



Geog 126: Maps in Science and Society

Colonial Mapping:
the Middle East and Africa

Ralph A. Austen: Mapping Africa: problems of Regional Definition and Colonial/National Boundaries.

<http://fathom.lib.uchicago.edu/1/777777122619/>

- Africa defined by physical and ecological factors
 - Continent surrounded by bodies of water
 - Deserts (Sahara, Namib, Kahahari)
 - Savanna (East, West)
 - Mediterranean (Northern coast, South Africa)
 - Convention divides into Mediterranean and sub-Saharan
 - Med. Africa seen as Maghreb “The West”
 - Also temperate and tropical,
- Varying indigenous representations of space
- Superimposed colonial boundaries
- 37°20' 50"N to 34° 49' 59"S

Physical constraints

- Northern and Northeastern narrow seas
- Atlantic and Indian ocean coasts
- Isolated geographically
- Few natural harbors
- Only short internal rivers (Niger, Congo, Zambezi, below cataracts (navigable 100 miles) well separated
- Sahara a major obstacle (Camel about 1CE)
- Rain forest largely impenetrable and disease prone (e.g. Tsetse, Malaria)

Africa: Regional Divisions

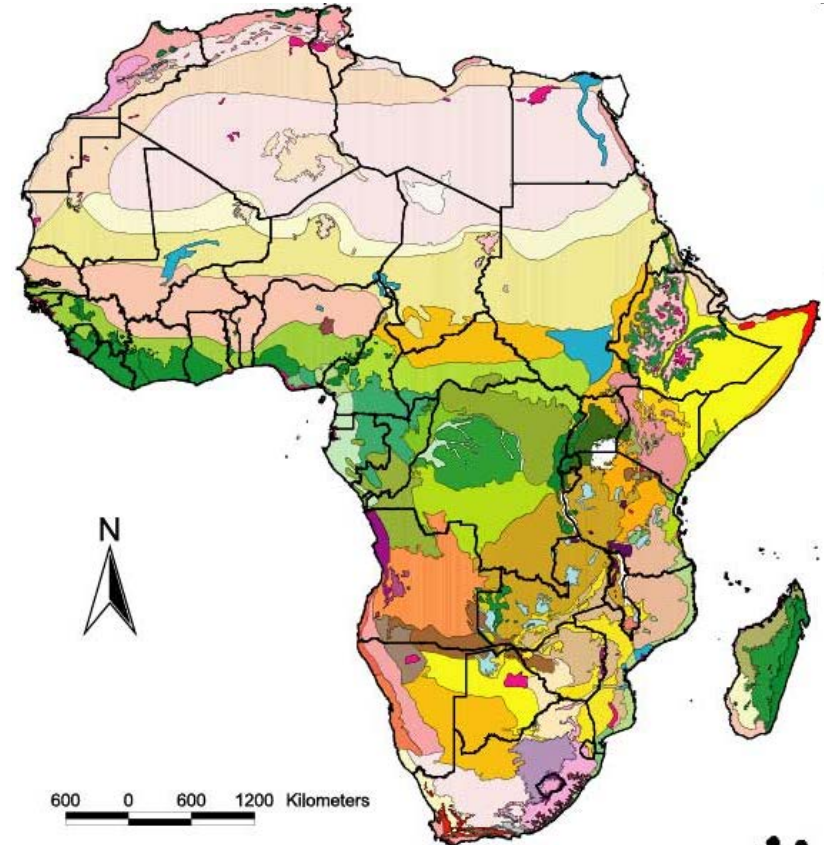
Key

National Boundary

ecoregions

Albertine Rift montane forests
 Atlantic Equatorial coastal forests
 Cameroonian Highlands forests
 Central Congolian lowland forests
 Comoros forests
 Cross-Niger transition forests
 Cross-Sanaga-Bioko coastal forests
 East African montane forests
 Eastern Arc forests
 Eastern Congolian swamp forests
 Eastern Guinean forests
 Ethiopian montane forests
 Granitic Seychelles forests
 Guinean montane forests
 Krusna-Ametole montane forests
 KwaZulu-Cape coastal forest mosaic
 Madagascar lowland forests
 Madagascar subhumid forests
 Maputaland coastal forest mosaic
 Mount Cameroon and Bioko montane forests
 Niger Delta swamp forests
 Nigerian Lowland Forests
 Northeastern Congolian lowland forests
 Northern Zanzibar-Inhambane coastal forest mosaic
 Northwestern Congolian lowland forests
 Sao Tome and Principe moist lowland forests
 Southern Zanzibar-Inhambane coastal forest mosaic
 Western Congolian swamp forests
 Western Guinean lowland forests
 Madagascar dry deciduous forests
 Zambezan Cryptosepalum dry forests
 Angolan Miombo woodlands
 Angolan Mopane woodlands
 Central Zambezan Miombo woodlands
 East Sudanian savanna
 Eastern Miombo woodlands
 Guinean forest-savanna mosaic
 Itigi-Sumbu thicket
 Kalahari Acacia-Baiklaea woodlands
 Mandara Plateau mosaic
 Northern Acacia-Commiphora bushlands and thickets
 Northern Congolian forest-savanna mosaic
 Sahelian Acacia savanna
 Serengeti volcanic grasslands
 Somali Acacia-Commiphora bushlands and thickets
 Southern Acacia-Commiphora bushlands and thickets
 Southern African bushveld
 Southern Congolian forest-savanna mosaic
 Southern Miombo woodlands
 Victoria Basin forest-savanna mosaic
 West Sudanian savanna
 Western Congolian forest-savanna mosaic
 Western Zambezan grasslands
 Zambezan and Mopane woodlands
 Zambezan Baikiaea woodlands
 East African halophytics
 Etosha Pan halophytics

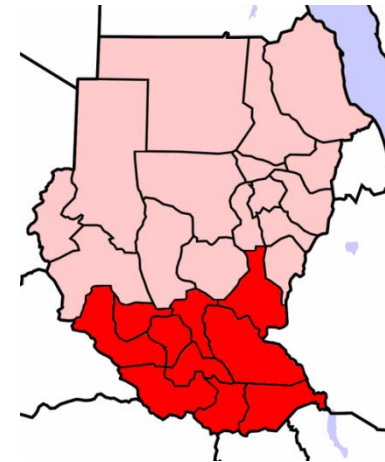
Inner Niger Delta flooded savanna
 Lake Chad flooded savanna
 Saharan flooded grasslands
 Zambezan coastal flooded savanna
 Zambezan flooded grasslands
 Zambezan halophytics
 Angolan montane forest-grassland mosaic
 Angolan scarp savanna and woodlands
 Drakensberg alti-montane grasslands and woodlands
 Drakensberg montane grasslands, woodlands and forests
 East African montane moorlands
 Eastern Zimbabwe montane forest-grassland mosaic
 Ethiopian montane grasslands and woodlands
 Ethiopian montane moorlands
 Highveld grasslands
 Jos Plateau forest-grassland mosaic
 Madagascar ericoid thickets
 Maputaland-Pondoland bushland and thickets
 Ruwenzori-Virunga montane moorlands
 South Malawi montane forest-grassland mosaic
 Southern Rift montane forest-grassland mosaic
 Albany thickets
 Lowland fynbos and reosterveld
 Montane fynbos and reosterveld
 Aldabra Island xeric scrub
 East Saharan montane xeric woodlands
 Eritrean coastal desert
 Ethiopian xeric grasslands and shrublands
 Hobyo grasslands and shrublands
 Kalahari xeric savanna
 Kaokoveld desert
 Madagascar spiny thickets
 Madagascar succulent woodlands
 Masai xeric grasslands and shrublands
 Nama Karoo
 Namib desert
 Namibian savanna woodlands
 Red Sea coastal desert
 Somali montane xeric woodlands
 Succulent Karoo
 Central African mangroves
 East African mangroves
 Guinean mangroves
 Madagascar mangroves
 Southern Africa mangroves
 Mediterranean conifer and mixed forests
 Nile Delta flooded savanna
 Saharan halophytics
 Mediterranean High Atlas juniper steppe
 Mediterranean acacia-argania dry woodlands and succulent thickets
 Mediterranean dry woodlands and steppe
 Mediterranean woodlands and forests
 Atlantic coastal desert
 North Saharan steppe and woodlands
 Sahara desert
 South Saharan steppe and woodlands
 Tibesti-Jebel Uweinat montane xeric woodlands
 West Saharan montane xeric woodlands



