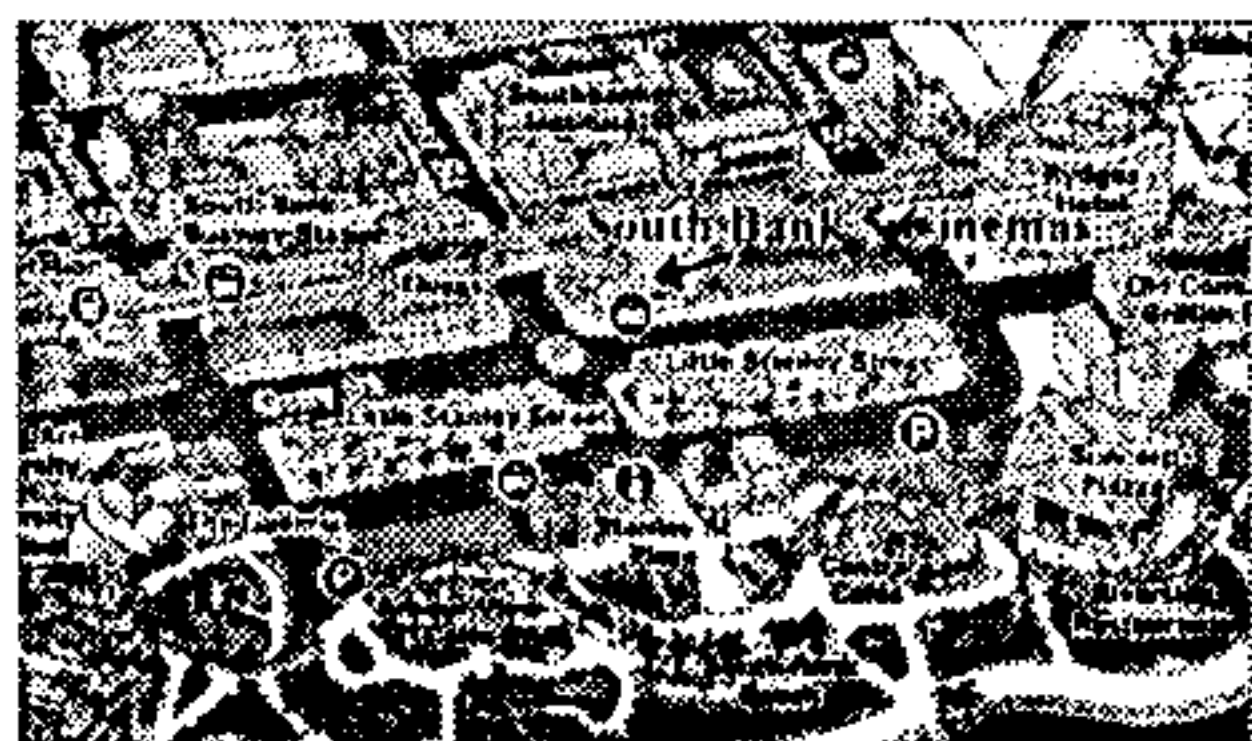
Description: Fairy lights, market stalls, ribbon twirlers and musicians energise Little Stanley Street at South Bank.

Location: Stanley Street Plaza & Little Stanley Street, South Bank Parklands

Opening Times: Sunday 9am - 5pm

Cost: Entry is free

Southbank Cinemas



Description: Indulge in one of a selection of the latest blockbuster movies.

