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- 0:33 *Cyperus papyrus* is a wetland sedge plant which grew abundantly along the Nile Delta in ancient Egypt.
- 0:43 Egyptians began writing around the 1st Dynasty. Clay, stone, bone, metal, and leather were initially used as materials to write on. Ancient Egyptians used the papyrus plant to make a paper-like material on which to write.
- 1:17 Transition between orality and literacy?
- 1:26 In ancient Egypt, paper was made exclusively from high-quality papyrus grown on plantations. As a result, modern papyrus, which is made from wild plants, is of a lower quality than ancient papyrus.
- 1:40 The entire plant was pulled from the root at harvest time. It is unknown at what time of year the ancient papyrus was harvested, or whether mature papyrus was preferred over young papyrus.
- 1:51 Once the outer layer was removed, the inner part of the reed was cut or peeled into strips.
- 2:01 The stalk of papyrus was cut at the base. The tough outer layer would have been kept for other uses such as baskets or sandals. Only the inner part of the reed was used to make the writing material.
- 2:13 The strips should all be around the same length and thickness, in order to create a consistent shape for the sheet.
- 2:28 Papyrus strips were soaked to soften the papyrus and activate the plant's natural juices, which acted as a glue to hold the strips together. In ancient times, it was thought that the mystical Nile waters were essential to the papyrus-making process.

- 2:42 After they have soaked for a few days in water, the papyrus strips were flattened and all the water removed.
- 2:58 The strips of flattened, soaked papyrus are laid out in two layers perpendicular to each other. This technique is essential to papyrus making.
- 3:14 When the strips have all been laid out, they were covered with a sheet of linen and felt, and then sandwiched between two boards in a press. The sheet was kept in the press for a few days, and the felt was changed daily to aid the drying process. When the sheet was dry, it was removed from the press.
- 3:48 Initially, the surface of the papyrus was somewhat rough. It was burnished slightly with a stone or shell and was then ready to write on.
- 3:57 Single sheets of papyrus were glued together to form a roll. The standard length of a roll was 20 sheets.
- 4:10 Hieroglyphics was a formal writing system that combined logographic (signs) and alphabetic elements. Only one side of the papyrus roll was generally written on due to the abrasive nature of rolling and unrolling.
- 4:22 The scroll was read by unrolling the scroll with the right hand while winding the portion that had been read back up with the left. The scroll was wound around a wooden or ivory rod to give the roll stiffness and to prevent bending.
- 4:35 Only one side of the papyrus roll was generally written on due to the abrasive nature of rolling and unrolling.
- 4:47 The main writing tool of the scribe was the *kalamos*, a reed that was cut to about 15 cm. The end was chewed to form a brush-like edge.
- 4:57 Although the papyrus roll continued to be used, it was not ideal.

- 5:03 Papyrus was durable but constantly unrolling and rerolling caused abrasion. Writing onone side of the page reduced wear, but it was inefficient and made the roll cumbersome to store.5:29 Scribes worked together with other scribes. Group writing allowed scribes to write in two
- 5:40 The scroll characterizes the environment between a majority orality and minority literacy. The scroll was associated with recitation and spoken delivery.

languages, to write from dictation, or for apprenticeship reasons.

- 5:49 The African papyrus codex was made from papyrus rolls. This production feature could explain the transition from scroll to book.
- 5:56 Papyrus rolls were systematically cut into squares to provide the sheets that were folded and interleaved to create the rectangular codex text block.
- 6:03 Anthony Grafton Historian. I've been fascinated for a long time by the moment, well, let's say it's kind of a long moment, period from the 2nd to 4th centuries when the codex, the modern, the book form we're familiar with, gradually overtakes the scroll. And looking backward the codex seems to have so many advantages we're surprised that it didn't win out sooner. It's bound more safely, it holds a great deal more text, it's easy to look things up, um, it's easy to carry it around, it's easy to identify it by writing something on the cover; all these are advantages that are much harder to find with scrolls and yet it's clear it took more than technical advantage for the scroll to win. There were I think two things that had going for the codex to win, I'm sorry, two things it had going for it. One, we're now understanding that Romans really liked Codexes. They liked them for notepads, they even liked them for books by the end of the first and second centuries AD we're learning more and more about this and, ah, Romans seem to have thought that there was something Roman about this form of pages, or sometimes blocks bound

worked for that.

together as a book. So that's one reason we think why became why it began to spread. But the other thing that happened I think is that it was useful to Christians.

7: 37 The papyrus codex was better suited for travel and country reading. The scroll was more easily read in library settings and may explain the emergence of the codex among early Christians.

Christians were arguing about texts, they were arguing about which texts were the right ones, they were arguing about what the text meant, they were trying to keep the texts when there were authorities who wanted to confiscate them. For all those reasons the codex was just a lot handier than the scroll. So, I think there was a kind general cultural push from the fact that this was a Roman kind of book. But I think there was also this particular fact that Christians wanted to do things with books that were relatively new and the codex really

8: 11 During the early periods all books, scrolls and codices, lacked text management devises such as word spacing, pagination or punctuation. Text was all written in capital letters.

And then what happens is the Codex shows them possibilities that they hadn't even dreamed of when they adopt it. So all of a sudden it's possible to take the whole old Testament and write it out in multiple six columns in Hebrew and Hebrew transliterated to Greek creating multiple translations and compared them and find out things about Bible you really couldn't find out if you have just dozens of scrolls and were just bobbling with each other.

8:29 "The reading modes overlay and merge with each other. These are the modes of orality, writing, print and electronic transmission. They all emerge, persist and influence each other in a

continuing, timeless dynamic of the storage and transmission of knowledge." (Frost, 2002).

- 8: 41 The first thing you do its kind of you see a need, you adopt a new form, then the new form begins to give you ideas and exert pressures. I don't actually think we've hit that stage yet in our current revolution. When I look at most websites they look to me like Scribner's magazine in 1870. You've got a ribbon of text between ads and the site itself costs money to put up just the way Scribner's magazine did, but ideally you get enough advertising revenue to pay for it and make a little profit.
- 9: 16 I think that we're very far from having leaped to a point where design on the World Wide
 Web design and websites and whatever takes the place of websites really exploits the
 possibilities of the new medium and shows us more than more of the things it can do. (Grafton,
 9: 23 "In every age, humankind imagines itself to be moving through a period of transition so
 acute that the effect borders on the dysfunctional. Our own age is no exception.
- 9:30 We long for a simpler past, or for a more focused future, but the fact is that every era is one of profound change, and it is now our turn." (Atkinson 1998)
- 9:45 Credits

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