

SCIENCE IN THE PREHISTORIC PERIOD

ALIA SARO, SONIA GUTIÉRREZ AND SARA FERNÁNDEZ

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EXPERIMENTAL ARCHAEOLOGY

It is a field of study which employs modern methods and techniques in explaining why and how did prehistorical tools worked.

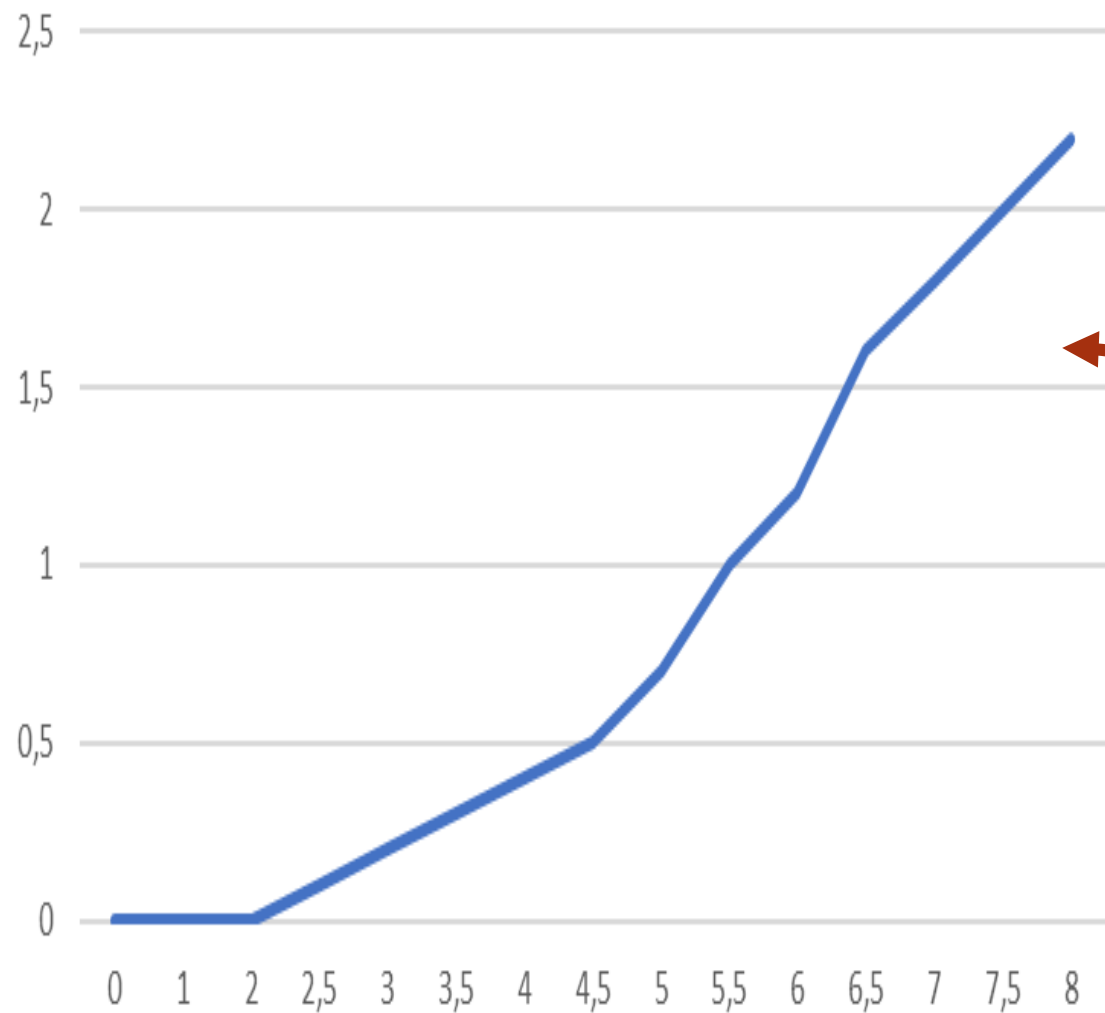
PREHISTORIC BOWS AND ARROWS



HYPOTHESIS

The further we want to throw the arrow, the more we have to tight the rope of the bow.

