Reading Between the Lines: Unearthing Structure in Ptolemy’s Geography

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Digital Classicist Work in Progress Seminar
Background
Claudius Ptolemaeus

- Alexandria, c. AD100-c. 168
- The Almagest (astronomy)
- The Tetrabiblos (astrology)
- The Geography
- The Handy Tables
- The Harmonics
- The Optics
Greek Geography

- Thales / Anaximander of Miletus (600 BC)
- Hecataeus of Miletus (500 BC)
- Herodotus of Halicarnassus (450 BC)
- Aristotle / Dicaearchus of Messina (350 BC)
- Eratosthenes of Cyrene (200 BC)
- Hipparchus (150 BC)
Marinos of Tyre

“He has clearly laid his hands on numerous records of research beside those that had come to knowledge still earlier...as can be seen from his publications of the revision of the geographical map, which are numerous.” *Geography* 1.6

“Marinos did not notice these [errors], either because his compilations were so voluminous and treated topics separately, or because he did not have time in his final publication, as he himself says, to draw a map” *Geography* 1.17

*Geography* 1.18
"Guide to Drawing a Map of the World"

Book 1
Theory

Books 2-7.4
Catalogue

Books 7.4-8
Theory, Captions & Maps
The Manuscript

Byzantine Revisions

'X'

- Kitamon 76 41,30
- Anarion 76,50 41,30
- Sigua
- Terua
- ...

Archetype
The Problem
Hypotheses

- The Geography was **intended** to be a living document. But how has this played out?
  - Insertion?
  - Accretion?
  - Conjunction?
  - A combination?
Hypotheses

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Digital publication

- Lacus Curtius website (Bill Thayer)
- Stückelberger & Graßhof 2006. *Ptolemaios: Handbuch der Geographie*
Point Data
Point Data
Point Data
Point Data
Order (NW-SE)
Divisions
What do we know that he knew?
What do we know that he knew?

<table>
<thead>
<tr>
<th>hrs</th>
<th>Longest day</th>
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<tbody>
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- Thule
- Borysthenes
- Tanais
- Hellespont
- Rhodes
- Lower Egypt
- Syene
- Meroe
- Equator
- Ant.-Meroe
- Equator
What do we know that he knew?

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Equator
Anti-Meroe
↓
Syene
Rhodes
Hellespont
Tanais
Borysthenes
Lower Egypt
Meroe
Equator
Anti-Meroe↓
Statistics

Random Count

Precision likelihood
Statistics

Actual Count

Precision likelihood

lat

long
Central Regions

![Bar chart of Baetica Count](image)

- **lat**
- **long**

![Bar chart of Precision likelihood](image)

**Baetica Count**

**Precision likelihood**
Peripheral Regions

India Count

Precision likelihood
Physical

Physical Count

Precision likelihood

lat

long
Islands

Island Count

Precision likelihood

lat

long
Settlements (interior)

Settlement Count

Precision likelihood

lat

long

0 5 10 15 20 25 30 35 40 45 50 55

1/12 1/6 ¼ 1/3 ½ 1

lat long
Fractions
Parallels

Longest day (hrs)

12 13 14 15 16 17 18 19 20

Equator

Meroe

Syene

Lower Egypt

Rhodes

Hellespont

Borysthenes

Thule

Equator

12 13 14 15 16 17 18 19 20
Lines
Lines
Broken lines
Broken lines
Broken lines
Correlations
Correlations
The Diaphragm
The Diaphragm

Sacred Cape
38 1/4, 2 1/2

Baetis Mouth (W)
37 1/6, 5 1/12

Pillars of Hercules
36 1/4, 7 1/2

Caralis
36, 32 1/2

Lilybaeum
36, 37

Pachynus
36 1/3, 40

Tainaros
34 3/4, 50

Rhodes
36, 58 2/3

Issos
36 1/4, 69 1/3
Edges
Edges
Acknowledgments

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- Bill Thayer