Okavango Delta, Botswana



Political

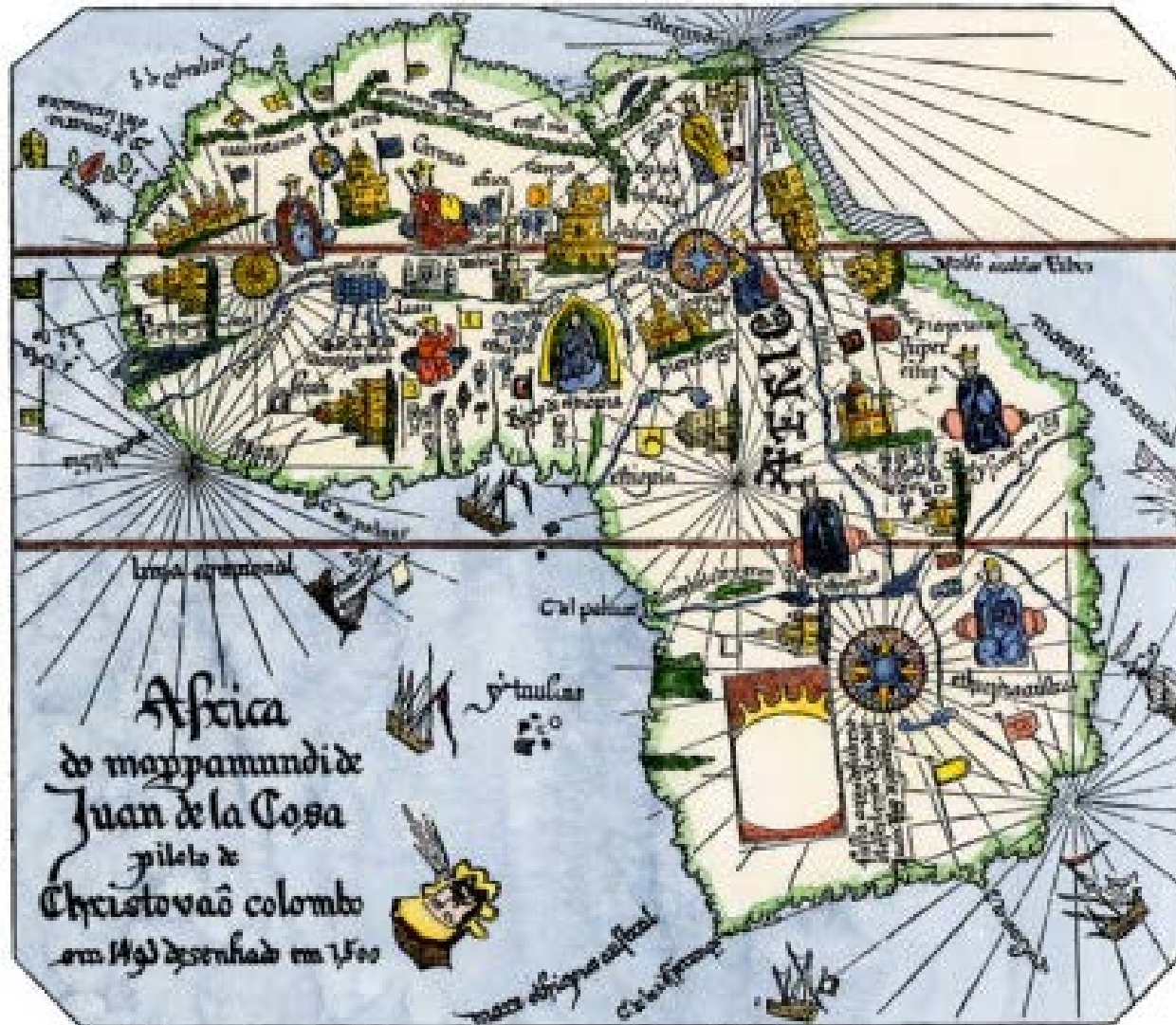


South Sudan, 2011

Jacob d'Angelo and Nicolaus Germanus, 1467 Bavaria

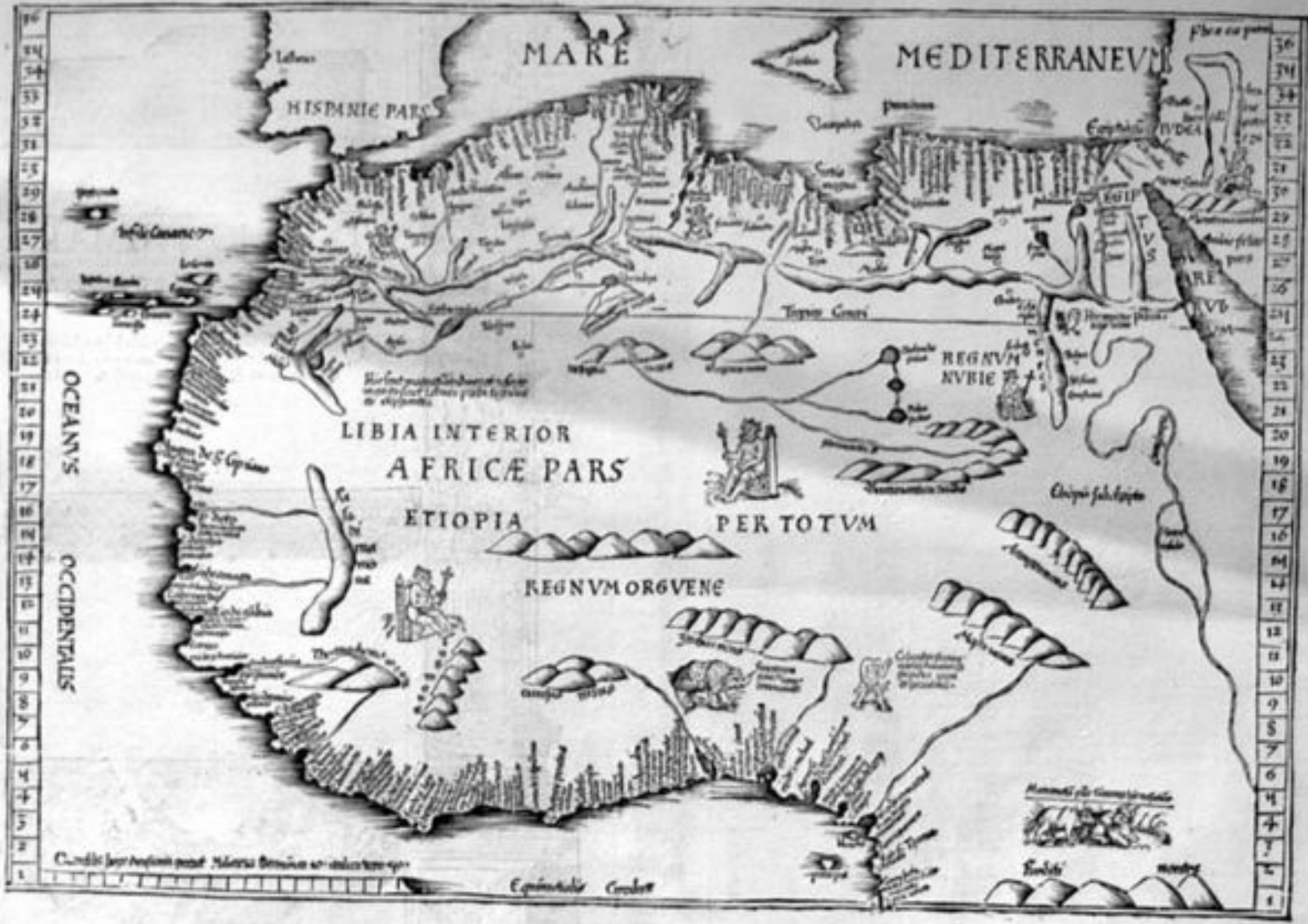


De Gama: Juan de la Cosa, 1500



1522 Dutch

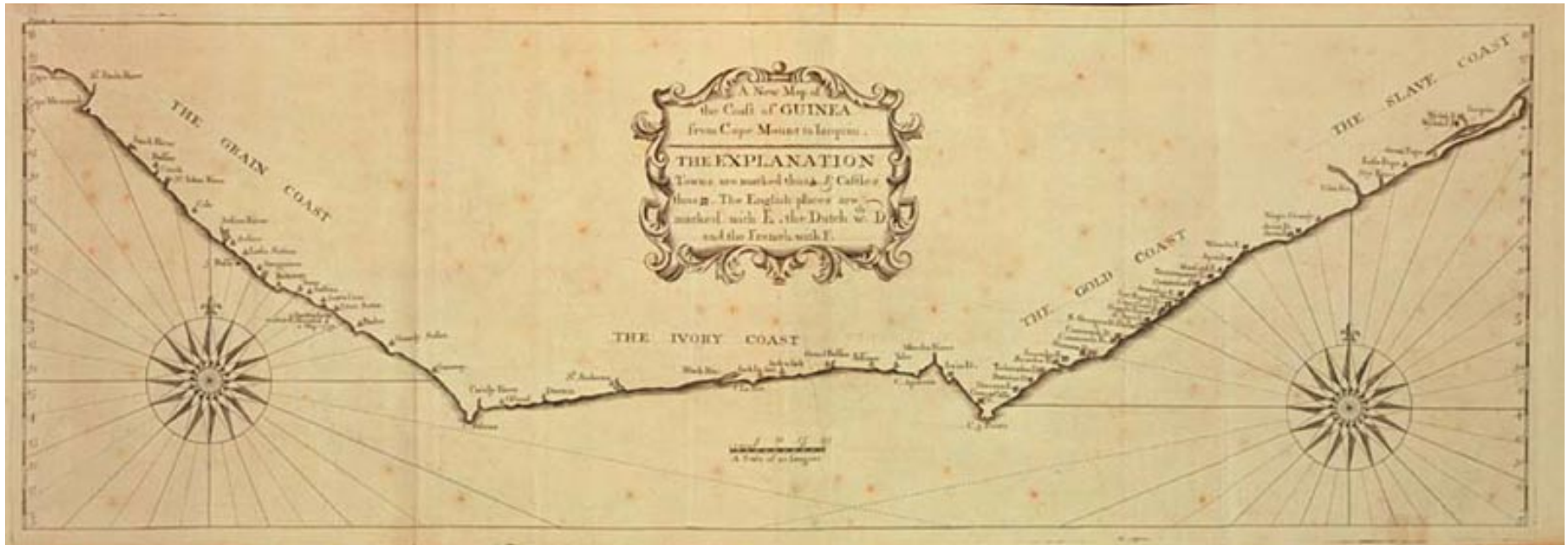




mapmakers: M.Waldseemuller L.Fries
 place and date of publication: Lyons 1522-1535
 medium and colour: woodblock, Uncoloured

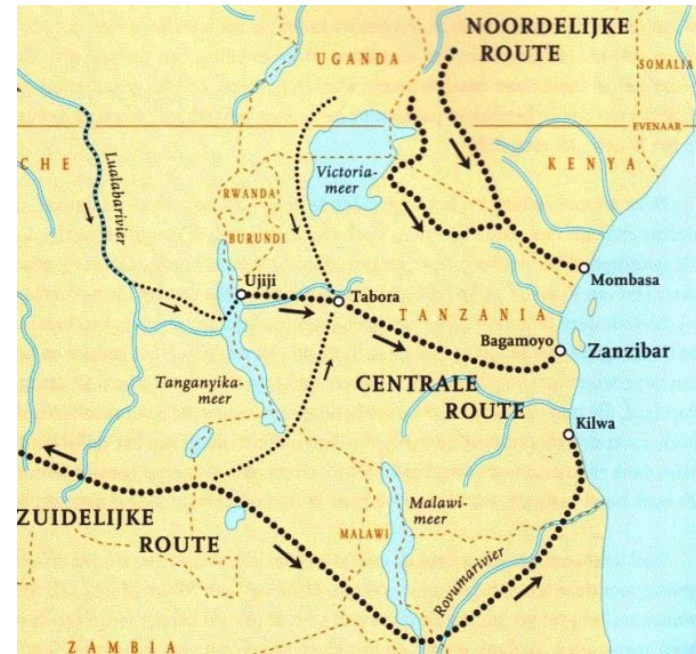
"A New Map of the Coast of Guinea from Cape Mount to Iacquin" appeared in William

Smith's *Thirty Different Drafts of Guinea* (not before 1727)



- The Grain Coast
- The Ivory Coast
- The Gold Coast
- The Slave Coast

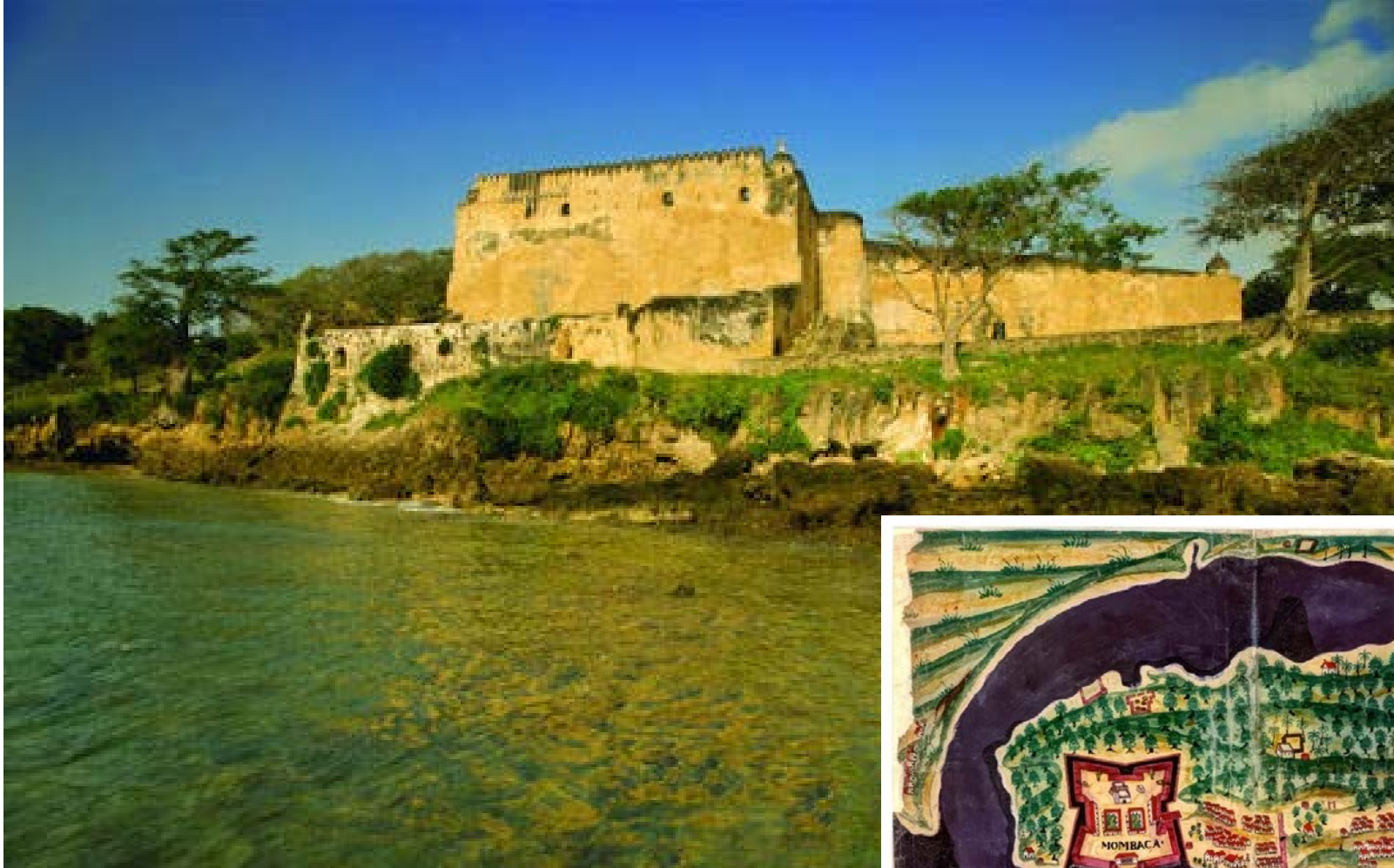
Mombassa



"Diocesis Goanae Processus martyrum de Mombassa"

- 1631 - Portuguese "expelled. Sultan of Mombasa, Dom Jerónimo Chingulia, assassinated the Portuguese governor, reclaimed his Muslim name of Yusuf ibn al-Hasan, and ordered all Christians in the city to convert to Islam
- Portuguese returned from Zanzibar in 1632 and retook Mombassa
- *The Mombasa Rising against the Portuguese, 1631: From Sworn Evidence* (1980)
- Record of the court of inquiry held by the diocese of Mombasa to ascertain whether those who died during the rebellion were martyrs and eligible for canonization as saints.
- The testimonies of eyewitnesses give the historian views of the confrontation between Islam and Christianity and between African and European political powers
- Issues were race and slavery: Who was Christian?

