

Decolonising history: Goodbye Euclid!

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Decolonising our Universities

A question

- ▶ USM and Multiversity organized a seminar on "‘Decolonising our Univerisities’" last month.

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Why decolonise?

Euclid: the story

Euclid: the
evidence

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A question

- ▶ USM and Multiversity organized a seminar on "‘Decolonising our Univerisities’" last month.
- ▶ Widely reported and discussed in the press. Someone asked

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A question

- ▶ USM and Multiversity organized a seminar on "‘Decolonising our Univerisities’" last month.
- ▶ Widely reported and discussed in the press. Someone asked
- ▶ Q. Why such a seminar 40 years after independence?

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First clarification

- ▶ **A.** 40 years of experience shows that it was **not** enough to pull down the flag.

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First clarification

- ▶ **A.** 40 years of experience shows that it was **not** enough to pull down the flag.
- ▶ Colonial power flowed from institutions, not the flag.

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First clarification

- ▶ **A.** 40 years of experience shows that it was **not** enough to pull down the flag.
- ▶ Colonial power flowed from institutions, not the flag.
- ▶ Those institutions remain: in the legal, political, and educational system.

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First clarification

- ▶ **A.** 40 years of experience shows that it was **not** enough to pull down the flag.
- ▶ Colonial power flowed from institutions, not the flag.
- ▶ Those institutions remain: in the legal, political, and educational system.
- ▶ Those institutions were blindly accepted as superior.

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First clarification: contd

- ▶ Typical comment:

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First clarification: contd

- ▶ Typical comment:
- ▶ Opposing blind acceptance = advocating blind rejection of the West.

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First clarification: contd

- ▶ Typical comment:
- ▶ Opposing blind acceptance = advocating blind rejection of the West.
- ▶ Response: the opposite of blind acceptance is **not** blind rejection.

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First clarification: contd

- ▶ Typical comment:
- ▶ Opposing blind acceptance = advocating blind rejection of the West.
- ▶ Response: the opposite of blind acceptance is **not** blind rejection.
- ▶ It is **critical re-examination**.

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First clarification: contd

- ▶ Typical comment:
- ▶ Opposing blind acceptance = advocating blind rejection of the West.
- ▶ Response: the opposite of blind acceptance is **not** blind rejection.
- ▶ It is **critical re-examination**.
- ▶ No critical re-examination done so far. High time to do so.

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Second clarification

- ▶ Colonialism was **not** mere physical conquest.

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Second clarification

- ▶ Colonialism was **not** mere physical conquest.
- ▶ It involved a **conquest of the mind**

Decolonising our Universities

Second clarification

- ▶ Colonialism was **not** mere physical conquest.
- ▶ It involved a **conquest of the mind**
- ▶ or mind control.

How the church controlled minds

- ▶ **False history** was a key instrument used by the church for mind control.

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How the church controlled minds

- ▶ **False history** was a key instrument used by the church for mind control.
- ▶ It works just like ordinary lies

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How the church controlled minds

- ▶ **False history** was a key instrument used by the church for mind control.
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- ▶ used to manipulate a person's behaviour.

How the church controlled minds

- ▶ **False history** was a key instrument used by the church for mind control.
- ▶ It works just like ordinary lies
- ▶ used to manipulate a person's behaviour.
- ▶ False history = systematic lies (which are **maintained**).

False history

of Western origins of science

- ▶ On this false history, science was a 100% Western product.

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False history

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- ▶ On this false history, science was a 100% Western product.
- ▶ This was used to glorify the West as superior

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False history

of Western origins of science

- ▶ On this false history, science was a 100% Western product.
- ▶ This was used to glorify the West as superior
- ▶ and belittle all others as inferior.

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Kant's racism

- ▶ The philosopher Immanuel Kant said

Kant's racism

- ▶ The philosopher Immanuel Kant said
- ▶ Mr. Hume challenges anyone to cite a simple example in which a Negro has shown talents . . . among the hundreds of thousands of blacks . . . although many of them have even been set free, still not a single one was ever found who presented anything great in art or science. . . they must be driven apart from each other with thrashings.