For movie titles and session times for Southbank Cinemas try

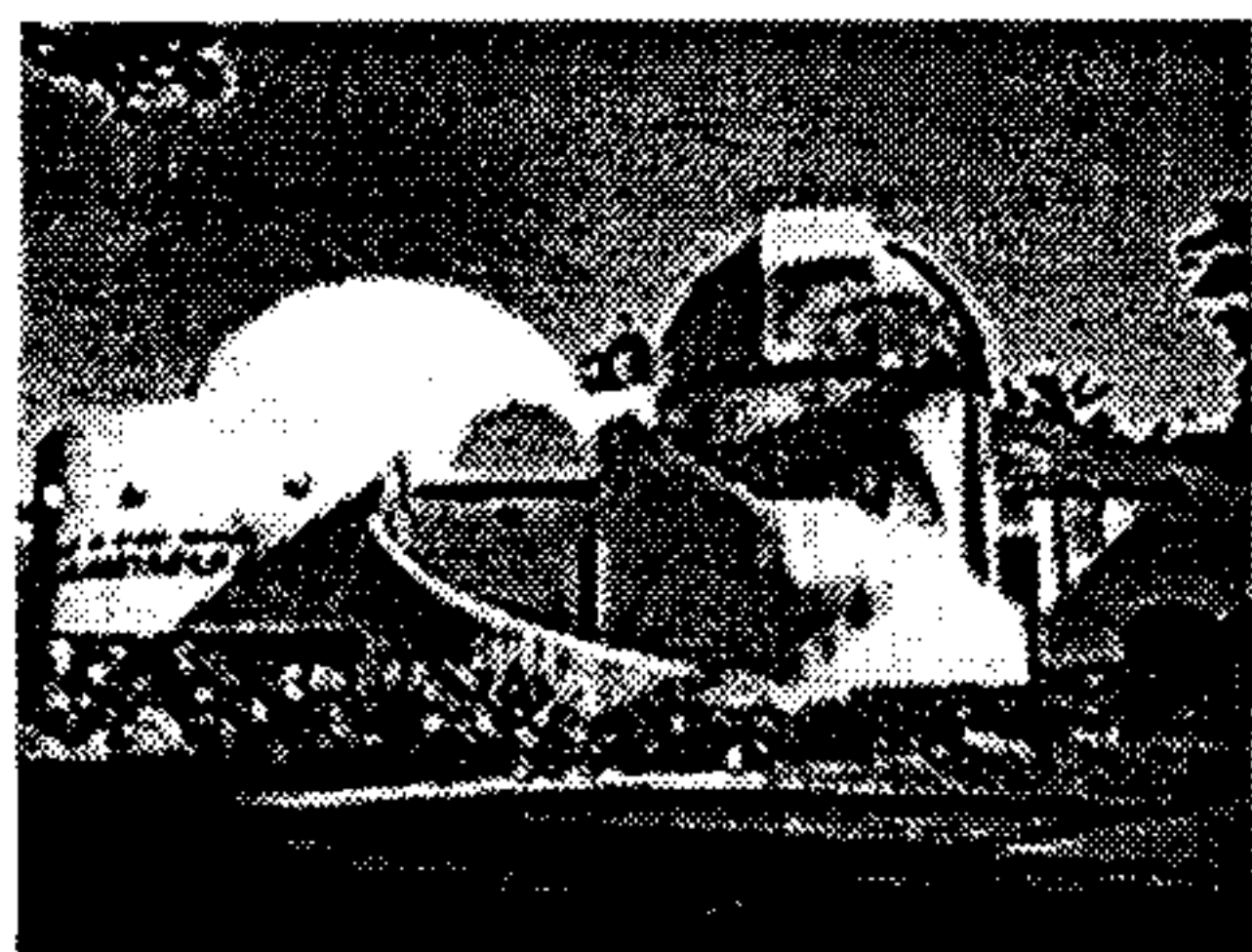
http://www.cineplex.com.au/now_screening_southbank.php

Location: You can walk there. Grey Street behind Southbank Parklands.

Opening Times: Go to [cineplex.com.au](http://www.cineplex.com.au) for Movies and Session Times.

Cost: Adults \$7.90 Students \$5.70

Planetarium



Description: In 1978, the Brisbane City Council opened Queensland's first planetarium. The Planetarium is named after Sir Thomas Brisbane, a Governor of New South Wales in the 1820's.

Sir Thomas Brisbane established Australia's first significant observatory and was responsible for the first extensive mapping of the southern sky. His observations led to a list of 7385 stars. You can view an original copy of the 'Brisbane Catalogue of Stars' and one of his telescopes at the Planetarium.