Fort Jesus, Mombasa



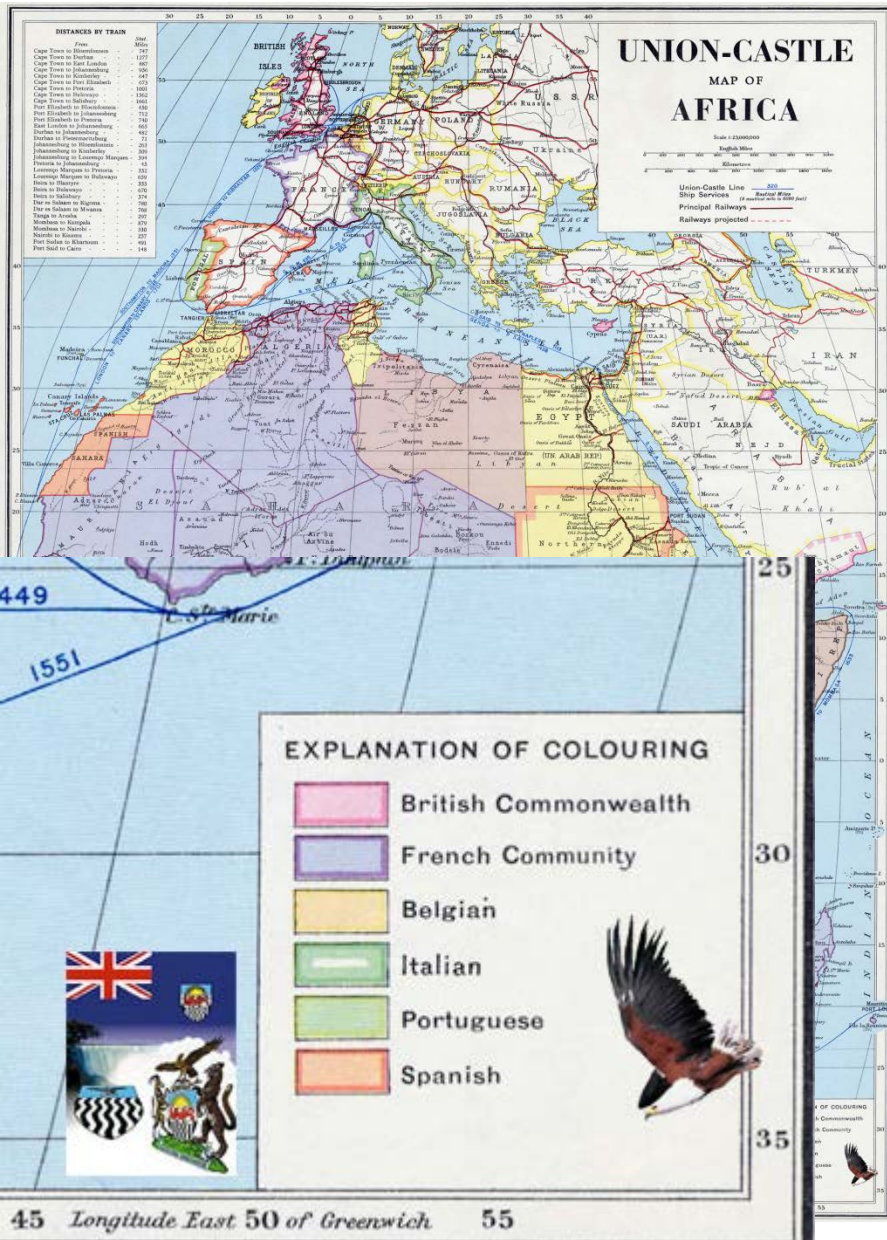
David Livingstone: Explorations 1849 to 1856



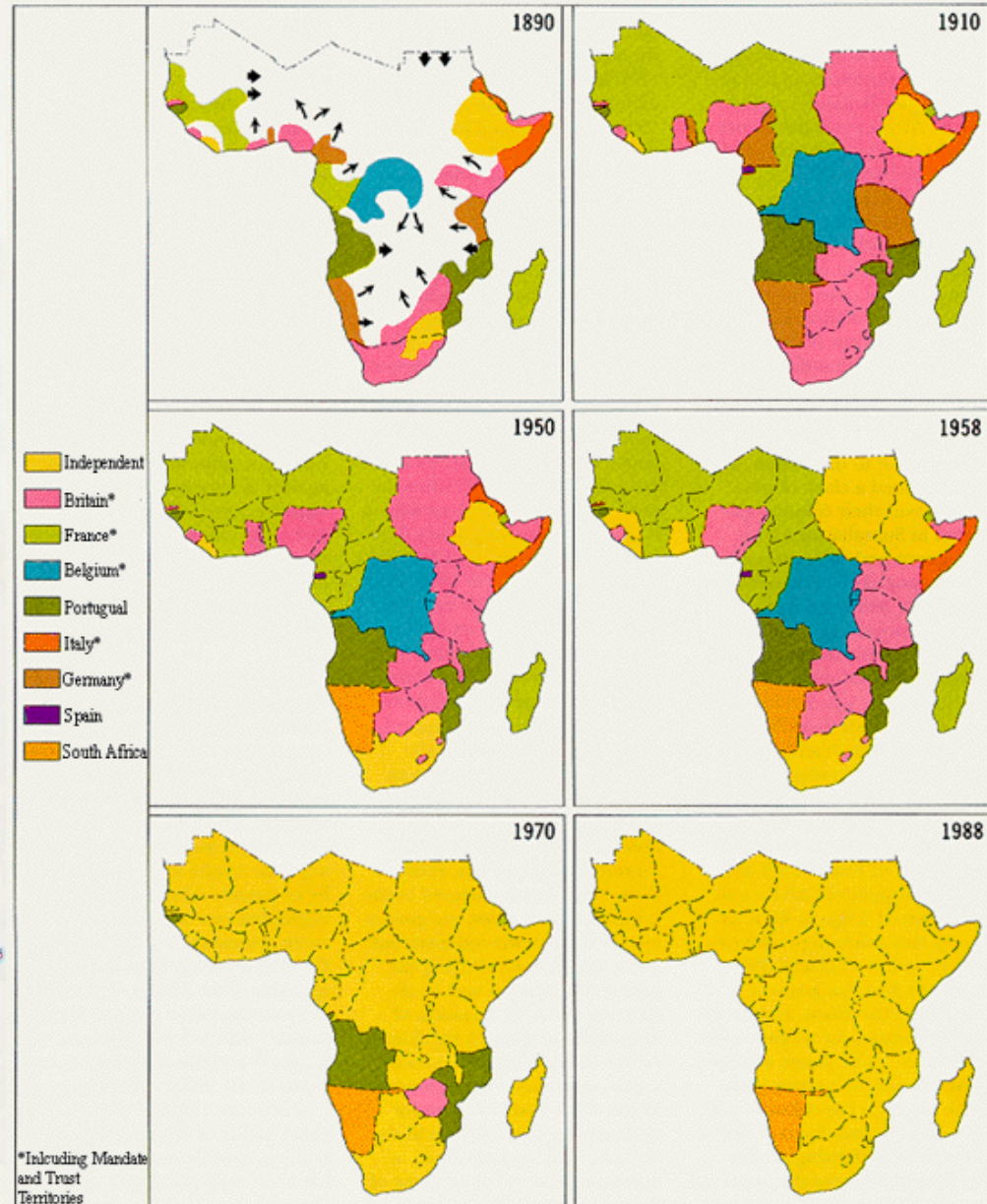


Livingstone's travels 1841, 1853-56, 1858-64, 1866-73.

Colonial Mapping



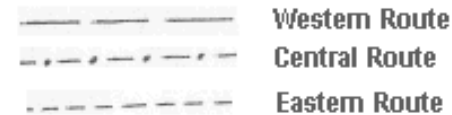
COLONIZATION AND LIBERATION



Historical northern interior trade routes



Figure 3: Relations between North Africa and the Sudan during the era of the great trans-Saharan trade routes. 5th to the 18th centuries.



Culture

- Savanna and rain forest different cropping regimes
- Strong tribal-kingdom structure
- Major differences in religion, arts, knowledge and military
- Key early civilizations and later keepers of geographical science (e.g. Islam)
- Much indigenous geographical knowledge, few “maps” survive (e.g. Muhammed Bello-Sokoto caliphate in Nigeria 1807-1837)
- Major language divisions
 - North and Northeast: Afro-Asiatic languages
 - Tropical zones: Niger-Congo language family
 - South: until C19th Bushman/Khoi, later Bantu

Language groups



Ashanti



Ashanti, or **Asante** major ethnic group in Ghana speak **Twi**

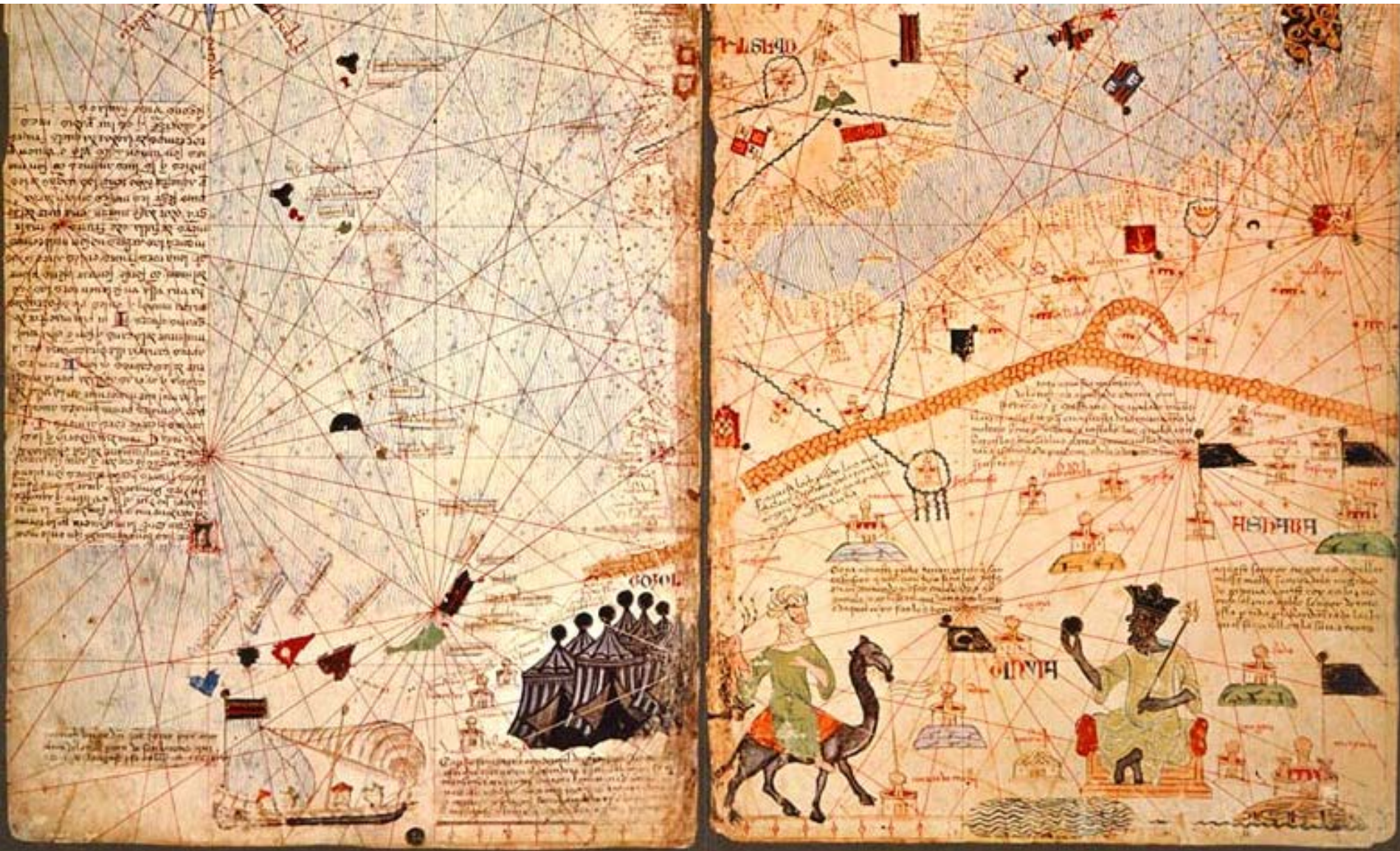
Prior to European colonization, the Ashanti people developed a large and influential empire in West Africa.

The Ashanti later developed the powerful Ashanti Confederacy and became the dominant presence early 18th-19th Century. The North African Almoravid dynasty gold coin was renowned throughout the medieval world as being the purest gold, since West African gold was 92% pure at the time it was mined, higher than old Egyptian gold ore, which started at 85%, and later refined to 95% gold.