False history and colonial institutions

- ▶ False history led to

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False history and colonial institutions

- ▶ False history led to
- ▶ false belief in Western superiority

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False history and colonial institutions

- ▶ False history led to
- ▶ false belief in Western superiority
- ▶ and the blind adoption of colonial institutions as better.

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Euclid: the story

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Ram Mohun Roy and Macaulay

- ▶ E.g. various European nations tried to conquer India but failed miserably for 250 years from 1498.

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Ram Mohun Roy and Macaulay

- ▶ E.g. various European nations tried to conquer India but failed miserably for 250 years from 1498.
- ▶ The battle of Plassey was won by simple bribery in 1757.

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Ram Mohun Roy and Macaulay

- ▶ E.g. various European nations tried to conquer India but failed miserably for 250 years from 1498.
- ▶ The battle of Plassey was won by simple bribery in 1757.
- ▶ But by 1823 Ram Mohun Roy was convinced of Western superiority

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Ram Mohun Roy and Macaulay

- ▶ E.g. various European nations tried to conquer India but failed miserably for 250 years from 1498.
- ▶ The battle of Plassey was won by simple bribery in 1757.
- ▶ But by 1823 Ram Mohun Roy was convinced of Western superiority
- ▶ and pleaded for Western education later imposed by Macaulay.

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Training for loyalty

like dogs

- ▶ Western education trains people like dogs, for loyalty to the West.

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Training for loyalty

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- ▶ Western education trains people like dogs, for loyalty to the West.
- ▶ E.g. Dante condemns Paigambar Mohammad to the Christian hell and describes his torture there in sadistic detail. (Divine Comedy)

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Training for loyalty

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- ▶ Western education trains people like dogs, for loyalty to the West.
- ▶ E.g. Dante condemns Paigambar Mohammad to the Christian hell and describes his torture there in sadistic detail. (Divine Comedy)
- ▶ The Western educated are taught to revere this **filth** from Dante, and Kant etc. as “great”.

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- ▶ The Western educated are taught to revere this **filth** from Dante, and Kant etc. as “great”.
- ▶ After that, in India (and Iran) they put up signs stating that “dogs and Indians not allowed”.

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Blinkering for control

like horses

- ▶ Western education also blinkers people, like horses

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Why decolonise?

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Blinkering for control

like horses

- ▶ Western education also blinkers people, like horses
- ▶ by keeping them ignorant of their own culture.

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Blinkering for control

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- ▶ Western education also blinkers people, like horses
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- ▶ E.g. indigenous calendar.

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Blinkering for control

like horses

- ▶ Western education also blinkers people, like horses
- ▶ by keeping them ignorant of their own culture.
- ▶ E.g. indigenous calendar.
- ▶ (Indian calendar, which marks the rainy season, still superior to the Gregorian.)

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Why decolonise?

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Interim summary

- ▶ False history led to the false belief in Western superiority

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Interim summary

- ▶ False history led to the false belief in Western superiority
- ▶ and the blind acceptance of Western institutions

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Why decolonise?

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Interim summary

- ▶ False history led to the false belief in Western superiority
- ▶ and the blind acceptance of Western institutions
- ▶ which reinforced loyalty to the West, and ignorance of one's own culture.

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Why decolonise?

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Decolonising history

the first step

- ▶ Therefore, decolonising history must be the first step

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Decolonising history

the first step

- ▶ Therefore, decolonising history must be the first step
- ▶ to enable critical re-examination of all colonial institutions.

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Decolonising history

the first step

- ▶ Therefore, decolonising history must be the first step
- ▶ to enable critical re-examination of all colonial institutions.
- ▶ (Note: not a single university department for history and philosophy of science in all India, in 60 years since independence, and despite repeated requests.)

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The colonial history of science

- ▶ According to current history all science was the work of the West.

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Why decolonise?

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The colonial history of science

- ▶ According to current history all science was the work of the West.
- ▶ Pick up any Western book or encyclopedia.

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The colonial history of science

- ▶ According to current history all science was the work of the West.
- ▶ Pick up any Western book or encyclopedia.
- ▶ It will talk of Greeks, and then move on to post-renaissance Europe.

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Contrary to commonsense

- ▶ This history is contrary to commonsense.

