

July 24th

Memory Verse

And he shewed me a pure river of water of life, clear as crystal, proceeding out of the throne of God and of the Lamb. In the midst of the street of it, and on either side of the river, was there the tree of life... Revelation 22:1,2a.

More information on this verse in the lesson for 19th July.

Buildings today. Some still standing, some in ruins...

Something to go and look for

Have you ever seen a house which has one of the windows bricked up? Perhaps you even live in such a house yourself. Why would a householder brick up a window? It is quite a long story!



In the reign of William III there was a problem with currency. Money was in the form of silver coins. The old silver coins were often clipped round the edges and some of the metal stolen. This made them of less real value. Silver metal was also worth more than the face value of the coins themselves so they tended to be melted down and the metal sold. In 1696, to stabilise the coinage the government called in silver money and re-coined it. The re-coinage did not fully solve the problem and it put the government to considerable expense. To help defray the cost it was decided that a new tax was needed – but what kind of tax should it be?

Income tax was one of the ideas proposed. An income tax is a tax in proportion to what someone earns or acquires from investments. I am sure your father will tell you that he has to pay income tax. However, income tax was not introduced in Britain in 1696. Most people did not like the idea. Why should the government know how much they earned? This would be an infringement of their liberties. What they earned was no one's business but their own.

The alternative was much simpler, although the relationship of the amount to be paid to the taxpayer's income was rather rough and ready. The suggestion adopted was a tax on windows. Those who had bigger homes were generally better off and so could afford to pay more tax. Bigger homes had more windows. At first every house was taxed at two shillings per year regardless of the windows and if there were more than ten windows there was additional tax, depending on the number of windows. Between ten and twenty windows attracted an extra 4 shillings. More than 20 windows attracted an extra 8 shillings. No intrusion into anyone's privacy was required as the inspector could see the number of windows and assess a house without even going inside.

In 1747 the way the window tax was calculated was altered. This made it fairer and less burdensome. Sixpence (half a shilling) was charged for each window in a house if there were 10–14 windows. This rose to ninepence each if there were 15–19 windows. If there were more than 20 windows each was taxed at one shilling. You can see that in a large house it would be worth considering blocking up some windows. This was specially the case if blocking just one window brought the house down from say, 20 to 19 windows. By 1778 the tax was still in place but some refinements were introduced. Poor people, who were already exempt from paying certain other taxes were now exempted from window tax also. To prevent the tax affecting people's livelihoods, dairies, cheese rooms and so on, were now considered exempt from the tax if they were clearly labelled. If you see an old house with “dairy” carved on the lintel of a doorway this is the reason why.

There is no such thing as a popular tax but people seem to have really disliked the window tax. Some called it a tax on light and air, claiming it made people live in unhealthy houses. It is sometimes said that the origin of the expression “daylight robbery” was connected with window tax but whether that is true or not, the tax was lifted on 24th July 1851.

However, let's go back to the house in the picture. I know that house well because I used to live there. It was built in 1873, long after the window tax was repealed. If you were to go inside it you would find that behind that “blocked” window is a thick wall dividing two rooms. When I lived in that house I always imagined that the builder put in the “blocked” window because it made the house look better to have a “window” over the door. Without it there would have been an odd space above the front door. That was even more the case when the house was new because then the window under the long lintel on the right was a large shop window and door. I found when I was doing some research for this lesson that my guess is correct and in fact quite a few houses were built with blank windows where there were walls inside the house for this reason, long after the window tax had gone.

Go out and have a look around the area where you live. Have a thorough explore. Can you find any old houses with blank windows. Can you guess (or perhaps you can find out) whether they are old enough to have been blocked because of the tax or not?

Something think about

Why do we have to pay taxes? What other taxes do we have to pay besides income tax today? Are any of them related to the size of your house as the window tax was? In Luke 20 and Matthew 22 Jesus makes it quite plain that Christians must pay their taxes but this does not mean we should not consider whether the taxes we are asked to pay are fair and whether the money gathered is used wisely. In a democratic system everyone is part of the government and we can talk to our Member of Parliament if we think taxes are unfair. What do you think could be done to improve the way our tax system works? What could governments do to reduce taxes?