Evidence of Ashanti connection to the Islamic world is the Ashanti word for money - "sikka" - the same as the Arabic word for minting money



Pilgrimage to Mecca 1324 by the wealthy king Mansa Musa
(reigned, 1312?-37) of the Mali Empire. Catalan Atlas Abraham Crèsques
(d. 1387)



Mansa Musa: Richest person in history

- Pilgrimage to Mecca between 1324 and 1325
- Procession included 60,000 men, wearing brocade and Persian silk
- 12,000 slaves who each carried 1.8 kg gold bars
- Heralds dressed in silks, with gold staffs
- 80 camels each carrying 23–136 kg of gold dust.
- Musa gave the gold to the poor he met along his route.
- Gave gold to Cairo and Medina, and traded gold for souvenirs.
- It was reported that he built a new mosque every Friday

Indigenous view of space

- Core and periphery, not boundary
- Power radiating from centers, sometimes limited by natural features
- Maps often integrated with identity, migration history, mythology, and spirituality
- Included wall decorations, sand drawings, tattoos, orientations written on unconnected objects (e.g. lukasa=memory board)



East African Trade Routes

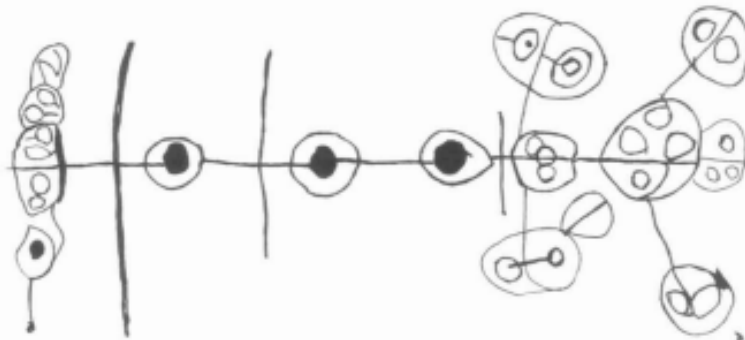
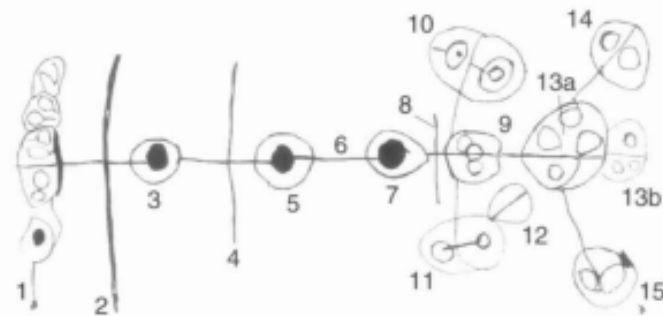


FIG. 3.12. SABATELE'S MAP OF THE MAIN CARAVAN ROUTES IN EAST AFRICA. Paper and pencil. This map with its southerly orientation traces the main caravan routes across Tanzania, with the terminus points placed at Dar es Salaam. See figure 3.13 for an explanatory diagram.

Size of the original: unknown. Current location unknown. Photograph courtesy of the Archiv Museum für Völkerkunde zu Leipzig (Neg. Af 0 1428; from the original glass plate negative).

the relative locations of Tripoli, Ghadāmis and Ghat, the Hoggar (Ahagger) Mountains and Agades, and Tombouctou. Largeau was at a loss to explain how “the idea of meridians had found its way to this son of the Niger.”⁶¹ The parallel lines were possibly the boundaries of climates that commonly appeared on medieval European and Islamic maps.⁶² Adler believed Arab merchants were responsible for the diffusion of such elements of “scientific geography” in their trans-Saharan travels.⁶³

The German geographer Karl Weule was “over-



1. "Mawopanda," Dar es Salaam
2. "Lufu," the Ruvu River, a large river frequently crossed on the main caravan road by Wanyamwezi carriers, one of whom created this map
3. "Mulokolo," Morogoro, the terminus for the central railway at the time
4. "Mgata," Makata, plain between the Uluguru and Rubeho mountains, a swamp during the rainy season
5. "Kiroso," Kilosa
6. "Balabala," the caravan road
7. "Mwapwa," Mpwapwa, the old caravan center, once the last stop on the inland march before the great alkali desert, Marenga Mkali, and hostile Ogogo
8. Mutiwe, a stream near Kilimatinde
9. Kilimatinde, a mountain
10. Kasanga
11. Kondoa-Irangi
12. Post of Kalama, in Iramba (Mkalama?)
- 13a. "Tobola," Tabora, with the new *boma* (enclosure/fort)
- 13b. "Tobola ya zamani," Old Tabora with the former *boma*
14. Ujiji on Lake Tanganyika
15. Mwanza on Lake Victoria

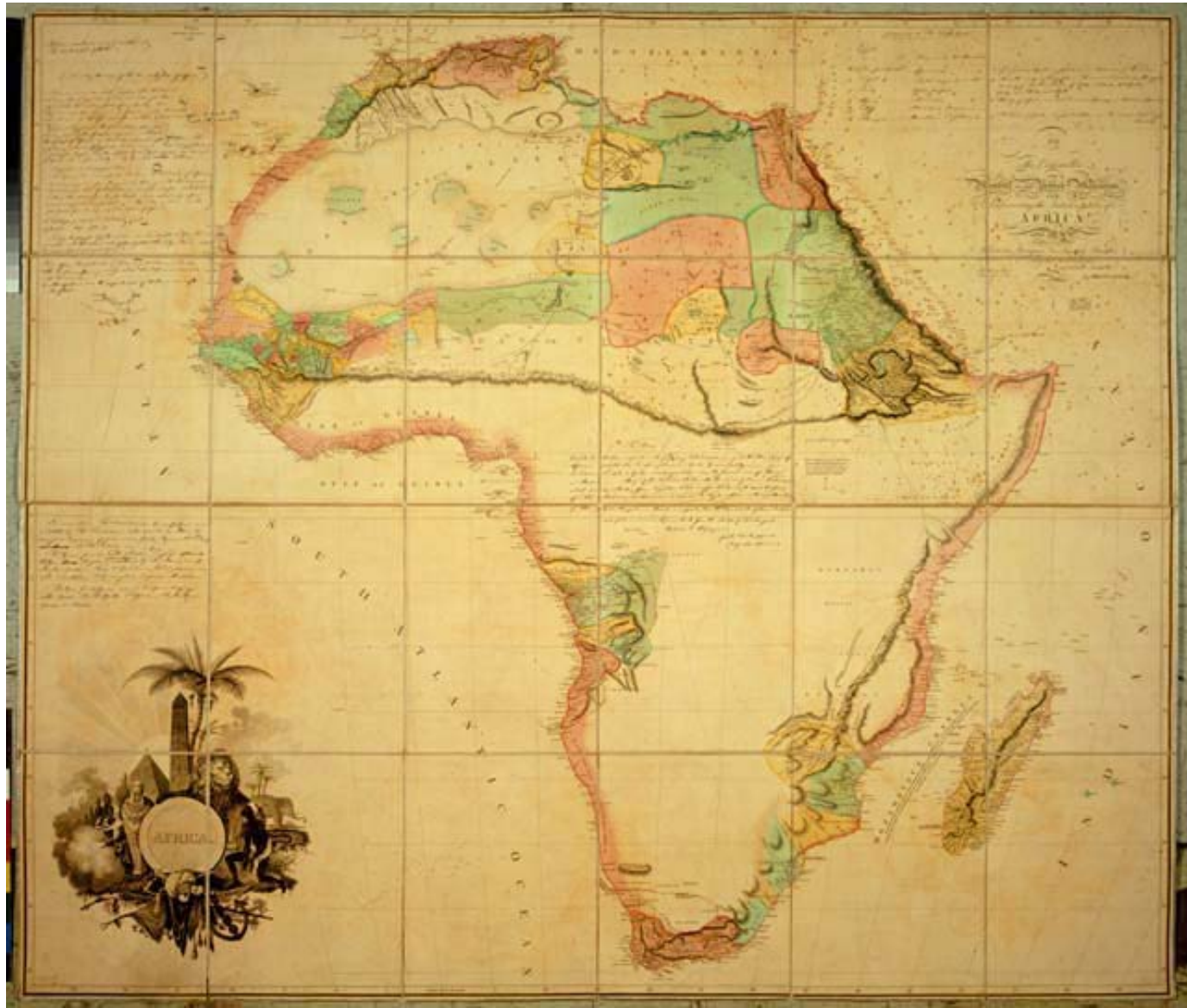
FIG. 3.13. EXPLANATION OF SABATELE'S MAP (FIG. 3.12).

After Karl Weule, *Native Life in East Africa*, trans. Alice Werner (New York: D. Appleton, 1909), 9, 373–75.

Colonial Era

- European powers build settlements and extracted/traded resources after 1500
- Division of territory took place in Europe, in diplomatic maneuvers unrelated to the terrain or cultures
- Frequent boundary changes as the powers shifted
- World War I led to first major changes

Aaron Arrowsmith's *To the Committee and Members of the British Association for Discovering the Interior Parts of Africa This Map Is With Their Permission Most Respectfully Inscribed* (1802)



Colonial Boundaries

- Imposed serious disadvantages on Africa (primary extractive structure, reinforced by road and rail)
- Much balkanization, but no proof that bigger is better
- Once states gained independence, “they all became staunch defenders of the existing boundaries”
- Charter of Organization of African Unity “respects boundaries at independence”
- States are nevertheless often failed organizational mechanisms
- “the modern mapping of this region is still inked to its asymmetrical relationships with outsiders”