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Contrary to commonsense

- ▶ This history is contrary to commonsense.
- ▶ If math and science are universal, they should have developed the same everywhere.

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Contrary to commonsense

- ▶ This history is contrary to commonsense.
- ▶ If math and science are universal, they should have developed the same everywhere.
- ▶ so, either Western math and science are culturally loaded

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Contrary to commonsense

- ▶ This history is contrary to commonsense.
- ▶ If math and science are universal, they should have developed the same everywhere.
- ▶ so, either Western math and science are culturally loaded
- ▶ or they could not have developed in the West alone.

Result of re-examination

- ▶ If Western history of science is re-examined objectively

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Result of re-examination

- ▶ If Western history of science is re-examined objectively
- ▶ the result is that it is stood on its head.

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Result of re-examination

- ▶ If Western history of science is re-examined objectively
- ▶ the result is that it is stood on its head.
- ▶ That includes Euclid, Ptolemy, Copernicus, and Newton.

Is Science Western in Origin?

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Aim of this talk

The Elements

- ▶ However, today I want to restrict myself to just one person

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Aim of this talk

The Elements

- ▶ However, today I want to restrict myself to just one person
- ▶ Euclid

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Aim of this talk

The Elements

- ▶ However, today I want to restrict myself to just one person
- ▶ Euclid
- ▶ to allow time for more details.

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Why decolonise?

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Aim of this talk

The Elements

- ▶ However, today I want to restrict myself to just one person
- ▶ Euclid
- ▶ to allow time for more details.
- ▶ If the story of Euclid changes, so will math teaching today. (But will not go into that.)

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Euclid

Father of geometry?

- ▶ Euclid is supposedly the father of geometry

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Euclid

Father of geometry?

- ▶ Euclid is supposedly the father of geometry
- ▶ and the author of the *Elements* of geometry

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Euclid

Father of geometry?

- ▶ Euclid is supposedly the father of geometry
- ▶ and the author of the *Elements* of geometry
- ▶ which uses 47 propositions to prove the “Pythagorean theorem”.

Euclid and the deductive method

- ▶ Though Greeks learnt geometry (like everything else) from Egyptians

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Euclid and the deductive method

- ▶ Though Greeks learnt geometry (like everything else) from Egyptians
- ▶ Euclid supposedly invented “the deductive method”

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Why decolonise?

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Euclid and the deductive method

- ▶ Though Greeks learnt geometry (like everything else) from Egyptians
- ▶ Euclid supposedly invented “the deductive method”
- ▶ and gave proper proofs of all those propositions.

Deduction and math

- ▶ This “deductive method” supposedly characterizes math today.

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Deduction and math

- ▶ This “deductive method” supposedly characterizes math today.
- ▶ According to the historian Rouse Ball this was known only to the Greek **race**.

Rouse Ball on race and deduction

- ▶ The history of mathematics cannot . . . be traced back before . . . the . . . Greeks . . . Though all early **races** . . . knew something of numeration yet the rules . . . were neither deduced from nor did they form part of any science.

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Euclid of Megara?

- ▶ From **where** was Euclid?

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Euclid of Megara?

- ▶ From **where** was Euclid?
- ▶ The story gets unclear at this point.

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Euclid of Megara?

- ▶ From **where** was Euclid?
- ▶ The story gets unclear at this point.
- ▶ Today people say Euclid was from Alexandria in Africa.

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Euclid of Megara?

- ▶ From **where** was Euclid?
- ▶ The story gets unclear at this point.
- ▶ Today people say Euclid was from Alexandria in Africa.
- ▶ But for over 500 years people believed he was from Megara in Greece.

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Euclid of Megara?

- ▶ From **where** was Euclid?
- ▶ The story gets unclear at this point.
- ▶ Today people say Euclid was from Alexandria in Africa.
- ▶ But for over 500 years people believed he was from Megara in Greece.
- ▶ The first English translation of the *Elements* in 1570 states that he was from Megara.