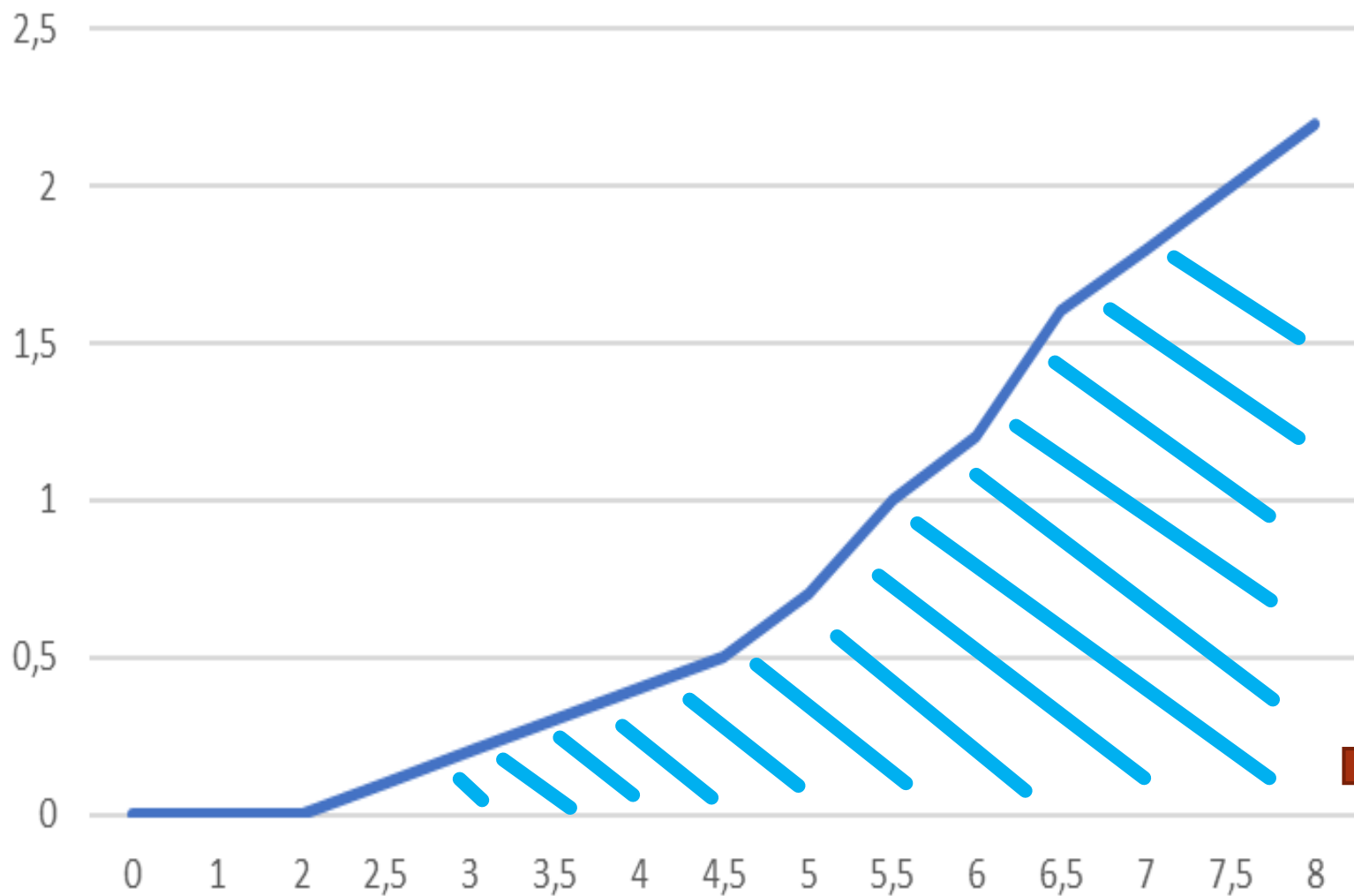
ENERGY ACCUMULATED



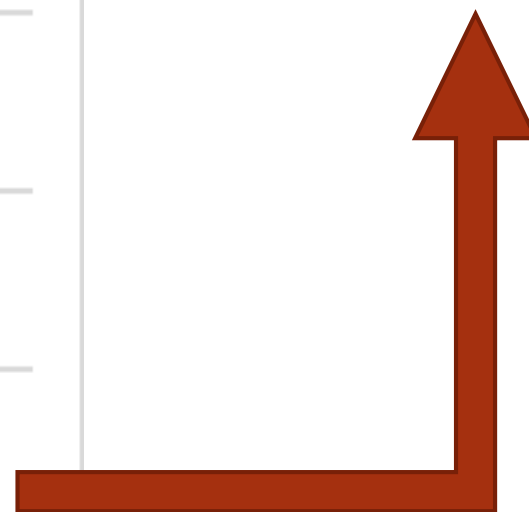
Newton's *cm*

0	0
0	1
0	2
0,1	2,5
0,2	3
0,3	3,5
0,4	4
0,5	4,5
0,7	5
1	5,5
1,2	6
1,6	6,5
1,8	7
2	7,5
2,2	8

ENERGY ACCUMULATED



78.48 cm^2



PROCESS

$$78,48 \cdot 10^5 = 7,848 \cdot 10^6 \text{ Erg} \quad \left. \vphantom{78,48 \cdot 10^5} \right\} \text{ Tighting the rope until 8cm}$$