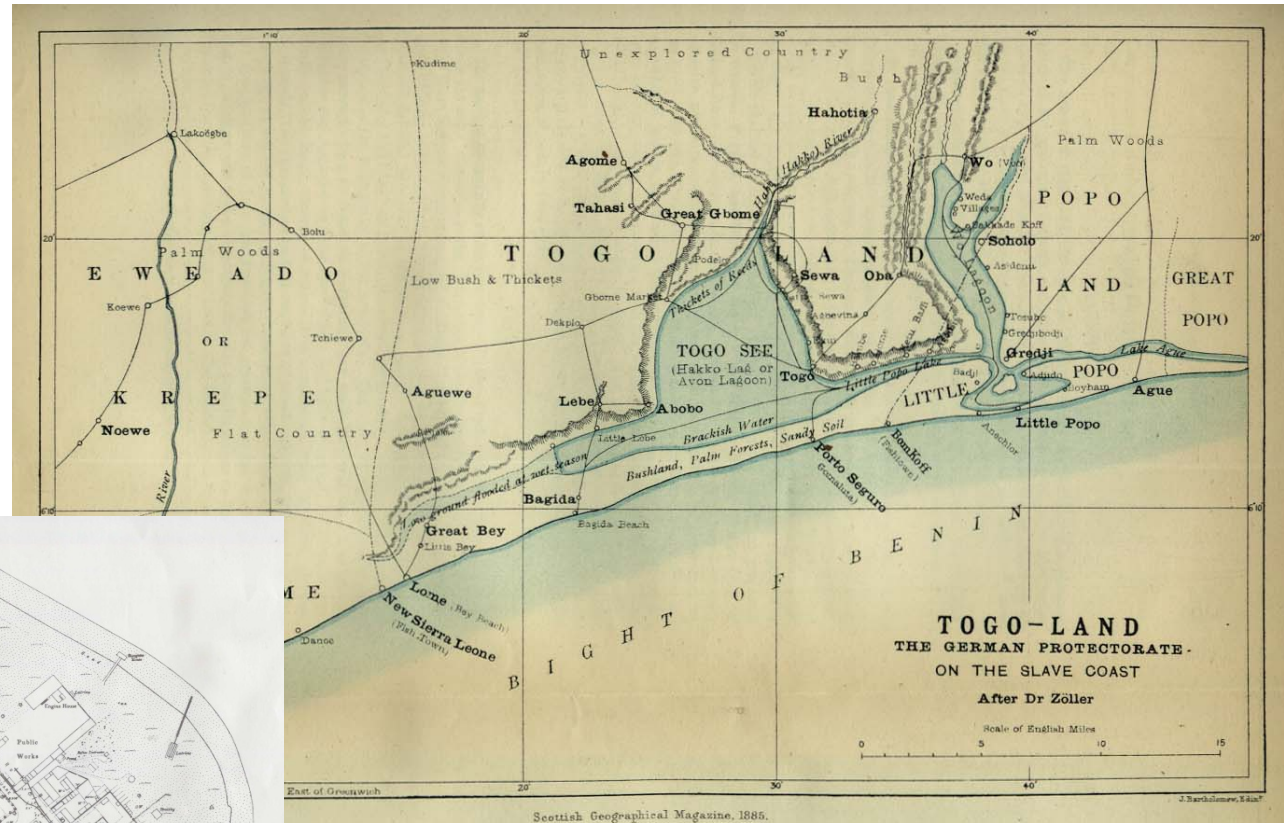
German SW Africa: Caprivi strip

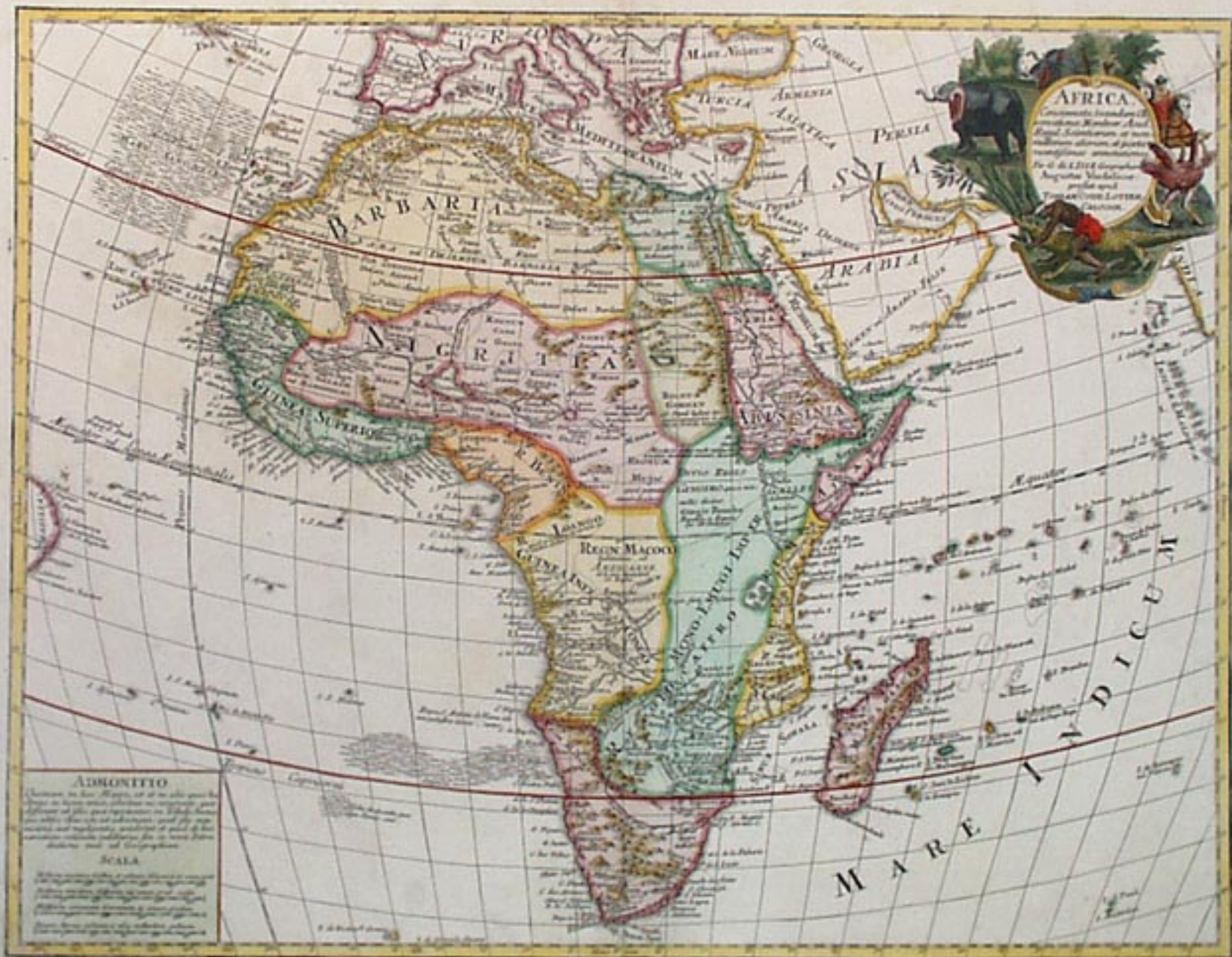


1909 German South West Africa

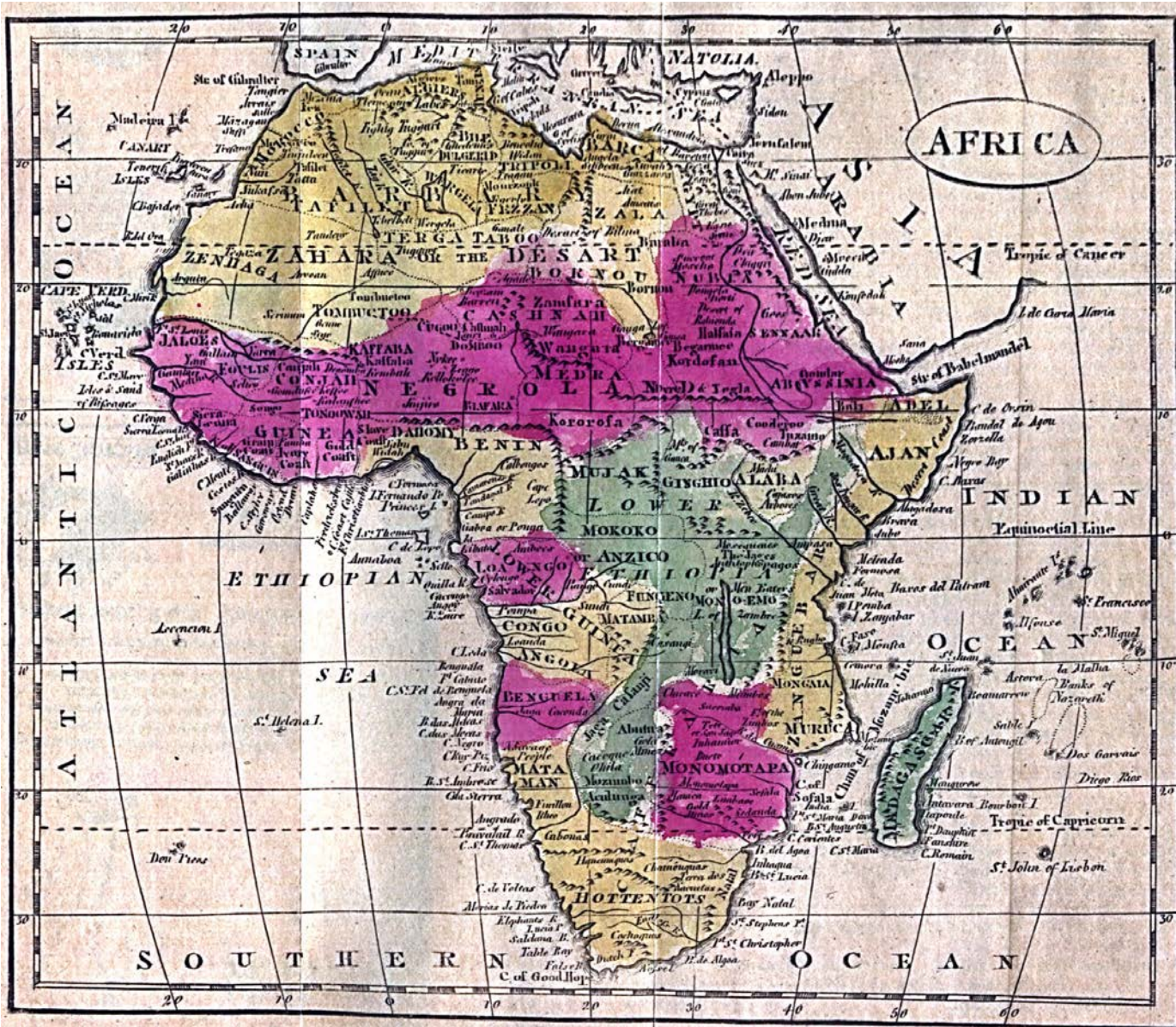
From "The Map of Africa by Treaty" by Sir E. Hertslet, 3rd ed., London: by Harrison and sons, 1909.

Colonial era needs





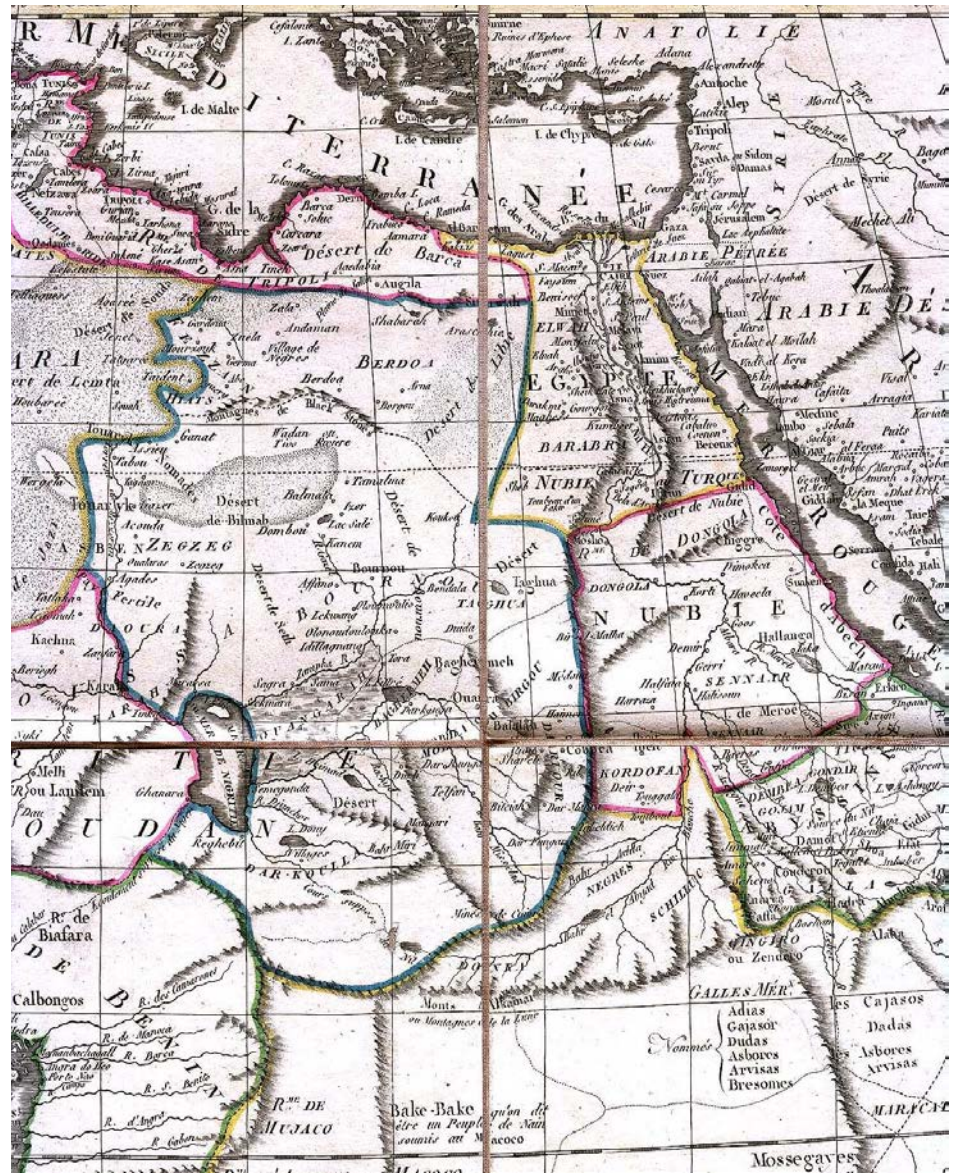
1808



Religion 1913



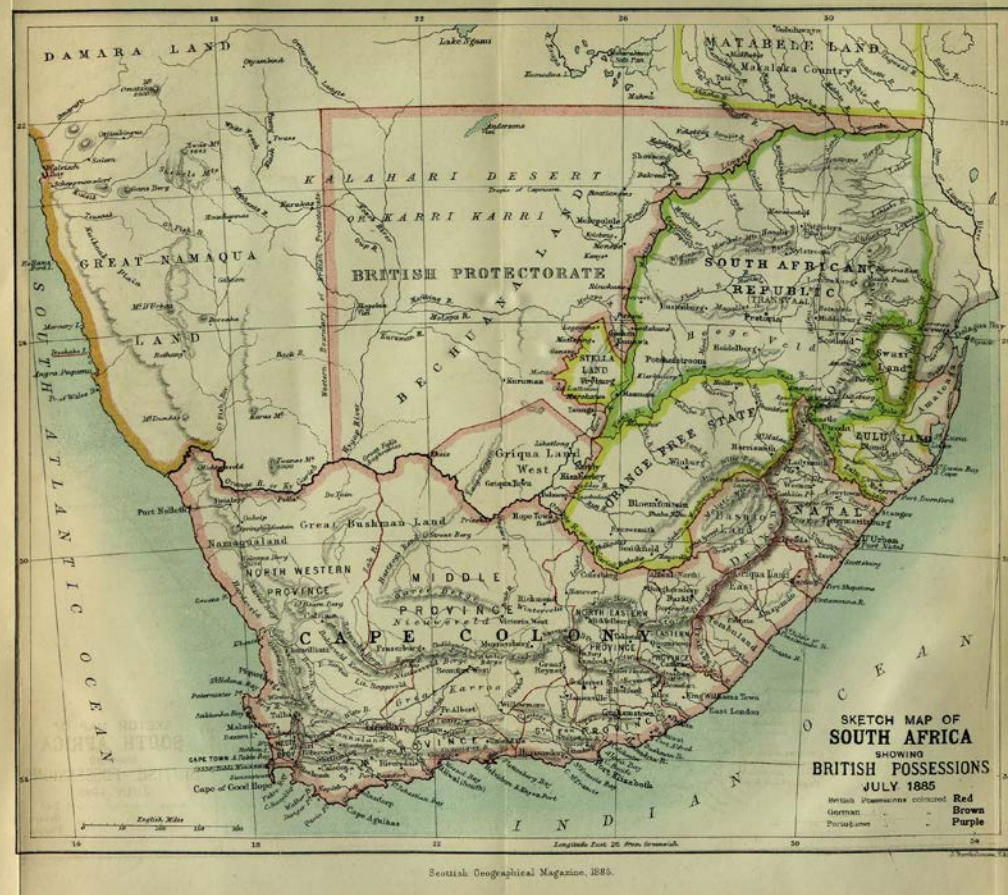
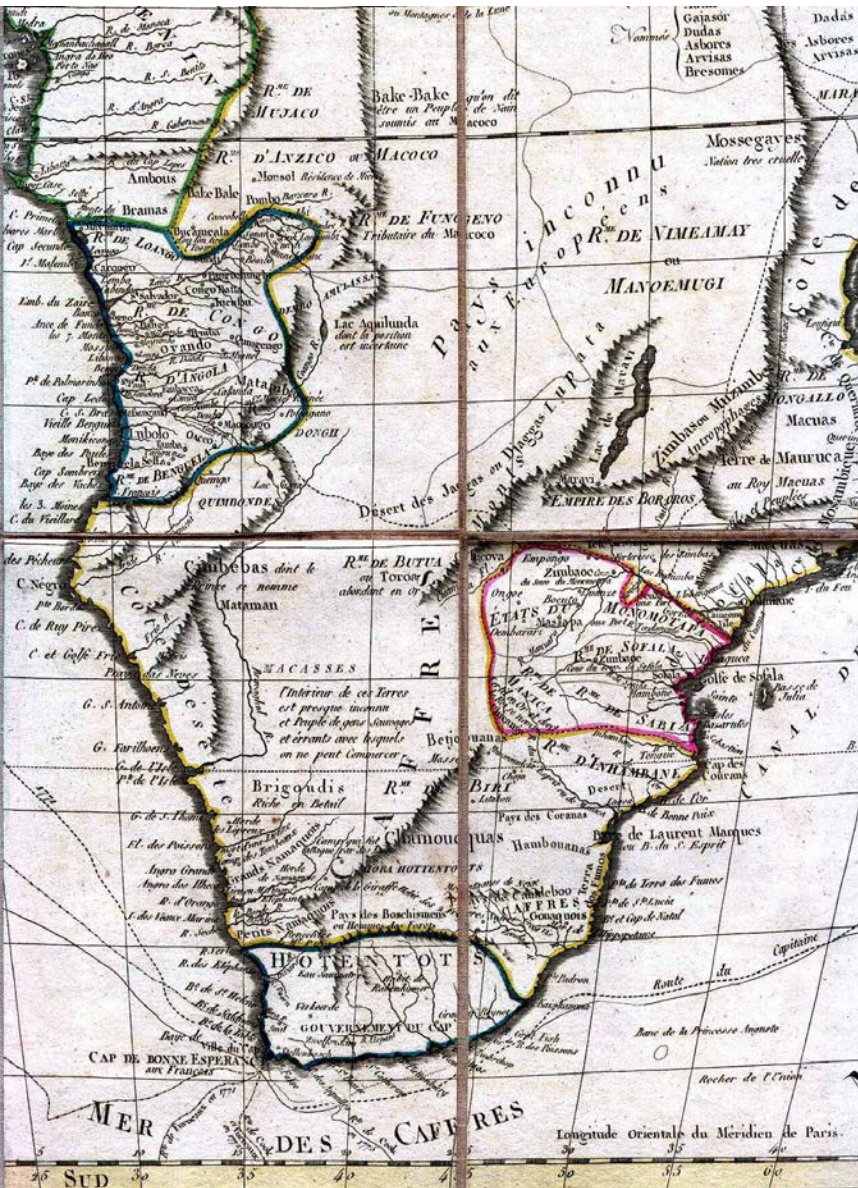
1890 and 1829