Cosmic Skydome: The Cosmic Skydome is a giant screen that displays digital feature shows. It uses the Zeiss Star Projector to recreate images of Brisbane's night sky.

Display Zone: The Display Zone features interesting artefacts and displays, including fragments of asteroids and spacecraft models. You will also see images from the Hubble Space Telescope.

Mini Theatre: Short feature shows on various astronomical topics and space missions are continuously screened in the Mini Theatre.

Location: The Sir Thomas Brisbane Planetarium is located in the Brisbane Botanic Gardens, Mt Coot-tha. It features the Cosmic Skydome, Display Zone, Mini Theatre, Observatory and Planetarium shop. You can catch a bus to the Planetarium. Catch bus 471 from Wickham Tce (F4 on map) Terminus A (Stop 158). Fare is \$2.40.

Opening Times: Adult show at 3.15pm

Cost: Adults \$11.50; Students with ID \$9.50

12

Lone Pine Koala Sanctuary

Description: The World's First and Largest Koala Sanctuary (Established 1927)

At Lone Pine Koala Sanctuary you can:

- Hug one of 130 cute koalas anytime of the day;
- Hand feed friendly kangaroos & emus;
- See Tasmanian devils, wombats, dingoes, reptiles and more variety of animals;
- Walk through 20 hectares (50 acres) of natural setting;
- Meet the fun-loving Aussies;
- Become an expert on Australian animals through Lone Pine's regular animal talks

Location: See Appendix 4 for Bus Schedule

Opening Times: Every day from 8:30 AM - 5:00 PM

Cost: Adults \$16; Students (14-17 years, with ID) \$14

13

Brisbane Botanical Gardens

Description: Founded in 1970, the Gardens occupy over 52 hectares and feature over 20,000 plants representing approximately 5000 species from around the world. Arid, tropical and temperate plants are arranged in thematic and geographical regions. Attractions include a Tropical Display Dome, a Japanese Garden, a Bonsai House and Fern House. The Australian Plant Communities section of the Gardens occupies over half the total area (27 hectares) and gives a tremendous opportunity to view Australian native plants represented in natural communities.

Location: Mt Coot-tha. You can catch a bus to the Gardens. Catch bus 471 from Wickham Tce (F4 on map) Terminus A (Stop 158). Fare is \$2.40.

Opening Times: Every day from 8:30 AM - 5:00 PM

Cost: Adults \$16; Students (14-17 years, with ID) \$14

14

Roma Street Parklands

Description: Sixteen glorious hectares in the centre of Brisbane, Australia, Roma Street Parkland is the world's largest urban subtropical garden. The Parkland features a variety of themed gardens and recreational areas, with a web of pathways and boardwalks traversing cascading waterways and rocky outcrops, and in situ artworks by 16 local artists. Take a closer look.

Location:

Opening Times: The parklands are always open but do not go there at night.

