

January - March 2024 Magazine

Welcome to the January – March 2024 edition of our Magazine. This issue runs from 1st January to 31st March 2024.

Reports include:

- January Monthly Meeting—Thursday 4th January—Dr Kate Bellamy: Fun Facts about the brain that you didn't know you needed to know.
- January SNATTs Meeting— Friday 12th January 2024—Mike Genge: Navigation at Sea before GPS.
- New Year Lunch on 24th January 2024
- February Monthly Meeting - Thursday 1st February - Andrew Lound:
- The Children of the Titanic.
- February SNATTs meeting - Friday 9th February - Julie Howard talking about New Zealand.
- History Group - Thursday 15th February - History of Music and Musical Instruments by Robert Tringham.
- March Monthly Meeting— Thursday 7th March 2024 - Roger Browne talking about The Golden Age of Radio.
- Group Events Photographs

Last update: 24th March 2024



River Avon flooding the Bancroft Gardens in front of the RSC Theatre.
The worst flooding since 2007 Wednesday 3rd January 2024

Monthly Meeting—Thursday 4th January 2024

Fun Facts about the brain that you didn't know you needed to know.

Dr Kate Bellamy

Dr Kate Bellamy, BA (Hons), MSC, PhD, is a cognitive neuroscientist. Her talk was about how the brain works with some comparison to the relatively new concept of AI



in computers. (Artificial Intelligence. This was proposed over 50 years ago by Alan Turing, a leading code breaker at Bletchley Park during WW2 and who was instrumental in the development of a very early computer there in the early 1940s.) In the early 1950s he proposed the Turing Test to test whether a computer can think. The form of the test has been much debated since then.

Dr Bellamy gave a very clear and entertaining talk about the brain and how it works. The advent of AI (artificial intelligence) in computers often compares the process with creative thinking in the human thought processes. But, in fact, the human brain and the computer work in quite different ways; the computer works in a serial way while the brain can work in a parallel way. She illustrated the difference by referring to a airplane incident in 2009 when an airliner crash landed on the River Hudson in the USA. The airplane took off from La Guardia airport and within minutes struck a flock of Canada Geese which resulted in loss of power from both engines. The pilot was very experienced and managed to land the plane on the River Hudson with few injuries and no loss of life to passengers and crew. It is estimated that AI control in the landing sequence would have meant total loss.

Dr Bellamy and her husband will soon be moving to live and work in France so we may not see her again in the future.

Science, Nature and All Things Technical Group Meeting

Friday 12th January 2024

Navigation at Sea Before GPS, with some History

Mike Genge

Mike started by explaining the scope of the talk which would be to look at a brief historical background to ships and how they were sailed. He joined the Royal Navy after his degree course at university on a short service commission at a time when there were no modern GPS navigational aids, no digital or radio clock control from an atomic clock such as that at the National Physics Laboratory in London.

The Phoenicians were one of the earliest cultures that sailed on the Mediterranean Sea, closely followed by the Greeks and other cultures around the shores of the Mediterranean. They mostly sailed during daylight hours and kept in sight of land. There were few navigational aids, the magnetic compass was not documented as in use until about 1190 AD in Europe, perhaps a little earlier in China.

The Vikings were one of the early cultures to go sailing the high seas of the Atlantic but they were not active until about 700 to 800 AD and we do not know if they had the use of a compass.