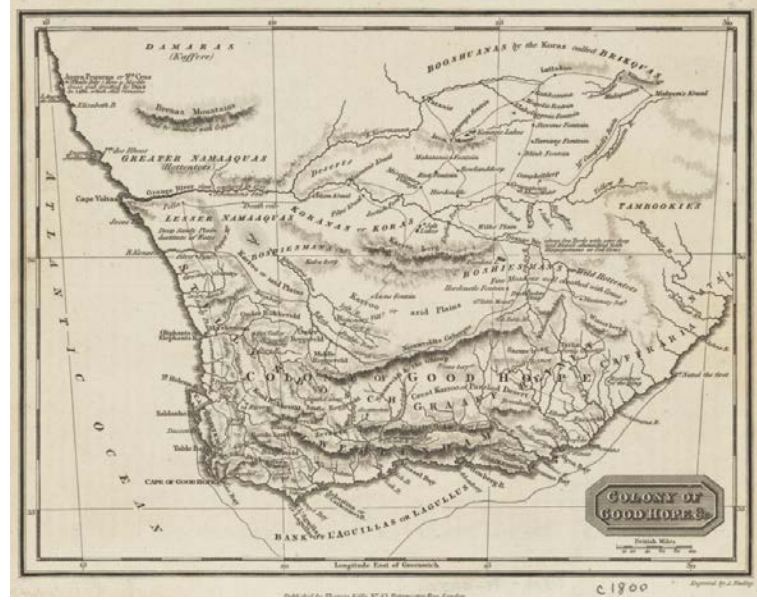
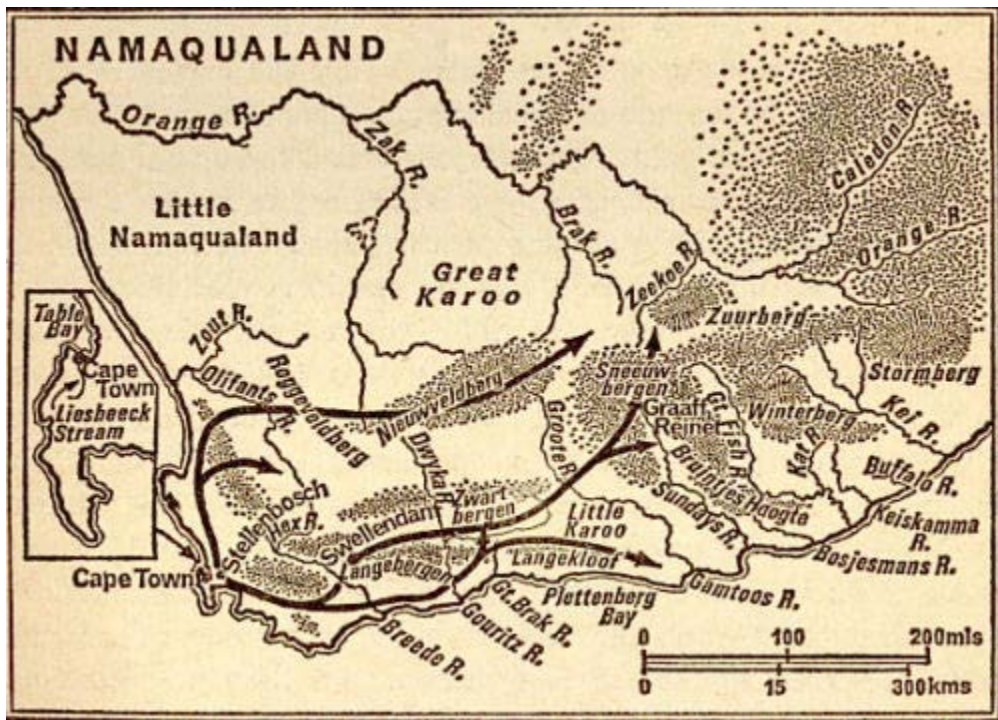
1829 details