Something to make



Do you have a dolls house? If not you could make one. Cardboard boxes are the best starting material and you can cut out doors and windows (and even draw or paint on a blocked up one!) to your own design. It does not have to be as grand as the one in the picture, which if the windows on the back were similar in number to those on the front, would have attracted a bit of window tax! Smaller boxes such as cereal boxes can be joined together and if a pitched roof is too difficult, remember many houses have flat roofs. When you have made your house shape, ordinary household emulsion paint makes a good foundation. Other features can be added when the paint is dry using felt pens, paint or even by sticking on coloured paper.

White emulsion paint can be used as it is or a small amount can be poured from the main tin and tinted to the desired shade with poster paint or even food colouring. Please make sure you don't use up paint that is being reserved for touching up walls of your own real house though!

Map work and some archaeological history

High in the Peruvian Andes is **Machu Picchu**, sometimes called “the Lost City of the Incas”. You may be able to find it on your atlas, certainly you will be able to find the **Andes** mountains and **Peru**. Machu Picchu was once a thriving centre of the Inca civilization, and, it is now believed, a royal summer palace of the Inca ruler. It was on **24th July** 1911 that American explorer Hiram Bingham first set eyes on the ruins of Machu Picchu after a long search.



The Inca empire stretched along the western edge of South America. As far as archaeologists can tell it arose in the early 13th century, although what the conditions were that caused its rise is not known. You can see from the picture that the Incas lived in very steep mountain country. This makes farming difficult. The Incas cut terraces into the mountains which you can see in the picture to enable them to grow things on steep slopes. They had beautiful intricate weaving and pottery and used a bronze-alloy metal. The Incas had no wheeled vehicles and for a long time it was thought that they had no writing. Intriguingly, however, doubts are now being cast on the idea that the Inca's did not write – more about this below.



The city of Machu Picchu was built by Inca engineers high up in the beautiful mountains of Peru. It is now one of the world's most famous ancient ruins. The Incas used stones without cement or mortar to build Machu Picchu, yet the walls are strong because the stones fit together so well. Even a thin piece of paper cannot be pushed between them.

The first European ever to set eyes on the ruins of Machu Picchu was an American lecturer in South America History from Yale university, Hiram Bingham III (1875-1956). You can see him in the picture, standing on a jungle bridge with his Peruvian guide below. As he travelled he carefully gathered oral information from local people and he also looked at every ruin he was told about. Bingham was already quite famous as an explorer when on **24th July** 1911 he arrived at Machu Picchu. He was actually looking for something else when he found it, the last capitals of the Incas, Vitcos and Vilcabamba (now known as **Espiritu Pampa**) both of which he found later in the year and which explorers wrongly imagined were filled with gold. These two cities were built when the Incas were struggling against the Spanish. Vilcabamba was the last refuge of the Inca ruler Manco Capac II, who fought against the Spanish conquerors in the 1530s. Machu Picchu was built earlier when the Incas were at the height of their power and is much more magnificent.



When he climbed up to Machu Picchu and found the ruins – totally overgrown then – Hiram Bingham thought at first he had found Vitcos. He had climbed up the mountain in a drizzle of rain for two hours with two others of his party (the rest had not thought it worth going) to reach a peasant hut. Here he was welcomed and a lad was sent to guide him to the ruins. He was rewarded with “an unexpected sight, a great flight of beautifully constructed stone terraces, perhaps a hundred of them, each hundreds of feet long and 10 feet high.... Suddenly I found myself confronted with the walls of ruined houses built of the finest quality of Inca stonework.” The scene was breath taking.