$$E_c = \frac{1}{2} \cdot m \cdot v^2$$

$$7,848 = \frac{1}{2} \cdot 2 \cdot v^2$$

$$V = 2801,43 \text{ cm/s} \longrightarrow 28,02 \text{ m/s}$$

TIME

$$h = \frac{1}{2} \cdot g \cdot t^2$$

$$1 = \frac{1}{2} \cdot 9.8 \cdot t^2$$

$$t = 0.45 \text{ s}$$

DISTANCE TRAVELLED

$$X = V \cdot t$$

$$X = 28,02 \cdot 0,45$$

$$X = 12,60 \text{ m}$$

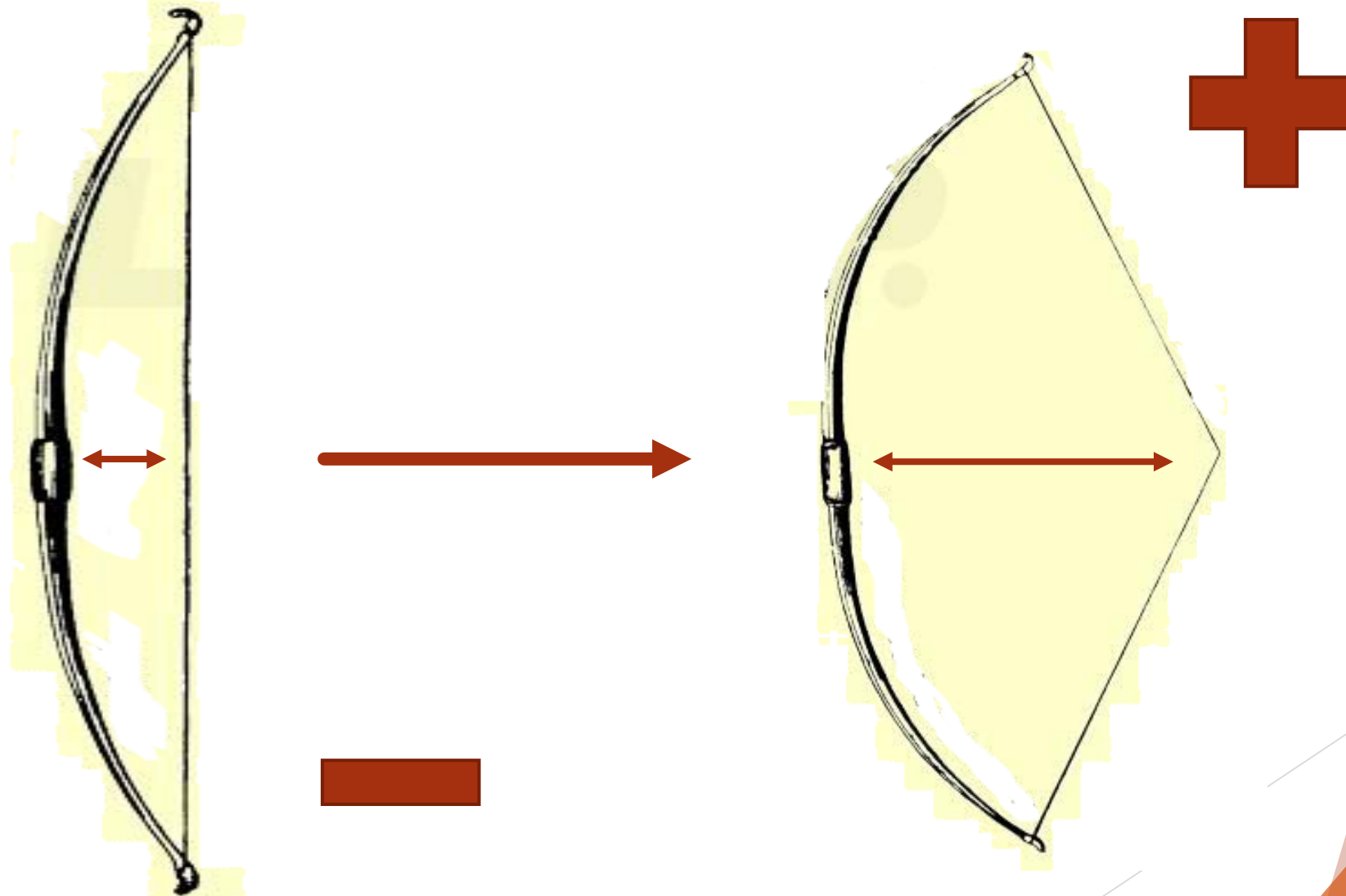
RESULTS