South Africa 1829 and 1895



The Voortrekkers 1830-40s



Diamonds Kimberly 1866-



Fleetwood Rawstone's Red Cap party at work on C

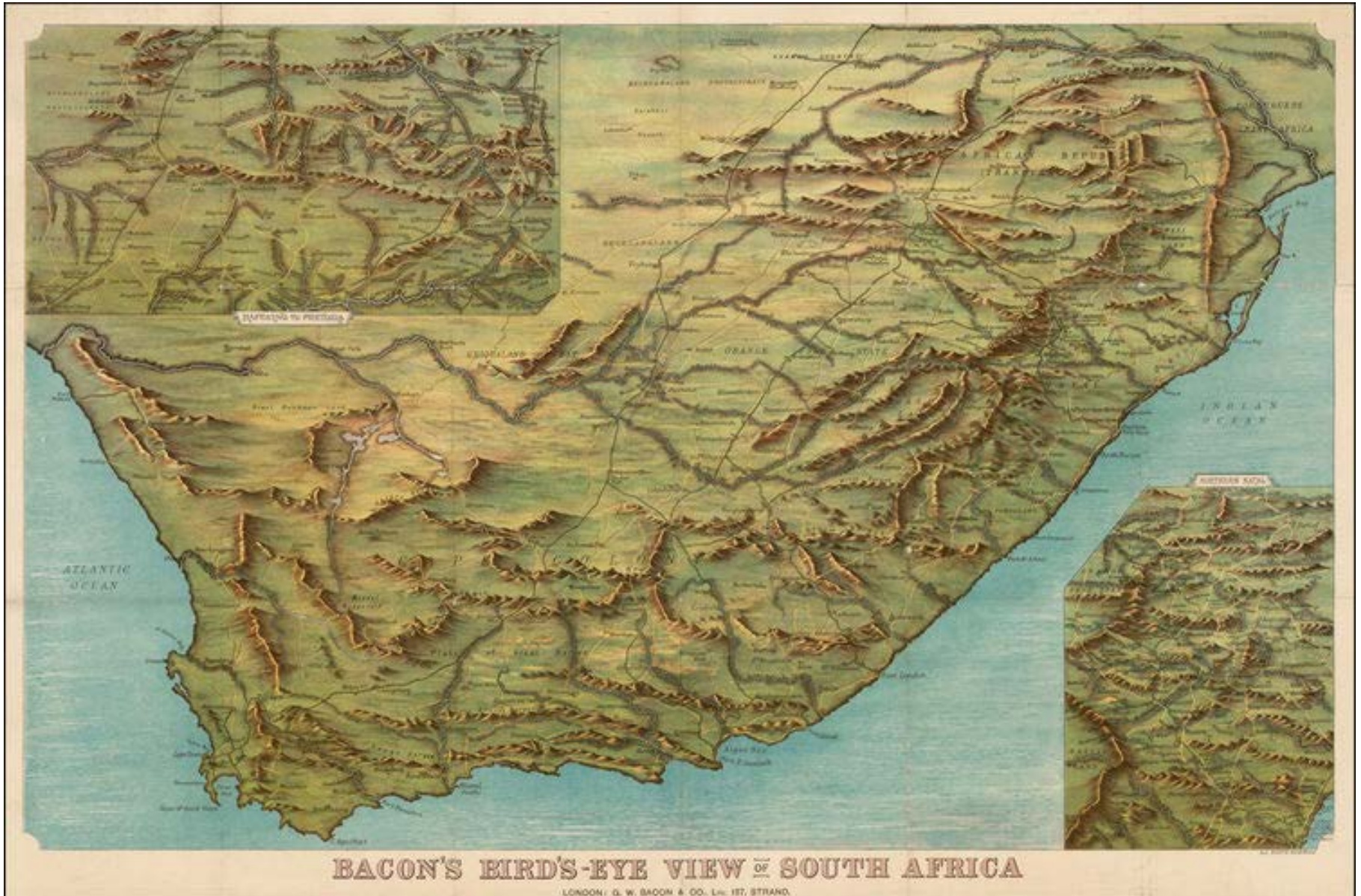


Kimberly
Orange Free State
Johannesburg: Kruger, DeBeers
Gold at Joch mine 1886

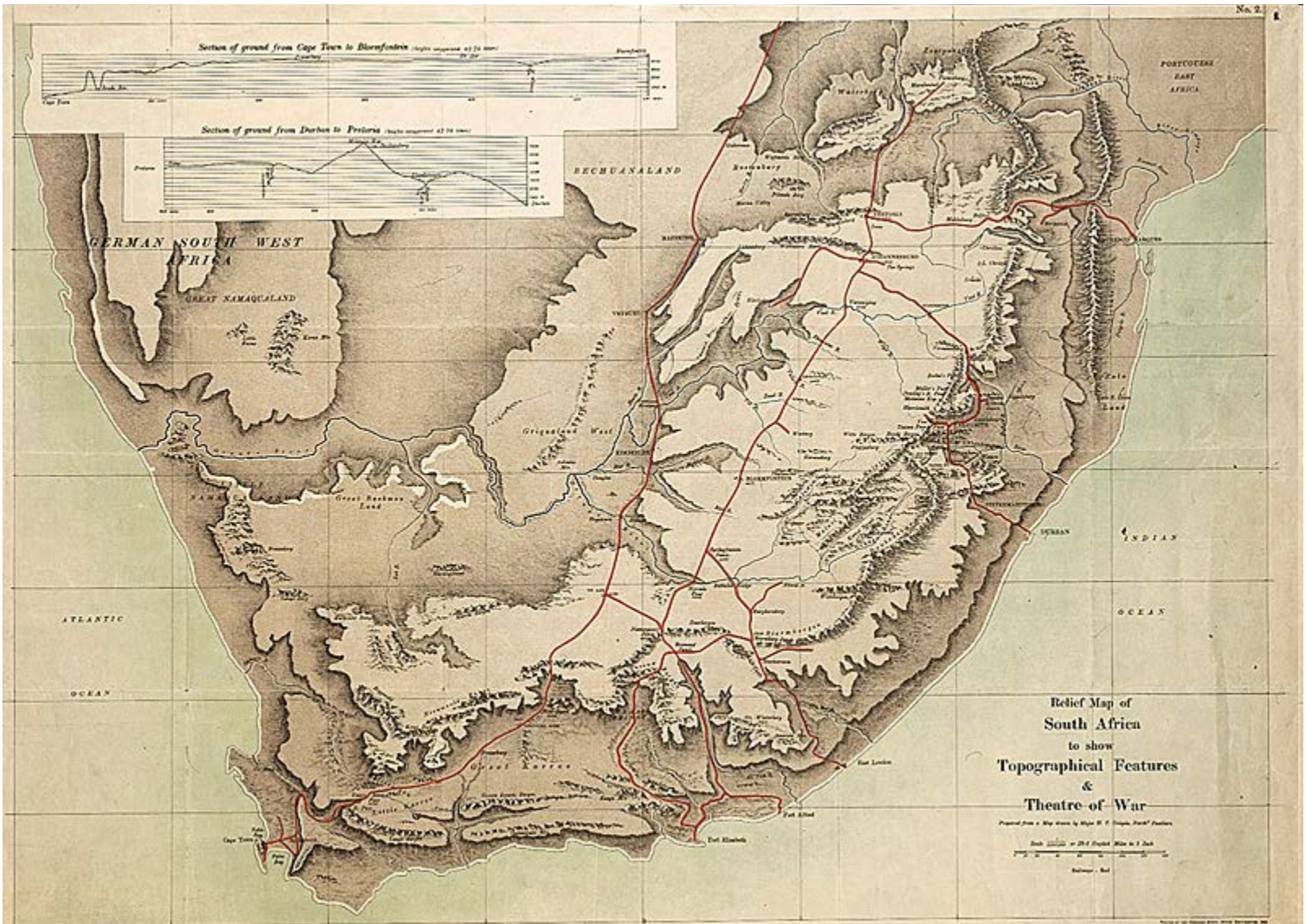


Bacon's Map 1890

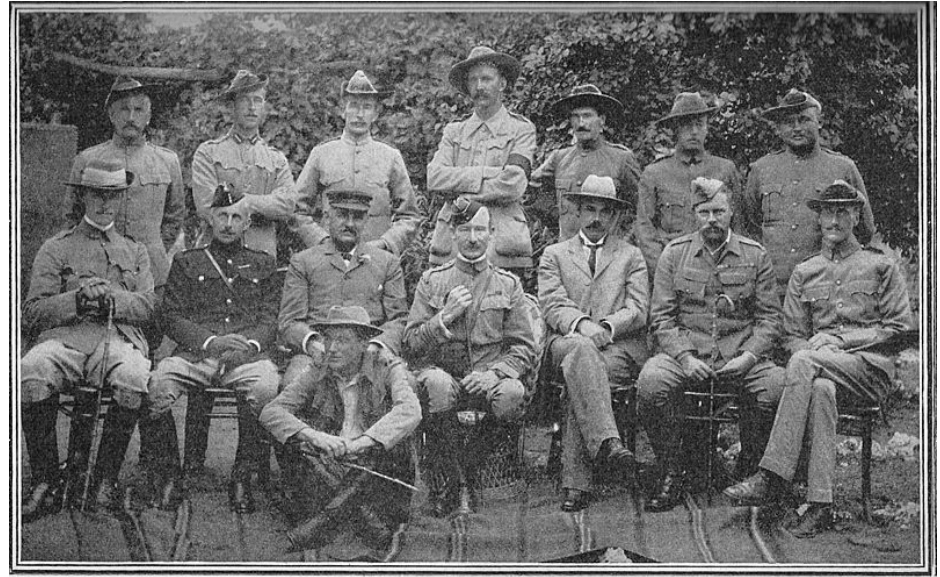
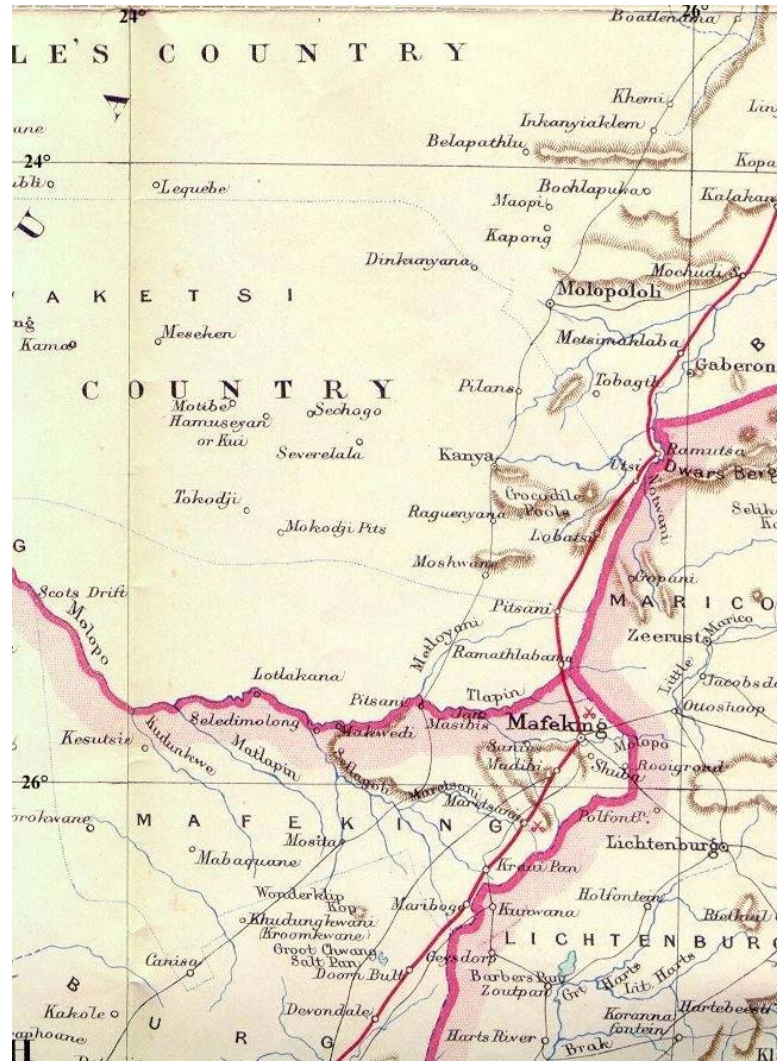
First Boer War December 1880 to March 1881



The Second Boer War 1899-1902



Times map of the conflict



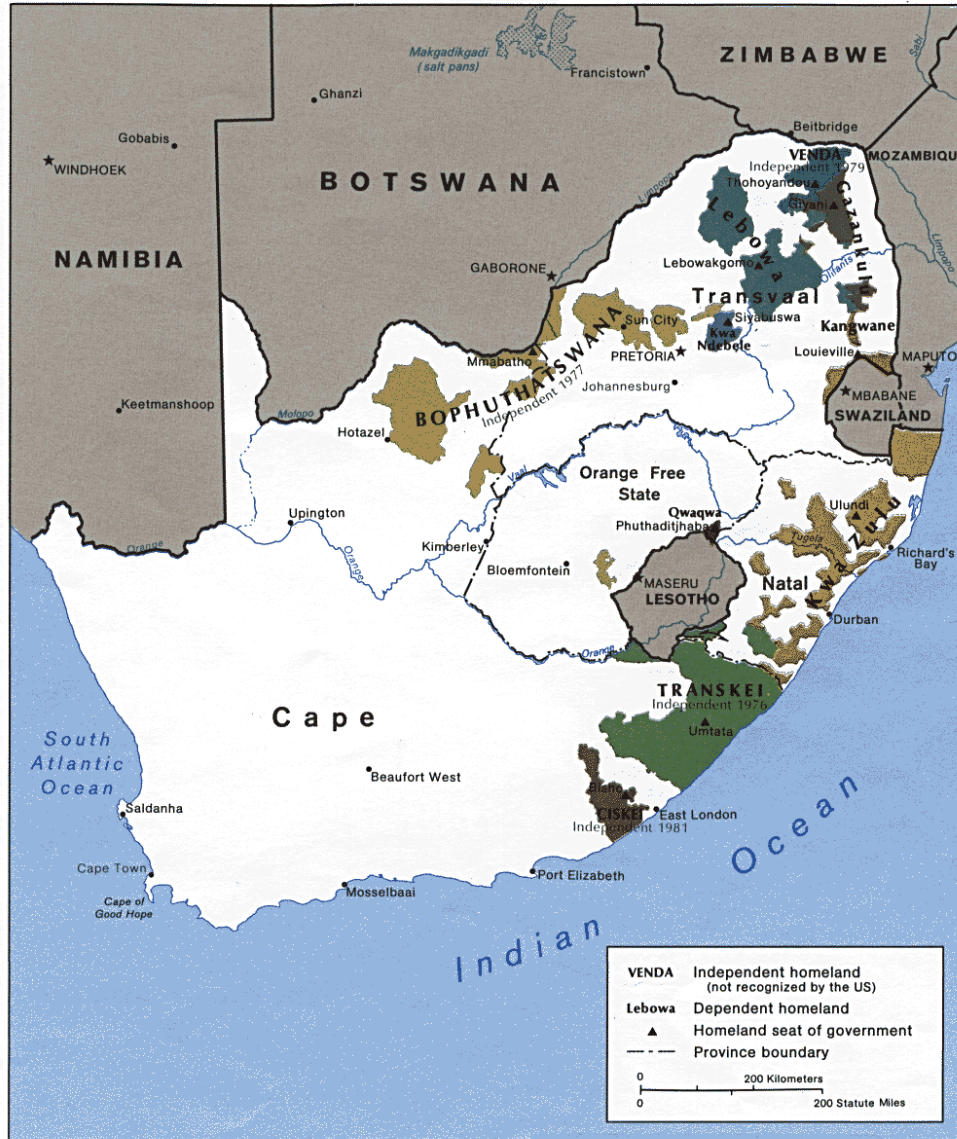
The names, read from left to right and from top to bottom, are:—1. Major Panzer, Artillery 2. Capt. Ryan, Commissariat 3. Capt. Greener, Paymaster 4. Chief Staff Officer, Major Lord Edward Cecil 5. Capt. Wilson, A.D.C. Baden-Powell (Lady Sarah's husband) 6. Lt. the Hon. Hanbury Tracy, Censor 7. Capt. Cowan, Bechuanaland Volunteers 8. Major Godley 9. Col. Vyvyan 10. Mr. Bell, C.C.R.M. 11. Major-General Baden-Powell 12. Major Whitely 13. Colonel Hore, Prosector's Regt. 14. Dr. Hayes, P.M.O. town 15. Lt. Moncrieff, Hon. Extra A.D.C. to Colonel "B.-P." (Photo by J. Angus Hamilton, Our Special Correspondent with Major-General Baden-Powell)

MAJOR-GENERAL BADEN-POWELL AND THE PRINCIPAL MEN WHO HELPED HIM TO DEFEND MAFEKING



Black Homelands under Apartheid

South Africa: Black Homelands



10 Bantustans = Homelands
Abolished 1994

P.W. Botha
President and Prime Minister
1978 to 1989



The Middle East



Ewald Banse. Die Türkei. Eine Moderne Geographie, Berlin/Braunschweig/Hamburg 1919.

The Middle East

- Ancient history dating back to Egypt, Biblos etc.
- Much trade via Byzantium, inc. India
- Exposure to Europe during the crusades
- Much of the area came under Ottoman rule after the fall of Constantinople in 1453
- Vaguely defined, but includes Arabian peninsula, parts of North Africa, Syria, Lebanon, Iraq, Persia, Turkey

From Karnak Seti I (died 1279 BCE) and Temple of Amun (Ethiopia)

Documents raids on Aleppo, Syria



MIDDLE EAST

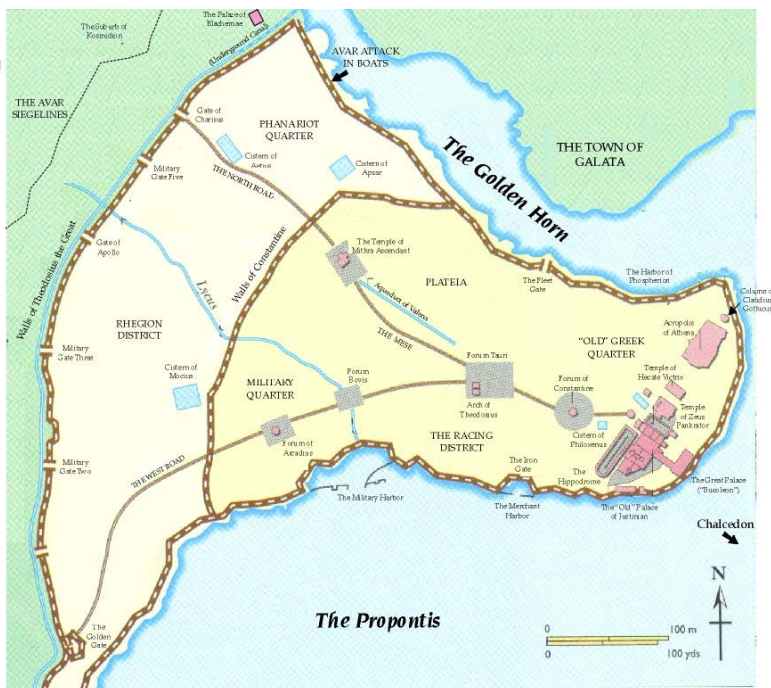


Scale 1:21,000,000
 Lambert Conformal Conic Projection
 standard parallels 12°N and 36°N
 0 500 Kilometers
 0 500 Miles
 Boundary lines shown in accordance with international law

Some high islands are depicted in grey.
 Water and land are shown in a simplified manner.
 Some water bodies are shown in a simplified manner.
 Some water bodies are shown in a simplified manner.
 Some water bodies are shown in a simplified manner.