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THE ELEMENTS OF GEOMETRIE
of the most auncient Philosopher EVCLIDE of Megara

*Faithfully (now first) translated into the Englishe toung, by
H. Billingsley, Citizen of London. Whereunto are annexed
certaine Scholies, Annotations, and Inuentions, of the best
Mathematiciens, both of time past, and in this our age.
Imprinted at London by John Daye.*

Figure: The author of the *Elements* is identified with Euclid of Megara on the title page its first English translation in 1570.

Euclid of Megara

contd

- ▶ For 500 years Western historians were wrong about Euclid

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Euclid of Megara

contd

- ▶ For 500 years Western historians were wrong about Euclid
- ▶ because there was **no evidence** where he was from.

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Euclid of Megara

contd

- ▶ For 500 years Western historians were wrong about Euclid
- ▶ because there was **no evidence** where he was from.
- ▶ Today, they say confidently that he was from Alexandria!

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Euclid of Megara

contd

- ▶ For 500 years Western historians were wrong about Euclid
- ▶ because there was **no evidence** where he was from.
- ▶ Today, they say confidently that he was from Alexandria!
- ▶ instead of admitting the lack of evidence.

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How many books did Euclid write?

- ▶ According to Western historians, Euclid wrote 13 books of the *Elements*.

How many books did Euclid write?

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- ▶ Of these the first book is the most famous.

How many books did Euclid write?

- ▶ According to Western historians, Euclid wrote 13 books of the *Elements*.
- ▶ Of these the first book is the most famous.
- ▶ How do we know Euclid wrote this book?

Did Euclid write the *Elements*?

- ▶ Normally, when we say x is the author of a book

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Did Euclid write the *Elements*?

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- ▶ we expect manuscripts in which x is named as the author.

Did Euclid write the *Elements*?

- ▶ Normally, when we say x is the author of a book
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- ▶ Latin translations of the *Elements* from Arabic were prepared in Europe during the 12th c. Crusades.

Did Euclid write the *Elements*?

- ▶ Normally, when we say x is the author of a book
- ▶ we expect manuscripts in which x is named as the author.
- ▶ Latin translations of the *Elements* from Arabic were prepared in Europe during the 12th c. Crusades.
- ▶ But **Greek manuscripts of the *Elements* do not mention Euclid at all.**

Did Euclid write the *Elements*?

- ▶ Normally, when we say x is the author of a book
- ▶ we expect manuscripts in which x is named as the author.
- ▶ Latin translations of the *Elements* from Arabic were prepared in Europe during the 12th c. Crusades.
- ▶ But **Greek manuscripts of the *Elements* do not mention Euclid at all.**
- ▶ They mention Theon of Alexandria (4th c. CE) who lived 700 years after Euclid.

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Greek manuscripts say author was Theon

- ▶ As Thomas Heath, a key authority on Euclid, explains¹

All our Greek texts of the Elements up to a century ago . . . purport in their titles to be either 'from the edition of Theon' . . . or 'from the lectures of Theon'.

¹Thomas Heath, *A History of Greek Mathematics*, Dover, New York, 1981, p. 360.

The mystery deepens

The anonymous author

- ▶ Euclid's name is not mentioned even in the commentaries on the *Elements*?

Decolonising
history: Goodbye
Euclid!

C. K. Raju

Why decolonise?

Euclid: the story

Euclid: the
evidence

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- ▶ Euclid's name is not mentioned even in the commentaries on the *Elements*?
- ▶ Heath admits

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The mystery deepens

The anonymous author

- ▶ Euclid's name is not mentioned even in the commentaries on the *Elements*?
- ▶ Heath admits
- ▶ because the Greek commentaries “commonly speak of the writer of the *Elements* instead of using his name.”

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Did “Euclid” exist?

- ▶ So, we know nothing about Euclid.

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Did “Euclid” exist?

- ▶ So, we know nothing about Euclid.
- ▶ And the available evidence suggests that the *Elements* was authored by someone else.

Did “Euclid” exist?

- ▶ So, we know nothing about Euclid.
- ▶ And the available evidence suggests that the *Elements* was authored by someone else.
- ▶ Accordingly, at an international conference in 2000, I declared Euclid did not exist.

He who knows not he knows not

- ▶ A journalist reported in *Nepal Times*.

He who knows not he knows not

- ▶ A journalist reported in *Nepal Times*.
- ▶ one Prof CK Raju . . . said . . . Euclid was a manufactured personality . . .