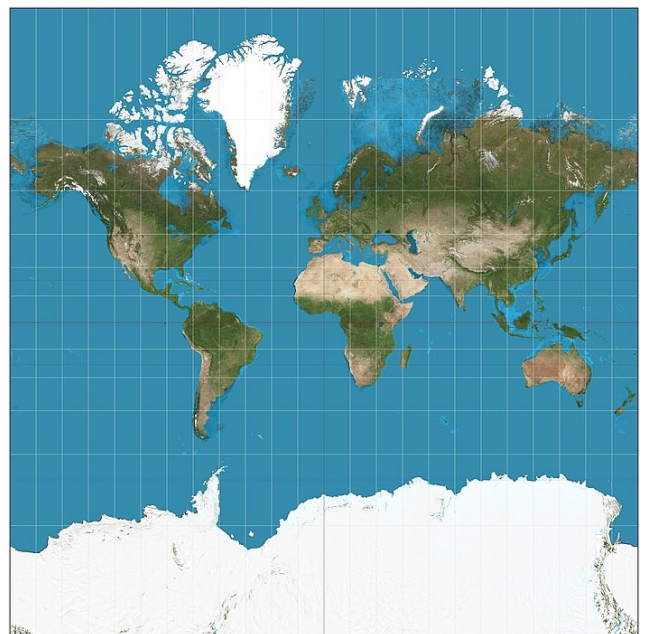
Maps were very rudimentary and often shown as Jerusalem-centric and a flat earth.

The first image shown is of a map from 1430 AD. There is a similar map in Hereford Cathedral called The Mappa Mundi.

The second image below is of the world ac-



According to Gerardus Mercator, a Flemish



Science, Nature and All Things Technical Group Meeting

Friday 12th January 2024

Navigation at Sea Before GPS with some History

Mike Genge

(continued)

geographer and cartographer whose representation of the world in 1569 became generally accepted.

The essential knowledge that was necessary included a knowledge of the start point, what the surrounding geographical features were like, what one was likely to observe on the voyage, and where or what one was aiming for. At first, the sailors had very little knowledge but they learned as they went along. Once writing was known, details could be recorded on some sort of chart.

By the time Europeans were attempting to sail the Atlantic they had developed some instrumentation:

A method of measuring and recorded the ship's speed. A very long rope was used. It had knots tied into it at regular intervals and a heavy log was tied on at the end. The log was tossed into the sea over the stern of the ship and the knots counted as the length of rope payed out. A sandglass was used to measure the time so the speed could be recorded in 'knots per hour'. The speed of ships in modern times is still recorded as knots per hour where 1 knot is equivalent to 1 nautical mile per hour. The nautical mile is now defined as 1 minute of latitude at he equator and is equivalent to 1.852 Kilometres.

There were various ways to determine position—the sextant became the recognised

accurate method to determine latitude during the 18th and 19th centuries but was proceeded by various instruments in earlier times.

There was no precise method of determining longitude until the invention of a reliable chronometer during the late 18th century.

Marine Chronometer in 1761 by British inventor John Harrison.. Further improvements continued to be added over the few years. By 1825 The Royal Navy had begun to install chronometers in their ships. At noon each day a sextant was used to check the position of the sun in the sky so a fairly precise determination of noon at the position where the ship happened to be. This could be compared to the chronometer so the longitude of the ship could be established.

Shore establishments began to erect 'time balls' on a tower in major ports and accurate time could be obtained by observing the drop of the ball at a set time each day. At Greenwich the ball on the Royal Observatory would drop at 1.00 pm. Ships in the port could check and adjust their chronometers. At least two chronometers were generally carried on each ship.

Other advancements made to improve navigation include:

Improvements to charts, including port entry charts

Science, Nature and All Things Technical Group Meeting

Friday 12th January 2024

Navigation at Sea Before GPS with some History

Mike Genge

(continued)

'Rules of the road' (which could vary around the world)

The gyrocompass in 1906, invented in Germany by Hermann Anschütz-Kaempfe. The Gyro-Compass always indicates true north instead of magnetic north as does the magnetic compass. It is less affected by variations in magnetism or the presence of large metal objects.

When lighthouses were erected around the coasts, then the particular lamp timings could be used to indicate position along a coast.