$$8 \text{ cm} = 12,60 \text{ m}$$

$$5 \text{ cm} = 5,043 \text{ m}$$

$$4 \text{ cm} = 3,41 \text{ m}$$

CONCLUSION







FIRE SKILLS



HYPOTHESIS

Fire can be obtained by
friction



Work



Heat



ways in which energy appears

MARROW CANDLE



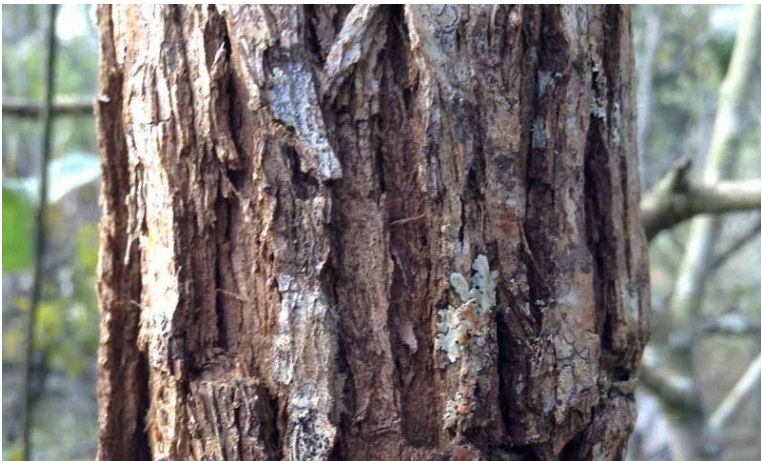
TYPES OF THREAD



Lichens



Moss



Bark



Herbs

HYPOTHESIS

Marrow lamps worked because of marrow's combustion.