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- ▶ A journalist reported in *Nepal Times*.
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- ▶ He added: “for people like Raju, the evidence does not matter” .
- ▶ What was his evidence?

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- ▶ A journalist reported in *Nepal Times*.
- ▶ one Prof CK Raju . . . said . . . Euclid was a manufactured personality . . .
- ▶ He added: “for people like Raju, the evidence does not matter” .
- ▶ What was his evidence?
- ▶ He had checked with Google!

He who knows he knows not

- ▶ A couple of years later, I raised the same point in a mailing list.

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He who knows he knows not

- ▶ A couple of years later, I raised the same point in a mailing list.
- ▶ One of the mathematicians was upset.
- ▶ As an academic he could not appeal to Google.
- ▶ So he asked the authorities to step in.

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Why decolonise?

Euclid: the story

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He who knows he knows not

contd

C.K. Raju states that historical evidence on Euclid is very meagre, and that much has been ascribed to him with insufficient reason. Could one of the historians on this group kindly indicate where one may learn what is known...? ²

²[http:](http://mathforum.org/kb/message.jspa?messageID=1175733&tstart=0)

[//mathforum.org/kb/message.jspa?messageID=1175733&tstart=0](http://mathforum.org/kb/message.jspa?messageID=1175733&tstart=0), Historia Mathematica discussion list, 9 Nov 2002.

Decolonising
history: Goodbye
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Euclid: the story

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He who knows he knows

- ▶ The late David Fowler another authority on Greek mathematics responded.

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Why decolonise?

Euclid: the story

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- ▶ <<What is known at present 1. about the person 'Euclid'>>

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- ▶ The late David Fowler another authority on Greek mathematics responded.
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He who knows he knows

- ▶ The late David Fowler another authority on Greek mathematics responded.
- ▶ <<What is known at present 1. about the person 'Euclid'>>
- ▶ **Nothing**
- ▶ <<2. ... on the origin of the texts of which he is (or was) supposed to be the author? >>

He who knows he knows

- ▶ The late David Fowler another authority on Greek mathematics responded.
- ▶ <<What is known at present 1. about the person 'Euclid'>>
- ▶ **Nothing**
- ▶ <<2. ... on the origin of the texts of which he is (or was) supposed to be the author? >>
- ▶ Almost all of our texts come from Constantinople, the earliest from 888 AD, closer [in] time to us than to the supposed date of Euclid!

Try 3

- ▶ There is no evidence but Indian school texts show pictures of Euclid as a white-skinned person.

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Why decolonise?

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Try 3

- ▶ There is no evidence but Indian school texts show pictures of Euclid as a white-skinned person.
- ▶ In fact they show pictures of lots of white skinned Greeks from Alexandria, in Africa.

Try 3

- ▶ There is no evidence but Indian school texts show pictures of Euclid as a white-skinned person.
- ▶ In fact they show pictures of lots of white skinned Greeks from Alexandria, in Africa.
- ▶ After reading these texts, my son asked “Why do all Greeks look alike?”

The color of Euclid's skin

- ▶ Obviously they are not real images.

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history: Goodbye
Euclid!

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Why decolonise?

Euclid: the story

Euclid: the
evidence

The color of Euclid's skin

- ▶ Obviously they are not real images.
- ▶ They represent a Caucasian stereotype in the artists imagination.

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Euclid: the story

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The color of Euclid's skin

- ▶ Obviously they are not real images.
- ▶ They represent a Caucasian stereotype in the artists imagination.
- ▶ According to some accounts, Euclid was from Tyre, a black enslaved by Alexander, who was Greek only by nationality.
item4-¿So, I asked the Indian authorities, “What evidence do you have for the color of Euclid’s skin?”

NCERT response

Why do you need evidence?

- ▶ NCERT is the apex Indian body which produces those school texts.

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NCERT response

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- ▶ NCERT is the apex Indian body which produces those school texts.
- ▶ The head of their math department came to my symposium.

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- ▶ The head of their math department came to my symposium.
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NCERT response

Why do you need evidence?