A navigator needs to know many things

Avoidance of Collisions

- ▶ Drive on the right (Port to Port)
- ▶ If a boat/ship (anything) stays on a constant bearing as it gets closer to you, you will collide unless one of you changes something (speed/direction)
- ▶ If you can determine that you will not collide, by a safe margin you should maintain course and direction until the 'event' is passed
- ▶ If you are overtaking, it is your responsibility to keep clear
- ▶ If the vessel approaching on a 'collision' course is on your right (starboard side), you should turn right to avoid it (Sound horn. How many blasts?)
- ▶ Special rules apply for ships with limited manoeuvrability, trawling, fishing, towing, very large, run aground! where you should keep clear
- ▶ Port Red Even
- ▶ Starboard Green Odd

about the voyage being undertaken:

Hazards such as Lands (coasts), reefs, shallow water, currents, manmade obstructions, awareness of other ships, changes to con-

stant position items. A good lookout needs to be kept, a knowledge of the 'rules of the road' (which change around the world), chart amendments.

Navigation lights need to be lit at night:-

Port side—Red Light

Starboard:- Green Light

Collision Avoidance (see below)

Sailing ships have priority over powered ships, except in certain positions.

Entry details to ports need to be known, and charts must be available. An example is shown below.



Science, Nature and All Things Technical Group Meeting

Friday 12th January 2024

Navigation at Sea Before GPS with some History

Mike Genge

(continued)

Ships had to change of course. Early European ships did not sail well against the wind. Lateen and Dhow rigged ships, such as those found in eastern countries and seas, were much better and the sails and rigging in European ships changed as well. Navigators had to develop knowledge of ocean currents, such as the Gulf Stream.

Navigational processes, such as dead reckoning, had to be developed. Dead reckoning is a way of plotting a course using a chart and allowing for drift off course because of tides, currents, wind, to estimate one's position. When known land was sighted, one's position could be determined.

One of the tasks that the Royal Navy engaged in was preparing or modifying charts as they explored the world or travelled from port to port. On return to their home port copies of the resultant charts would be handed to the Admiralty for inclusion in charts issued to other RN ships on subsequent voyages.

Thanks to Mike Genge for a very interesting and informative talk about navigation in earlier times—not so long ago. Nowadays, GPS navigation using satellite derived images and positioning data has made navigation much simpler and accurate. Radar has also helped. However, entry to a port still has to be approached very carefully.

New Year Lunch

Wednesday 24th January 2024

The Sports Club, Old Swan Lane

The New Year lunch was arranged by Sue Tringham and took place at the Sports Club in Old Swan Lane, with the permission of the Sports Club. Sixty members and guests attended and were treated to a very nice festive lunch of three courses and a minimum of fuss. Our Chair, Jayne Jones, made a brief introduction and then let the well prepared staff get on with serving the

lunch. The Chair and committee members were spread across the tables so there was no great formality and top table. The members were accommodated over seven tables and conversation was possible over the fairly low noise level. The whole lunch was completed and members were leaving the club after about two and a half very pleasant hours.



Table 1



Table 2

New Year Lunch

Wednesday 24th January 2024

The Sports Club, Old Swan Lane



Table 3



Table 4



Table 5

New Year Lunch
Wednesday 24th January 2024
The Sports Club, Old Swan Lane



Table 6



Table 7

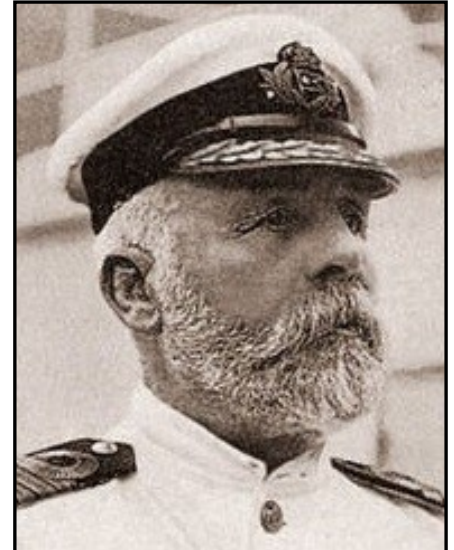
Monthly Meeting—Thursday 1st February 2024

The Children of the Titanic

Mr Andrew Lound



RMS Titanic



Captain Edward Smith

Andrew Lound started his illustrated presentation with dramatic music and effects on the screen. His talk was to be about the maiden voyage of the White Star Liner RMS Titanic in April 1911, with particular emphasis on the children who were lost in the catastrophe.