CAPILLARITY





PAINTING SKILLS



BERNOULLI'S PRINCIPLE

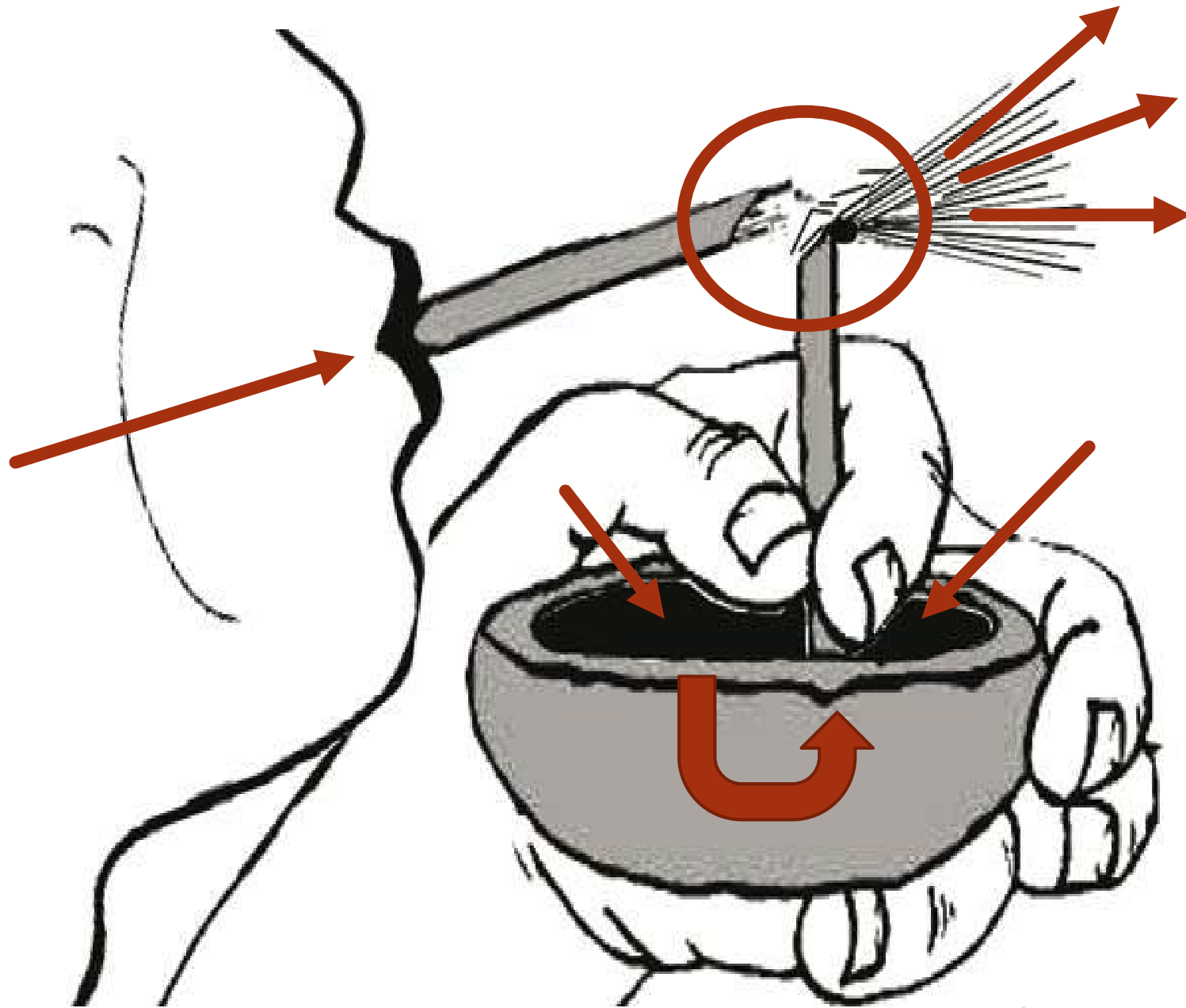
Higher speed



Higher pressure



Daniel
Bernoulli
(1700-1782)



**THANKS FOR YOUR
ATTENTION**