## PYRAMID SCIENCE

## ON ALMOST EVERY CONTINENT EXIST PYRAMIDS AND PYRAMIDS-LIKE MONUMENTS

At their fields, specialists investigate them: geologically, archaeologically and architecturally

At the academy, specialists research their: terms, properties, concepts and local scenarios

## THESE SUBJECTS ARE THE FUNDAMENTALS OF

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## GEOMETRICAL

## Пррація Pyramis Pyramid



These words in Greek, Latin and modern languages
Mean: a polygonal base and sloping sides meeting at an apex In other words a geometrical shape
 In the Ancient Egyptian Writing the hieroglyph is "MR" a $\mathbf{2}$ dimensional form of the classical shape of a pyramid

## LINGUISTIC

## IN OTHER LANGUAGES <br> the geometrical meaning in some languages is absent

In Arabic:
the word is haram هرم it means "very old " from" لسان العرب"

In Mexico:
"las piramides" which is Latin; they are are called "huaca" also meaning temple

## In Chinese:

Jin' zi ta (jīnzìtǎ), means "a tower with golden symbols"
Jiao zhui, means "prism" which could be geometrical, but the literal translation is "a horn for drilling the ground"

## COMPONENTS




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## PROPERTIES <br> （2）






























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## PROPERTIES, PYRAMIDS fromTUMULI

## CLASSICAL SCOPE: BASE, HEIGHT, AND THE EXCESSIVE

The pyramid base contains the circle of the mound (Red pyramid) The circle of the mound contains the pyramid base (Khafra pyramid) In these cases the height of a pyramid is determined by the angle of repose of the mound A relationship between the base length or diagonal and the height $=<1 / 2$ side or diagonal

But will exceeded in height, with smaller pyramids the diagonal $=>$ height More narrowing of the base and increasing of the height, a pyramid becomes a TOWER Diminishing corners with a circular base, a pyramid becomes a MOUND

The pyramid appears narrow along the axis


The pyramid appears broad along the diagonal

## PROPERTIES CLASSICAL

THE CLASSICAL SHAPE OF A PYRAMID IS MADE UP OF 11 STRAIGHT LINES:
4 straight lines at the base, equal in length 4 straight lines at the corners, equal in length
2 straight lines, diagonals of the base, equal in length
1 straight line from the center of the base to the apex


## PERFECTION <br> P

- Level base
- Plane sides
- Sharp corners
- Pin point apex

The pyramidions of Amenemhat III and Khendjer
of their pyramids their perfection extended all the wa
at the apex of their pyramids their perfection extended all the way to the base

## PROPERTIES CLASSICAL <br> PROPERTIES CLASSICAL

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- Sharp corners


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Memorial of the civil war

Richmond Virginia

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## PROPERTIES CLASSICAL


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## BEYOND LIMITS BUT ACCEPTABLE

Rounded corners but short of being mounds


The truncated pyramid of king Khuwi at Dara

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## BEYOND LIMITS BUT ACCEPTABLE

## The base is rectangular not square



Temple of inscriptions at Palenque







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## Step Pyramids



## BEYOND LIMITS BUT ACCEPTABLE





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## PYRAMID-LIKE MONUMENTS



Ziggurats of Mesopotamia


PYRAMID-LIKE MONUMENTS
BEYOND LIMITS IN SHAPE The base is circular - no corners - no flat sides: Mou
BEYOND LIMITS IN SHAPE The base is circular - no corners - no flat sides: Mound, Tumuli, Stupas and Barrows





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## PYRAMID-LIKE MONUMENTS

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## HISTORICAL

SQUARE TO RECTANGULAR MASTABA; 4 TO 6 STEP PYRAMID; ACTIVE SERVICE, NEGLECT, DESTRUCTION, DISCOVERY and RESTORATION


The Step pyramid at Saqqara (after J-Ph. Laue 1962)

## ARCHTECTURAL RECONSTRUCTION POSSIBILITIES OF A RUINED PYRAMID

Classical (2 options), bent or stepped


The rock knoll of the Brick pyramid (Lepsius 1) at Abu Rawash

## THE MSP SEILA OPENS UP A NEW ERA IN PYRAMID ASTRAL CULTS

## RELIGIOUS




The 2 stele in the eastern chapel may have been aligned with a Simultaneous meridian
transit of Phecda and Megrez signalling almost accurately due-north in the case of Seila
The 2 stele in the eastern chapel may have been aligned with a Simultaneous meridian
transit of Phecda and Megrez signalling almost accurately due-north in the case of Seila

## ASTRAL ORIENTATION <br> $\qquad$

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## THE MSP AT ELEPHANTINE

Oriented to an important day of the civil calendar

$\sim 161 / 4^{\circ} \pm 3 / 4^{9}$ is the declination of Sunrise at Wepet Renpet ca. $2570 \pm 30$ B.C.

## LOCAL SCENARIOS

## MEXICO <br> CHINA <br> BOSNIA

## local scenario MEXICO

## EXCESSIVE FEATURES WHICH ARE ACCEPTED: MESOAMERICA



Huaca del Sol at Teotihuacán


Huaca de la Luna


Chichén Itzá in the Yucatan


Tikal in Guatemala

## local scenario CHINA



## local scenario BOSNIA

## GIANT PYRAMID HILLS

classical shape - geologically built ; with human intervention?


The pyramid hill Visočica north side


N E corner


N W corner


Image by the artist

## GREATEST OF ALL



## AMAZING! EVEN BY POBOTS

The great pyramid of Khufu was built of limestone blocks of an average volume of one $\mathrm{m}^{3}$ weighing 2.5 metric tons 2.6 million blocks .

This figure comes from the volume of a pyramid being base ${ }^{2} \mathrm{X}$ height $/ 3,\left(230^{2} \times 148 / 3\right)$
2,600,000 m ${ }^{3}$.
The Turin Canon tells us that Khufu reigned for
23 years.
Assuming that the pyramid was built every day of the 23 years of his reign, then we have of building 8395 days .
Working hours for humans should be 10 hours a day, then we have 83,950 hours or 5,037,000 minutes.
To install 2,600,000 blocks in 5,037,000 minutes by robots they have to install

## ONE BLOCK, EVERY, LESS THAN TWO MINUTES. (1.94 MIN)

By man power the actual procedure was not like this; it had to be much faster rate at the start and slower towards the finish

## SAFETY OF LOGISTICS



## An example at the dam at Wadi Garawi



The dam at Wadi Garawi was built to prevent flash floods


## CONCLUSION

This brief browsing of pyramid science:
INVESTIGATING: geology, archaeology and architecture and

RESEARCHING: terms, properties, concepts and local scenarios

## SHOWS THAT:

AROUND THE WORLD THERE ARE HUNDREDS OF

## PYRAMIDS AND PYRAMID-LIKE MONUMENTS

They need to be brought to light.