Cost: Free

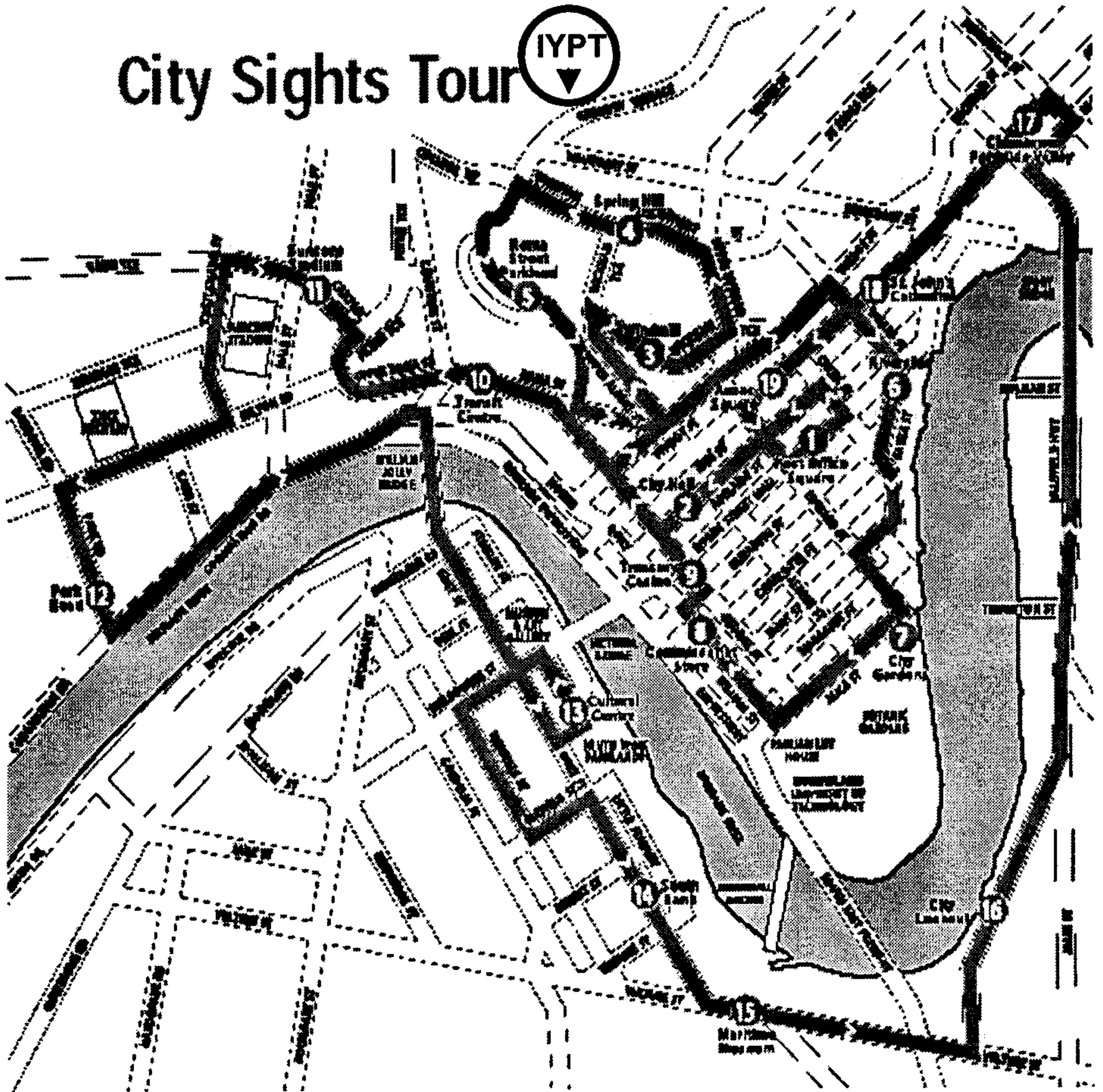
Appendix 1

Queen Street Mall Retail Locations

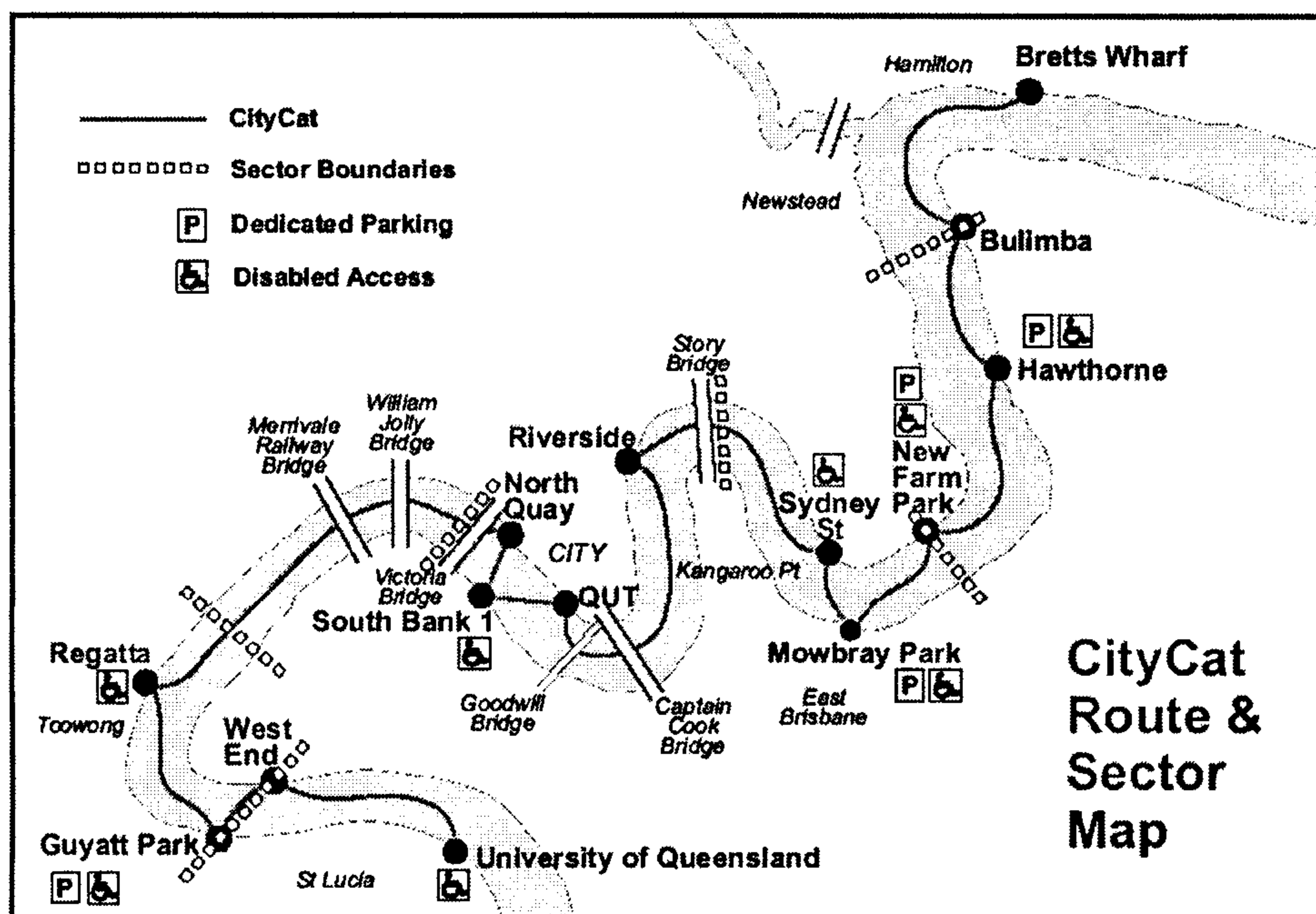
Grab a map of downtown Brisbane and start shopping!

Shopping Area	Description
141 Queen Street	A boutique arcade of speciality stores is positioned in the centre of the Queen Street Mall and offers a variety of retail services including beauty, pharmaceuticals, footwear, jewellery and banking.
Brisbane Arcade	Almost 80 years old, this beautiful arcade is home to Brisbane's most established designers, jewellers and fashion boutiques.
Broadway on the Mall	With its eclectic mix of one-off stores, there's something to satisfy every taste.
David Jones	Find a unique range of top local and international designer names in fashion and a great range of homewares and home office equipment.
Edward Street	Like-minded souls head towards this savvy street where high-end glamour, restaurants and eateries, bars and unique boutique style accommodation are the norm.
Elizabeth Arcade	With 32 individual retail operators, Elizabeth Arcade offers speciality stores ranging from cutting edge fashion to culinary delights.
Elizabeth Street	From elegant boutiques at Treasury Row to leading Australian hairdressers and the City's leading book stores.
Post Office Square	Just across from the Queen Street Mall discover a wide selection of take-away food outlets, cafes and restaurants.
Queen Adelaide Building	With 25 specialty fashion stores, Queen Adelaide Building caters for the style conscious shopper.
Tattersall's Arcade	The Tattersall's Arcade features unique fashion, art and accessory stores and the famous Tattersall's Club.
The Myer Centre	With 200 speciality stores over six levels and the largest department store in Queensland, Myer Brisbane City, you will be sure to find exactly what you want.
Wintergarden	Home to leading international and Australian fashion labels, exclusive accessory and jewellery boutiques, unique gift and homewares stores, essential services and a wide range of food outlets, restaurants, pubs and cafes.
Visitor Information Centre	The Visitor Information Centre is located on the corner of Albert and Queen Streets and is open seven days. The centre can assist with the location of retail or service outlets in the downtown area in addition to accommodation bookings, car hire and day tours.