There is a lot known about the Titanic and yet there is also a lot not known.

RMS Titanic was the largest liner afloat at the time she was launched on 31st March 1911. She was one of three Olympic class liners launched by The White Star Line; the others being Olympic (launched 1910) and Britannic (launched 1914).

When Titanic sailed on her maiden voyage on 10th April 1912 there were 2224 passengers and crew aboard.

Titanic complied with the British law which required 16 lifeboats with a capacity of 990 passengers for ships over 10,000 tons (Titanic weighed 46,000 tons); it had 20 lifeboats which could carry 1178 (capacity for about a third of the passengers it could carry.) A lifeboat drill due for 14th April did not happen as it was a Sunday and Captain Smith was conducting a Sunday service. Other life boat drills were not carried out due to windy conditions and rough seas.

There were 7 decks and 3 classes of accommodation:

- First Class
- Second Class
- Third Class (better accommodation than in previous ships which had a

Monthly Meeting—Thursday 1st February 2024

The Children of the Titanic

Mr Andrew Lound

(continued)

Steerage Class). USA wanted workers with some education and these were catered for better in a slightly superior accommodation class.

The ship had 159 boilers producing steam for 2 triple expansion reciprocating steam engines, each connected to a large screw propeller. The third propeller was powered by a low pressure turbine using exhaust steam from the other engines. This arrangement was expected to give much better economy in the coal burned. The White Star Line ships were designed for luxurious transport for passengers, rather than very high speed. The Cunard company were the faster ships (Lusitania and Mauretania) and sought the Blue Riband.



A Public Room in Titanic

On 14th April Titanic was approaching the USA coast. Icebergs were expected and messages were received by Titanic from several ships during the passage across the Atlantic. There was no moon during the night so it was difficult to pick out the icebergs at night. The sea was calm and flat during the evening, something that the crew had not seen before. A watch was kept for icebergs and a southerly route was taken to avoid them. However, the watchkeepers were not issued with binoculars as they were locked away and the officer with the keys was posted to another ship at the last moment before the ship sailed. The ship struck a large iceberg at 11.40pm. Titanic was considered unsinkable because of the design of the hull—it was divided into 16 sealed compartments. The gash made by the iceberg in the hull penetrated at least 5 of the compartments. Titanic sank at 2.20



The Grand Staircase in Titanic

Monthly Meeting—Thursday 1st February 2024**The Children of the Titanic****Mr Andrew Lound****(continued)**

am on the 15th April.

Lifeboats were launched, loaded, as was custom, by children and women first, so very few male passengers were saved, even though some of the lifeboats were not full.

The high death toll had several reasons:

- There was no information. The ship didn't have an alarm system (like the common ones, where sirens could be sounded). This means that the crew had to tell each passenger to go and evacuate the ship. There was less crew for second and third class, and there were many more people, so less people lived.
- People who paid less had no access to certain deck stairs.
- Many people travelling in third class were foreigners. Their language skills were limited, and they didn't know what was going on. The signs being only in English didn't do them any favours.

Many of those who died didn't die because they couldn't leave the ship before it sank. They died of hypothermia, while they were floating in the cold water, which was 28 degrees Fahrenheit (-2 Celsius).^[8] When the RMS *Carpathia* arrived, at 4.10 ship's time, there were many floating dead bodies in the water. Many lifeboats rowed away from those who were in the water shouting for help. Most lifeboats also did not go back to the ship, like lifeboat 6. The people on the lifeboats were scared because the sinking might cause their boats to be pulled under by the waves. The people in the lifeboats were afraid the lifeboat would capsize when people entered it from the water. Only lifeboat 4 returned to the shouting people in the water. Five people could be rescued, but two of them died in the lifeboat. Around 3 AM ship's time, 40 minutes after the sinking, the last calls for help ceased. After 3 AM, lifeboat 14, commanded by Fifth Officer Harold Lowe, returned. He managed to save another three people. He had let the people in the boat enter other boats before he went back.