- ▶ NCERT is the apex Indian body which produces those school texts.
- ▶ The head of their math department came to my symposium.
- ▶ He asked why do you need primary evidence?
- ▶ If it is written in some Western book, that is good enough!

Decolonising
history: Goodbye
Euclid!

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Why decolonise?

Euclid: the story

Euclid: the
evidence

The official evidence

- ▶ So, what is the evidence for “Euclid”?

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history: Goodbye
Euclid!

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Why decolonise?

Euclid: the story

Euclid: the
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The official evidence

- ▶ So, what is the evidence for “Euclid”?
- ▶ It is a passage from **another** book.

The official evidence

- ▶ So, what is the evidence for “Euclid”?
- ▶ It is a passage from **another** book.
- ▶ A *Commentary on the Elements* by Proclus (5th c. philosopher).

The key passage

Not much younger than these [pupils of Plato] is Euclid, who put together the Elements, . . . bringing to irrefutable demonstration the things which had been only loosely proved by his predecessors. This man [must have] lived in the time of the first Ptolemy; for Archimedes, who followed closely the first [Ptolemy? book?] makes mention of Euclid,

The sources of the passage

- ▶ It provides **new** information about “Euclid”, unknown to earlier historians, for it says

All those who have written histories [of geometry] bring to this point their account of the development of this science. *Not long after these men [pupils of Plato] came Euclid. . .*

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All those who have written histories [of geometry] bring to this point their account of the development of this science. *Not long after these men [pupils of Plato] came Euclid. . .*

- ▶ Proclus came 800 years after “Euclid”. Why did “Euclid” remain unknown for so long?

The problem of papyrus technology

- ▶ Even in these days it would be difficult to source a book from 800 years ago.

Decolonising
history: Goodbye
Euclid!

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Why decolonise?

Euclid: the story

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The problem of papyrus technology

- ▶ Even in these days it would be difficult to source a book from 800 years ago.
- ▶ Those days, books used papyrus which was fragile and crumbled.

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- ▶ Those days, books used papyrus which was fragile and crumbled.
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- ▶ Why would anyone fund the copying of books by an unknown author.

The problem of papyrus technology

- ▶ Even in these days it would be difficult to source a book from 800 years ago.
- ▶ Those days, books used papyrus which was fragile and crumbled.
- ▶ Books had to be repeatedly copied out to survive.
- ▶ Why would anyone fund the copying of books by an unknown author.
- ▶ And if his books were copied, why did Euclid remain unknown for 800 years?

The date of the passage

- ▶ The actual manuscript of Proclus' book comes another 800 years after Proclus,

The date of the passage

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The date of the passage

- ▶ The actual manuscript of Proclus' book comes another 800 years after Proclus,
- ▶ for it is on paper, not papyrus,
- ▶ and paper became common in Europe only after the 13th c.
- ▶ How do we know that passage was written by Proclus?

The Archimedes citation

- ▶ The passage claims Archimedes cited Euclid.

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- ▶ For it was not the custom in Archimedes' time to make such citations.

The Archimedes citation

- ▶ The passage claims Archimedes cited Euclid.
- ▶ Only one citation (to the *Elements*, not Euclid) is found in one manuscript attributed to Archimedes from the 13th c.
- ▶ That citation is known to be spurious.
- ▶ For it was not the custom in Archimedes' time to make such citations.
- ▶ and such citations should also have been made at other places.

Why the Proclus passage is spurious

- ▶ But if the Archimedes citation is a later-day interpolation.

Decolonising
history: Goodbye
Euclid!

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Why decolonise?

Euclid: the story

Euclid: the
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Why the Proclus passage is spurious

- ▶ But if the Archimedes citation is a later-day interpolation.
- ▶ and the author of the Proclus passage knew about it.

Why the Proclus passage is spurious

- ▶ But if the Archimedes citation is a later-day interpolation.
- ▶ and the author of the Proclus passage knew about it.
- ▶ then the “Proclus passage” itself must be from even later.

Why the Proclus passage is spurious

- ▶ But if the Archimedes citation is a later-day interpolation.
- ▶ and the author of the Proclus passage knew about it.
- ▶ then the “Proclus passage” itself must be from even later.
- ▶ Therefore, the “Proclus passage” is spurious.