City Sights Tour



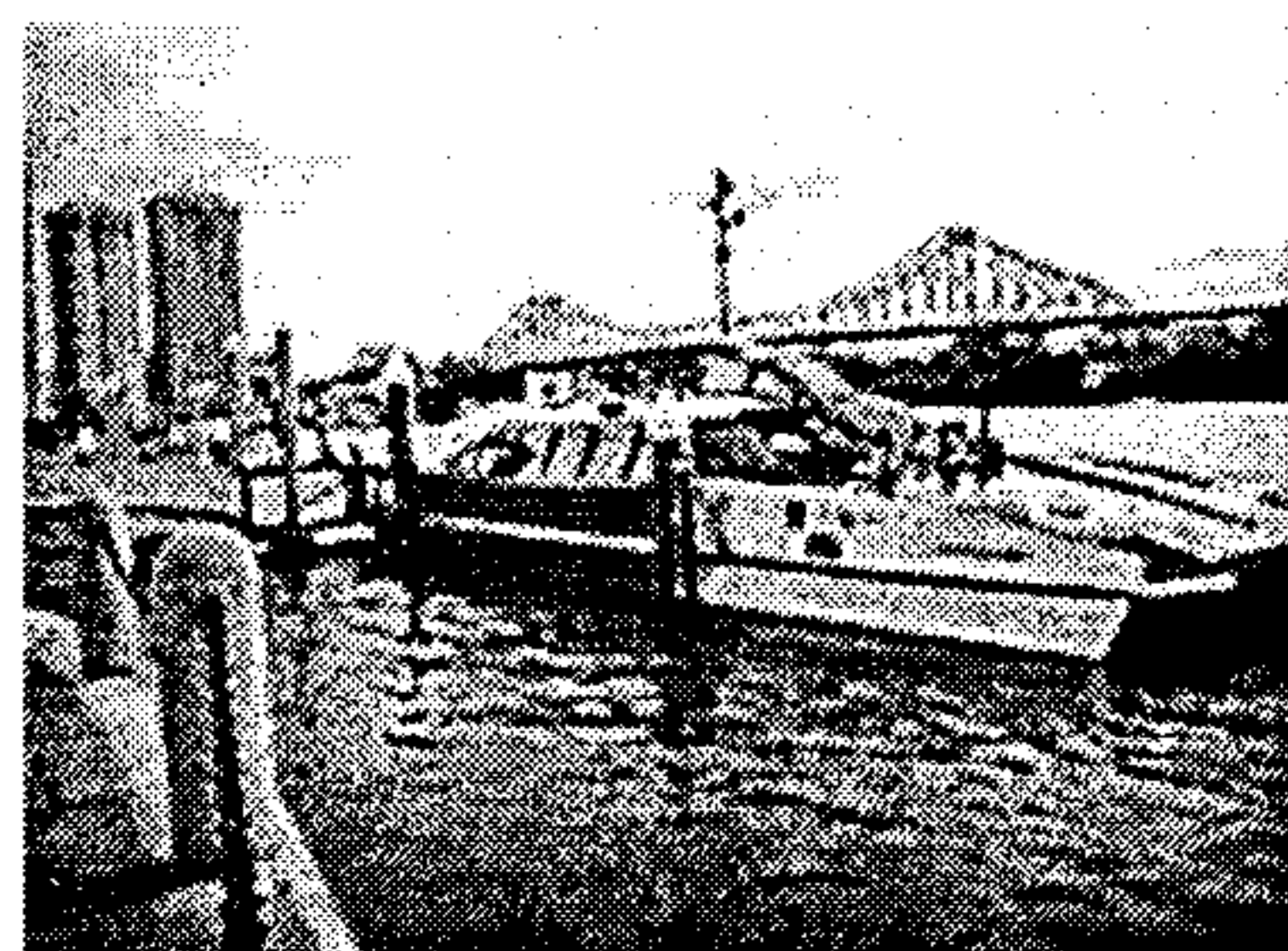
Appendix 3 CityCats



Where to buy tickets

You can buy your CityCat and City Ferry tickets from:

- bus and ferry operators
- most newsagencies and some local convenience stores



CityCat and City Ferry fares

Identify your point of origin and your destination. Use the map to determine the number of sector boundaries crossed and purchase the appropriate ticket as indicated below.

You can transfer between any two bus and ferry services within two hours of boarding the first service. Ask the first bus driver or ferry operator for a transfer ticket to your ultimate destination. Ten trip saver tickets will transfer automatically.

Number of zones/sectors crossed	Single ticket	Transfer ticket
Single ticket 1 zone/sector	\$1.80	\$0.90
Single ticket 2 zones/sectors	\$2.60	\$1.30
Single ticket 3 zones/sectors	\$3.40	\$1.70
Single ticket all zones/sectors	\$3.80	\$1.90

* Concession fare - You must show the relevant concession card to the bus or ferry operator before buying the ticket or putting the pre-paid ticket into the ticket console. You must make sure that you have your concession card with you to obtain concession travel.

Faulty tickets

You are responsible for keeping your ticket in good condition. You will not get a refund for your ticket if it has been damaged through neglect.

If you have an undamaged ticket that you believe is faulty, a bus driver or ferry operator will need to certify it by attaching a faulty ticket sticker to it.

CityCat and City Ferries terminal locations

CityCat	City Ferry	CityCat & City Ferry
University of Queensland	Sir William Macgregor Dr, St Lucia	CityCat
West End	Hoogley St, West End	CityCat
Guyatt Park	Macquarie St, St Lucia	CityCat
Regatta	Coronation Dr, Toowong	CityCat
North Quay 1& 2	Queens Wharf Rd, North Quay	CityCat & City Ferry
Southbank 1& 2	Southbank Parklands	CityCat
QUT Gardens Point	Alice St, City	CityCat & City Ferry
Southbank three	Southbank Parklands	City Ferry
River Plaza Hotel	Dock St, South Brisbane	City Ferry
Thornton Street	Thornton St, Kangaroo Point	City Ferry
Eagle Street	Eagle St, City	City Ferry
Holman Street	Holman St, Kangaroo Point	City Ferry
Riverside	Riverside Centre, Eagle St, City	CityCat
Woolloongabba	Ferry St, Kangaroo Point	City Ferry
Sydney Street	Sydney St, New Farm	CityCat & City Ferry
Mowbray Park	Park Ave, East Brisbane	CityCat & City Ferry
New Farm Park	Brunswick St, New Farm	CityCat
Hawthorne	Gordon St, Hawthorne	CityCat
Bulimba	Oxford St, Bulimba	CityCat & City Ferry
Teneriffe	Commercial Rd, Teneriffe	City Ferry
Brett's Wharf	Kingsford Smith Dr, Hamilton	CityCat & City Ferry

Appendix 4

Travel to Lone Pine is Easy

By Bus

By Bus:

Brisbane council bus number 430 runs hourly to Lone Pine from the city. It leaves from Koala Platform underneath the Myer Centre in the Queen Street Mall in the city. Adult fares are \$3.40 and children \$1.70 (subject to change) .

Bus Timetable

Brisbane City Council Bus 430 Leaves from Koala 'N' platform Myer Centre	
Mon-Fri	Sat, Sun & P/H
8:45	8:30
9:45	9:30
10:45	10:30
11:45	11:30
12:45	12:30
13:45	13:30
14:45	14:30
15:45	15:30
	16:30

Catch the 4.34pm from Lone Pine back to the City and walk up to the school along the road. Do NOT walk through parklands after dark.