The table on the following page gives a listing of those who died and those who survived, grouped by age, gender and passenger group. (Children are those up to age 12 as that was the statutory school leaving age from 1899 until 1918.) The list is taken from a report to the British Parliament of 1912.

Monthly Meeting—Thursday 1st February 2024

The Children of the Titanic

Mr Andrew Lound

(continued)

Victims and people rescued

Group	Total	Rescued	percentage	Victims	Percentage
Children, 2nd class	24	24	100 %	0	0 %
Women, first class	144	140	97 %	4	3 %
Women, crew	23	20	87 %	3	13 %
Women, 2nd class	93	80	86 %	13	14 %
Children, first class	6	5	83 %	1	17 %
Women, 3rd class	165	76	46 %	89	54 %
Children, 3rd class	79	27	34 %	52	66 %
Men, first class	175	57	32 %	118	68 %
Men, crew	885	192	22 %	693	78 %
Men, 3rd class	462	75	16 %	387	84 %
Men, 2nd class	168	14	8 %	154	92 %
Women total	425	316	74 %	109	26 %
Children, total	109	56	51 %	53	49 %
Men, total	1690	338	20 %	1352	80 %
first class, total	325	202	62 %	123	38 %
second class, total	285	118	41 %	167	59 %
third class, total	706	178	25 %	528	75 %
Crew, total	908	214	23 %	694	76 %
Total	2,240	710	31 %	1,514	69 %

Monthly Meeting—Thursday 1st February 2024

The Children of the Titanic

Mr Andrew Lound

(continued)

Andrew made some comment on the figures..

Less than a third of the passengers and crew were saved . There were several reasons why the percentage is so low:

- There were not enough lifeboats to accommodate the whole crew and passenger totals. The Board of Trade regulations on lifeboats were met by the company but were very out of date.
- Many lifeboats were launched which were only half full.—there had not been a lifeboat drill during the voyage and the loading was women and children first.
- The first vessel to reach the scene was the RMS Carpathian which arrived on the scene at 4.10 am, and then spent 6 hours rescuing people from the lifeboats. Any who had survived the sinking but were in the water did not survive for long in the freezing water.

The SS Californian was the closest ship to the Titanic but their radio equipment was turned off for the night and, whilst they saw white flares in the sky, they discounted them as they were thought to be signalling flares, perhaps from sealing ships. Emergency flares were red and Titanic did not have any red flares.

Half of the children aged up to 12 perished and the numbers varied according to the class of passengers that they accompanied. Only 1 first class child perished whilst 52 third class children perished. If the modern classification of children were checked, it is probable that the percentage of children lost would have been much higher.

Thanks to Andrew Lound for giving such a graphic and interesting account of the loss of the RMS Titanic

Science, Nature and All Things Technical Group Meeting
Friday 9th February 2024
New Zealand—an Illustrated Talk
Julie Howard



visited. The usual landing point was The Bay of Islands towards the northern tip of North Island as there was deep water, good anchorages and shelter from winds and storms.

Julie's travels took her to visit each of the 3 capitals of New Zealand. Russell was the first capital for a short period (1840 to 1841). It was named after the British Secretary of State for the Colonies, Sir

Julie and Peter's family holiday touring New Zealand provided the basis for her talk. She began with some history about the discovery and colonisation of New Zealand.

It is thought that the islands were probably discovered by Polynesians about 950 AD after a voyage from Tahiti. Colonisation started about 1300 AD and the Polynesians slowly developed the Maori culture that was found by the European settlers during the eighteen and nineteenth centuries.