The Proclus passage does not fit

Epistemic evidence

- ▶ The Proclus passage is spurious because it does not fit.

Decolonising
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Euclid!

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Why decolonise?

Euclid: the story

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The Proclus passage does not fit

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- ▶ The Proclus passage is spurious because it does not fit.
- ▶ It attributes to Euclid a philosophy of mathematics and proof

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- ▶ It attributes to Euclid a philosophy of mathematics and proof
- ▶ strikingly similar to post-Crusade Christian theology

The Proclus passage does not fit

Epistemic evidence

- ▶ The Proclus passage is spurious because it does not fit.
- ▶ It attributes to Euclid a philosophy of mathematics and proof
- ▶ strikingly similar to post-Crusade Christian theology
- ▶ but entirely different from the one used by Proclus in the rest of the book.

The archaeological evidence

- ▶ Some 4th c. papyri have been recovered from Alexandria.

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- ▶ which resemble the *Elements*

The archaeological evidence

- ▶ Some 4th c. papyri have been recovered from Alexandria.
- ▶ which resemble the *Elements*
- ▶ corresponding roughly to its first sixty lines.

The archaeological evidence

contd.

- ▶ Now Western historians have told us that

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Why decolonise?

Euclid: the story

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The archaeological evidence

contd.

- ▶ Now Western historians have told us that
- ▶ Euclid wrote the book in the –3rd c. CE

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Why decolonise?

Euclid: the story

Euclid: the
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The archaeological evidence

contd.

- ▶ Now Western historians have told us that
- ▶ Euclid wrote the book in the –3rd c. CE
- ▶ and everyone else copied it blindly after that.

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The archaeological evidence

contd.

- ▶ If that were so, a standardied version of the book must have existed.

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Euclid: the story

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The archaeological evidence

contd.

- ▶ If that were so, a standardised version of the book must have existed.
- ▶ The geometry papyri show that this was not true until the 4th c.

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Why decolonise?

Euclid: the story

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The prize

RM 10,000

- ▶ That is finis for Euclid.

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- ▶ Just in case I have left something out

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- ▶ I have offered RM 10,000 for sold evidence of Euclid

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The prize

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- ▶ That is finis for Euclid.
- ▶ Just in case I have left something out
- ▶ I have offered RM 10,000 for sold evidence of Euclid
- ▶ subject to some caveats.

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The caveats

- ▶ "Evidence" means evidence from primary sources.

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- ▶ "Evidence" means evidence from primary sources.
- ▶ Evidence from secondary Western sources
- ▶ or tertiary sources like Wikipedia does not count
- ▶ for their account is being questioned.

The caveats

contd.

- ▶ The manuscripts used as sources must be from the chronological proximity of “Euclid”

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The caveats

contd.

- ▶ The manuscripts used as sources must be from the chronological proximity of “Euclid”
- ▶ or connected by a chain of intermediate manuscripts.

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The caveats

contd.

- ▶ The manuscripts used as sources must be from the chronological proximity of “Euclid”
- ▶ or connected by a chain of intermediate manuscripts.
- ▶ Speculations based on late and accretive post-Crusade manuscripts do not count as evidence.

Decolonising
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Why decolonise?

Euclid: the story

Euclid: the
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Who was the mysterious “author of the Elements”?

- ▶ So, Euclid did not exist

Who was the mysterious “author of the Elements”?

- ▶ So, Euclid did not exist
- ▶ but the *Elements* does.

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Euclid: the story

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Who was the mysterious “author of the Elements”?

- ▶ So, Euclid did not exist
- ▶ but the *Elements* does.
- ▶ It was written sometime between the time of Theon (4th c.) and Proclus (5th c.)

Who was the mysterious “author of the Elements”?

- ▶ So, Euclid did not exist
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- ▶ The most likely candidate is Hypatia.

Who was the mysterious “author of the Elements”?

- ▶ So, Euclid did not exist
- ▶ but the *Elements* does.
- ▶ It was written sometime between the time of Theon (4th c.) and Proclus (5th c.)
- ▶ The most likely candidate is Hypatia.
- ▶ This would also explain why the Greek commentators were afraid to name her.