Hiram Bingham returned to the site in subsequent years and took many photographs. Despite evidence to the contrary, he decided in the end that what he found that day was Vilcabamba. In fact he had discovered an earlier and more magnificent site altogether. When he later discovered Espiritu Pampa he did not realise that it was the real Vilcabamba.¹

Something to do²



Did the Incas of Machu Picchu have any means of writing? Certainly they seem not to have had an alphabet like ours which could be used to record information by means of marks on stone, wood, paper or other media. However, the complex system of knotted cords or *quipu* (sometimes written *kipu*) which they used and which was once thought to be only a numerical record system may, it is now thought, have been a form of writing. You can see an example in the picture. The Spanish who conquered Peru in the

sixteenth century ruthlessly destroyed the Inca civilization, and with it every *quipu* they could find, so very few remain today for archaeologists to assess. Notice that the cords not only have knots in various different places; the cords themselves are of different colours and lengths. They can also be made of different fibres. The knots themselves can also differ in how they are tied. All this is used in the code. One researcher, Gary Urton, has suggested that the knots form a complex binary code – the kind of code used today in computers.³

Do you know Morse code? We looked at it in the lesson for April 2nd. If you do, you can imagine how a message could be spelled out in dots and dashes by means of knots in a piece of string or cord. You can try this out for yourself. Use the chart given in the April 2nd lesson if you do not know Morse code by heart. Spell out a very simple message, or perhaps your name, in Morse code and write it down. Now use a piece of twine, string, knitting yarn or something similar. You could represent the dots and dashes in the way that you space the knots. A knot followed by a long space would be a dash. A knot followed by a short space would be a dot. Another method would be to



¹ For more information see: https://creation.com/index.php?option=com_content&view=article&id=15984

² Image: By Pi3.124 - Own work, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=69539294>

³ For more information see: <https://creation.com/unravelling-the-knotty-kipu-code> and https://gogeometry.com/incas1/quipu/quipu_khipu_knot.html which also has a good map.

have one knot for the dot and two very close together for the dash. See what you can do. An interesting present for a friend might be to do their name in knots in this way using an attractive coloured cord, such as embroidery thread, and mount it on a card.

The Inca *quipu* did not work in this way, of course. It was a complex system in which:

The combination of fibre types, dye colours, and intricate knotting could be a novel form of written language, according to Harvard anthropologist Gary Urton. He claims that the quipus contain a seven-bit binary code capable of conveying more than 1,500 separate units of information. Quipus were knotted ropes using a positional decimal system. A knot in a row farthest from the main strand represented one, next farthest ten, etc. The absence of knots on a cord implied zero.⁴

In this picture from an old book in Spanish, the Inca man is holding a large quipu. Beside him on the left you can see his yupana, a kind of calculator which will help him produce the data to be stored in the knots of the quipu.

Something to think about⁵

Although the Incas system of writing using knots may still be undecipherable now, after the Spanish conquest they did adopt the kind of writing with which we are familiar. They wrote either in

Spanish or used the writing of the Spaniards which they had learned to write in their own Quechua language which is still spoken in Peru today. These records tell us that the Incas believed in a three fold deity called Viracocha. He first populated the world with giants. However, the giants displeased him and he turned them to stone, closing that epoch of the world with a great flood. After that he made the sun moon and stars and created more men, this time out of clay to populate the whole world. Then a second flood occurred which covered all the mountains. Everyone died except one man and one woman. The creator made more men and women and commanded them all to go underground into caves and tunnels ready for him to call them all forth into the various parts of the world where they were to be dispersed.

As in many ancient cultures there are echoes here of the true account we find in the Bible. Over time it has become distorted as it passed from generation to generation. The Incas also had what is called a cyclic view of history into which they fitted their stories of the past. Cyclic means repeated



⁴ https://gogeometry.com/incas1/quipu/quipu_khipu_knot.html

⁵ Information from Bill Cooper *The Authenticity of the Book of Genesis* (n.p., 2011) and other sources.

over and over again in cycles. In the case of the Incas they considered history to be a continual series of creations and floods. Perhaps observing the regular movements of the heavens led them to conclude that history also moved in regular cycles in this way. If we remove the cyclic elements that have become mixed into their account of their past we can see faint traces of the creation, flood and even the dispersal at Babel in these Inca stories.