European contact started in 1642 when a Dutch explorer visited, but that contact proved disastrous. Later, James Cook, an English sea captain, visited in 1769 and mapped the entire coastline. He visited again several years later. Contact between Europeans, Americans and Maori continued during the 18th and early 19th centuries as whaling and sealing ships and trading ships



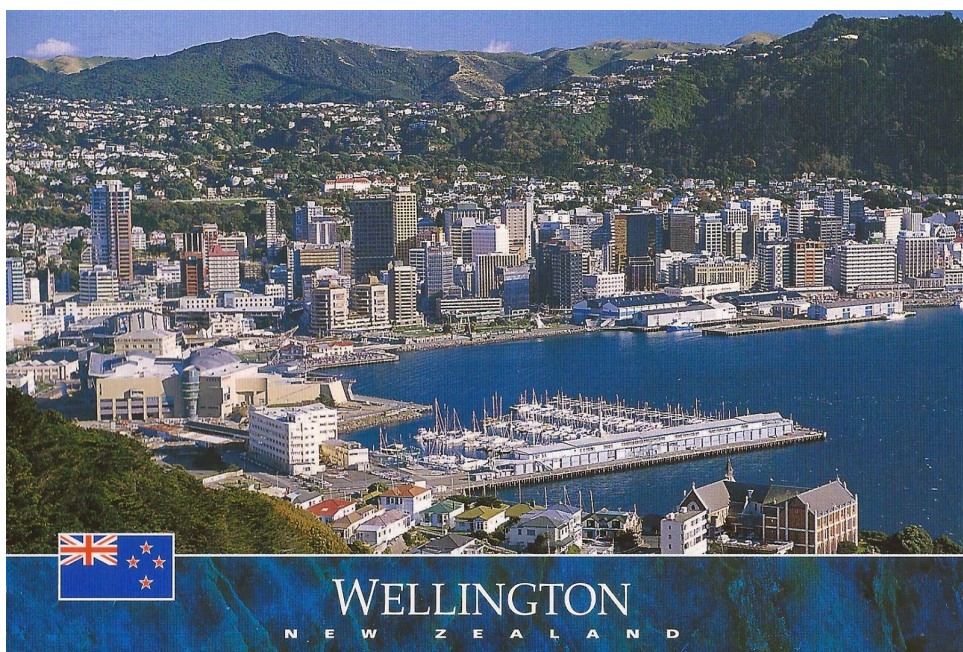
Science, Nature and All Things Technical Group Meeting
Friday 9th February 2024
New Zealand—an Illustrated Talk
Julie Howard

John Russell.

Auckland was the second capital as it was more centrally placed than Russell and a much larger city than Russell and more able to support the needs of a capital. In 1865, after much argument, the capital was relocated to Wellington at the southern tip of North Island.

The islands are in the geologically active region of the Pacific Ocean. There have been volcanic eruptions and earthquakes in recent history and more can be expected in the future.

Stratford in New Zealand (there are six Stratfords around the world, mostly in Commonwealth countries, such as Canada, New Zealand, Australia, but also 1 in USA.)



Wellington—Capital of New Zealand

Julie show many photographs of places and scenery of New Zealand which I have not reproduced here.

Some of the plants, animals and birds unique to New Zealand

Mountains and volcanoes on New Zealand.

Thanks to Julie for a very interesting account of her family trip to New Zealand.

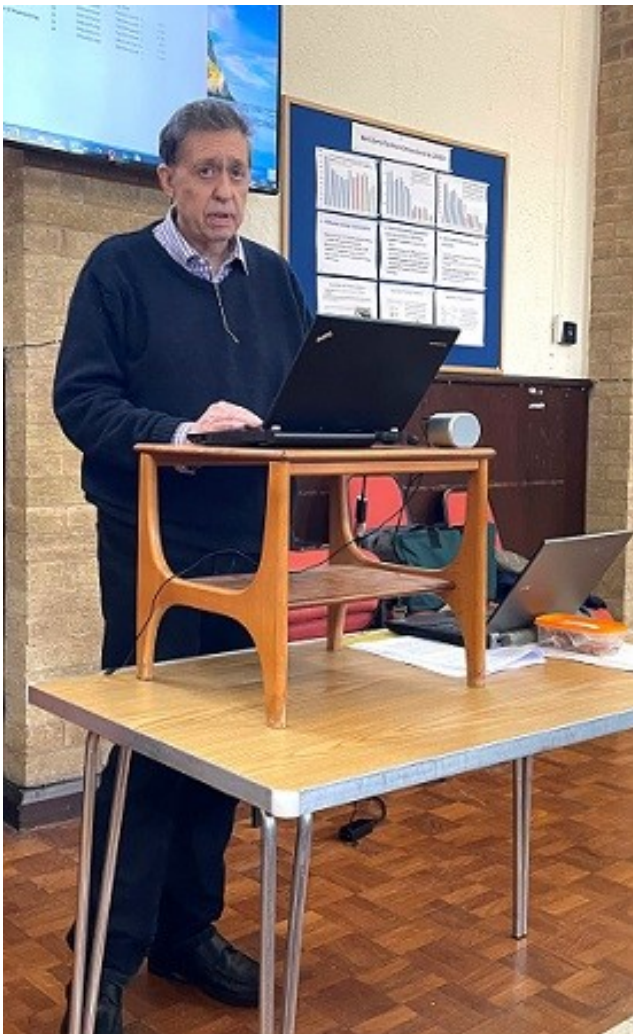
History Group Meeting

Thursday 15th February 2024

A Talk about the History of Music and Musical Instruments

Robert Tringham

Robert started his talk with a statement that the history of music is bound up with the evolution of the human race—homo sapiens and predecessors.



Homo Erectus is thought to have been the first human ancestor capable of speech but there is no evidence that they enjoyed mu-



sic. They made images of birds, horses and other natural features. The species evolved about 2 million years ago and existed until about 100,000 years ago.

Neanderthal man appears to have been musical and bone whistles with 3 notes have been found from 55,000 years ago. One

such is the Divje Babe musical instrument made from a bear mandible. It is on display in the National Museum of Slovenia. Flutes with 4 or more notes came later.

The aborigines have been in Australia for above 60,000 years and may have migrated from Europe.. They appear to have originated string instruments similar to the lyre. They also produced an instrument or signalling device that we call a 'bull roarer'. An ex-

History Group Meeting
Thursday 15th February 2024
A Talk about the History of Music and Musical Instruments
Robert Tringham (continued)

ample can be seen in an Australian film 'Crocodile Dundee II', where the star (Paul



Hogan playing Crocodile Dundee) uses one to communicate over considerable distance with aborigines to summon help. The instrument was held by the string and then rotated very quickly above the head. It made a whirring sound, which apparently could be heard a long distance away and may have been capable of producing music. Similar types of instrument can be found in New Zealand and the Americas.

There is a clay cuneiform tablet in existence that includes a first melody—The Hurrian Hymn- which is estimated to be more than 3,400 years old; it was from the Sume-

rian period.

Music as we know it started in the West, probably in Egypt about 4,000 years ago. Decorations in tombs from the Old Kingdom show musical instruments of several types, including percussion, string, woodwind and brass instruments. The Egyptian harp was much used, with variations in shape:



The Egyptian Drum also varied in shape



History Group Meeting

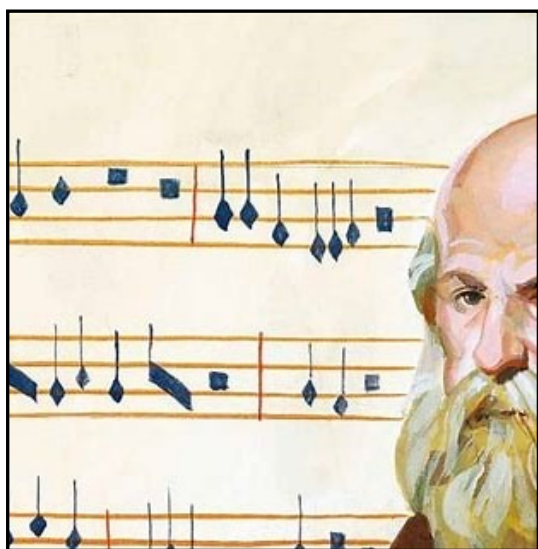
Thursday 15th February 2024

A Talk about the History of Music and Musical Instruments

Robert Tringham

(continued)

Modern written musical notation started with *Guidon d'Arezzo* (990–1050 AD) who developed his theories at the Abbey of Poppo. He encountered resistance from other monks and musicians and he left the Abbey and moved to the Cathedral of Arezzo



in 1025 and later to the Camaldolese monastery in 1029, where his fame developed.

Since the time of *Guido* music has continued to develop as have musical instruments. As manufacturing techniques have developed, so have musical instruments. String, woodwind, brass and percussion instruments have continued to develop, as has the complexity of music.

The **Robertsbridge Codex** (1360) is a music manuscript of the 14th century. It contains

the earliest surviving music written specifically for keyboard. It was found in a disused Abbey in Sussex.

The orchestra developed from smaller collections of instruments such as quartets, quintets, etc. Eventually, orchestras needed a conductor to keep the instruments in time.

In recent years the popularity of string instruments such as the guitar which often plays chords rather than notes, has led to the development of a chord numbering system applied to chord progressions. It is much used in country music with guitars but has also been applied to piano music.

Monthly Meeting — Thursday 8th March 2024

The Golden Age of Radio

Roger Browne

Roger Browne Roger Browne is an actor, singer, speaker, musician, director, composer and writer.

As a jazz pianist, he has accompanied many top International and UK based jazz artists including George Chisholm, Humphrey Lyttleton, George Melly, Marion Montgomery, Stefan Grappelli, Louis Armstrong all-star, Bud Freeman, Scott Hamilton, Danny Moss etc. He has played in all the countries of the UK, America's West Coast, in California and Washington State, in Montana, Arizona, Canada's British Columbia, across the Caribbean, in Spain, Germany, Norway, Republic of Ireland and The Netherlands.

Roger, now, apart from playing piano for Manchester Jazz and various of his own groups, delivers talks about his amazing life of music, featuring stories, songs, and interpretations of music by Gershwin, Kern, Porter etc., in his own inimitable piano style.

Today he gave us his view on the golden age of radio, speaking mostly about the 1940s, 1950, and 1960s when television was only just starting and most people's entertainment at home was BBC radio programmes from the Light Programme, the Home Service and possibly a bit from Radio Luxembourg.

He alluded to long running and not so long running drama series, such as

The Archers, (1951—present)

Mrs Dales Diary, (1948-1969)

Journey into Space, (1953 -1956)

Dick Barton, Special Agent, (1946—1951)

Radio Comedy Series:

Much Binding in the Marsh (1944—1950)
 (1951—1954)

ITMA (It's That Man Again) (1939—1949)

Billy Cotton Band Show (1949—1968)

Beyond Our Ken (1958—1964)

Round The Horn (1965—1968)

Hancock's Half Hour (1954—1961)

The Navy Lark (1959—1977)

There were many others, too many to record. There were also music programmes of all music genres, radio plays, sports, programmes and many other types of programme. Virtually every household in the nation had a radio set and could listen in to whatever was being broadcast on the radio programmes from the BBC across 3 services during the postwar year until about 1967:

Light Service on longwave—broadcast entertainments such as music, comedy, sports, light drama.

Home Service on medium wave—mainly speech based programmes.

Third Programme.—classical music, arts programmes, serious dramas, documentaries. Test Match Special programmes for cricket.

Roger was able to talk about many programmes that many of us could recall with pleasure.

Photographs of Various Group Events



Monday Book Group
New Year Lunch
15th January 2024
Hotel Du Vin

Submitted by Sylvia Crooks



Dinahs Group
Enjoying lunch at the
Red Lion
6th February 2024

Submitted by
Sylvia Crooks.