Constantinople

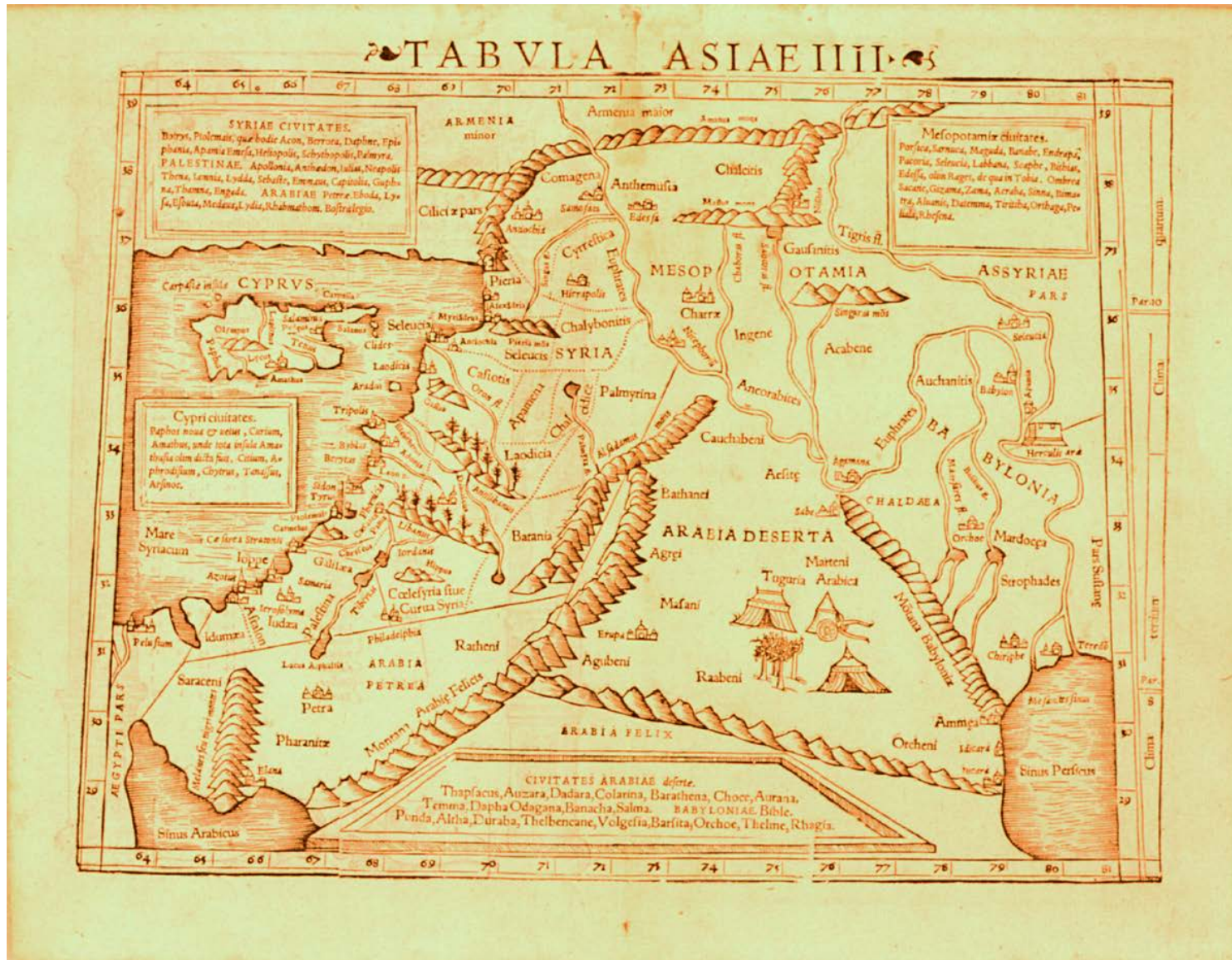
Oath of Empire Constantinople (622 AD)



Map of Constantinople (1422) by Florentine cartographer Cristoforo Buondelmonti (*Description des îles de l'archipel*, [Bibliothèque nationale de France](#), Paris) is the oldest surviving map of the city, and the only surviving map which predates the Turkish conquest of Constantinople (Istanbul) in 1453



1545. Munster, Sebastian(1489 -1552) --Ptolemy (87-150)
TABVLA ASIAE IIII on verso QVARTA ASIAE tabula continet Cyprum, Syriam,
Palestinam...



Faden, W. European Dominions of the Ottomans, or Turkey in Europe. London: W. Faden, 1795



PALESTINE

I. The first Zionist colony in Palestine, 1878.

Coastline ———

Frontier ———

• Zionist colony

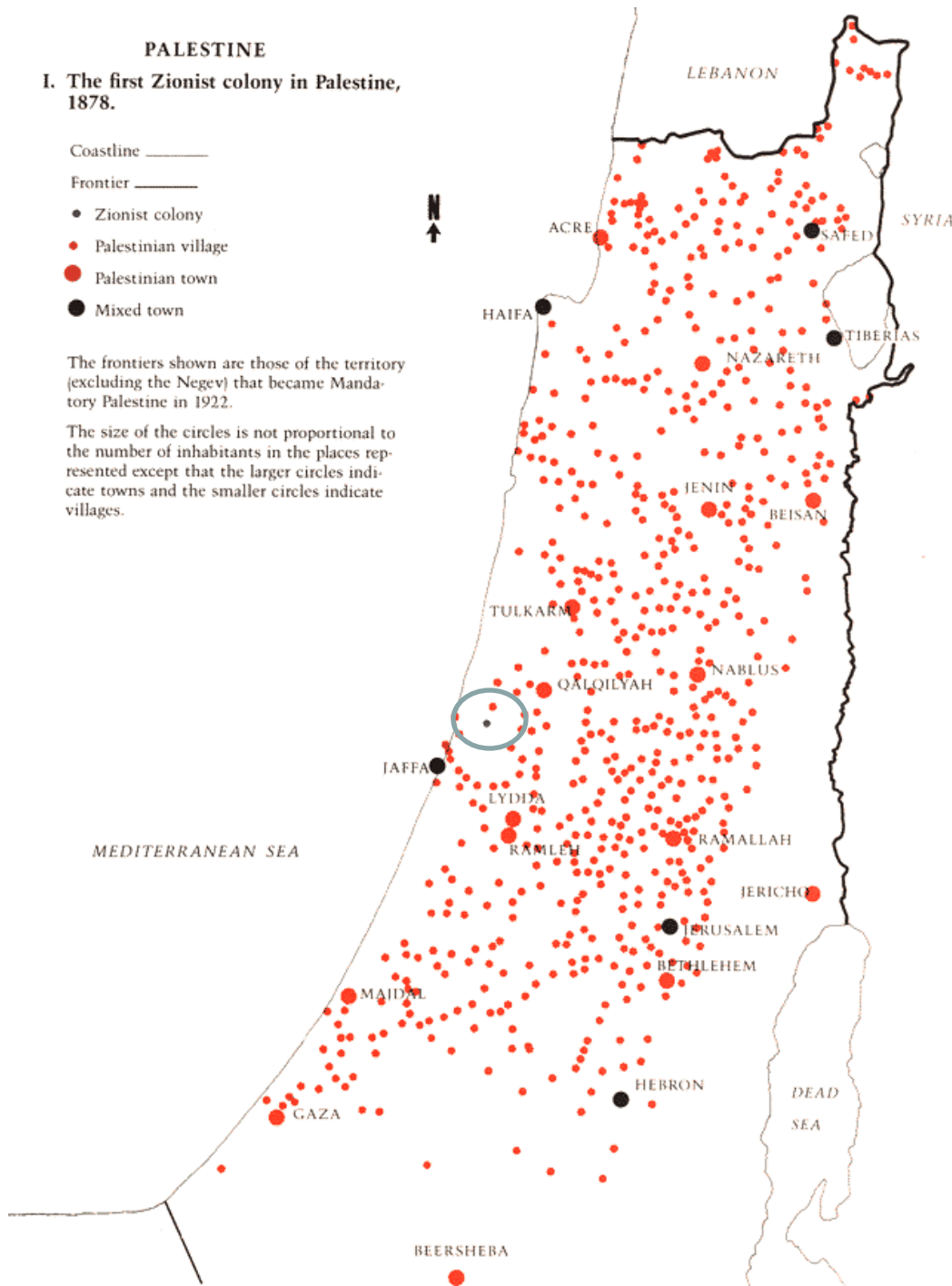
• Palestinian village

• Palestinian town

• Mixed town

The frontiers shown are those of the territory (excluding the Negev) that became Mandatory Palestine in 1922.

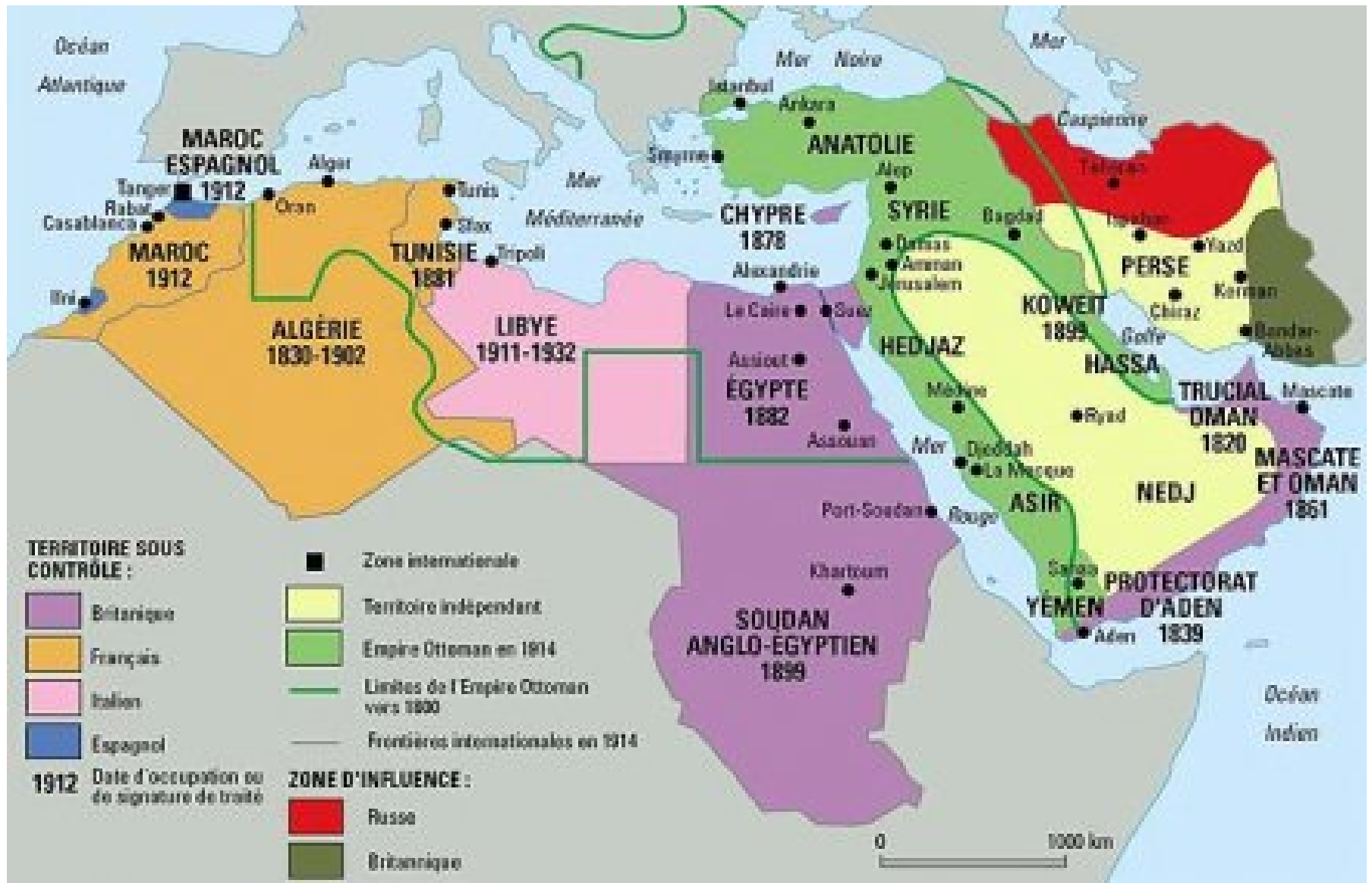
The size of the circles is not proportional to the number of inhabitants in the places represented except that the larger circles indicate towns and the smaller circles indicate villages.



- **Zionism** nationalist and political movement of Jews and Jewish culture supporting the re-establishment of a Jewish homeland in the territory defined as the historic Land of Israel
- Emerged in the late 19th century in central and eastern Europe
- Leaders main goal was creating the desired state in Palestine, then controlled by the Ottoman Empire

Palestine 1878

The Middle East 1912



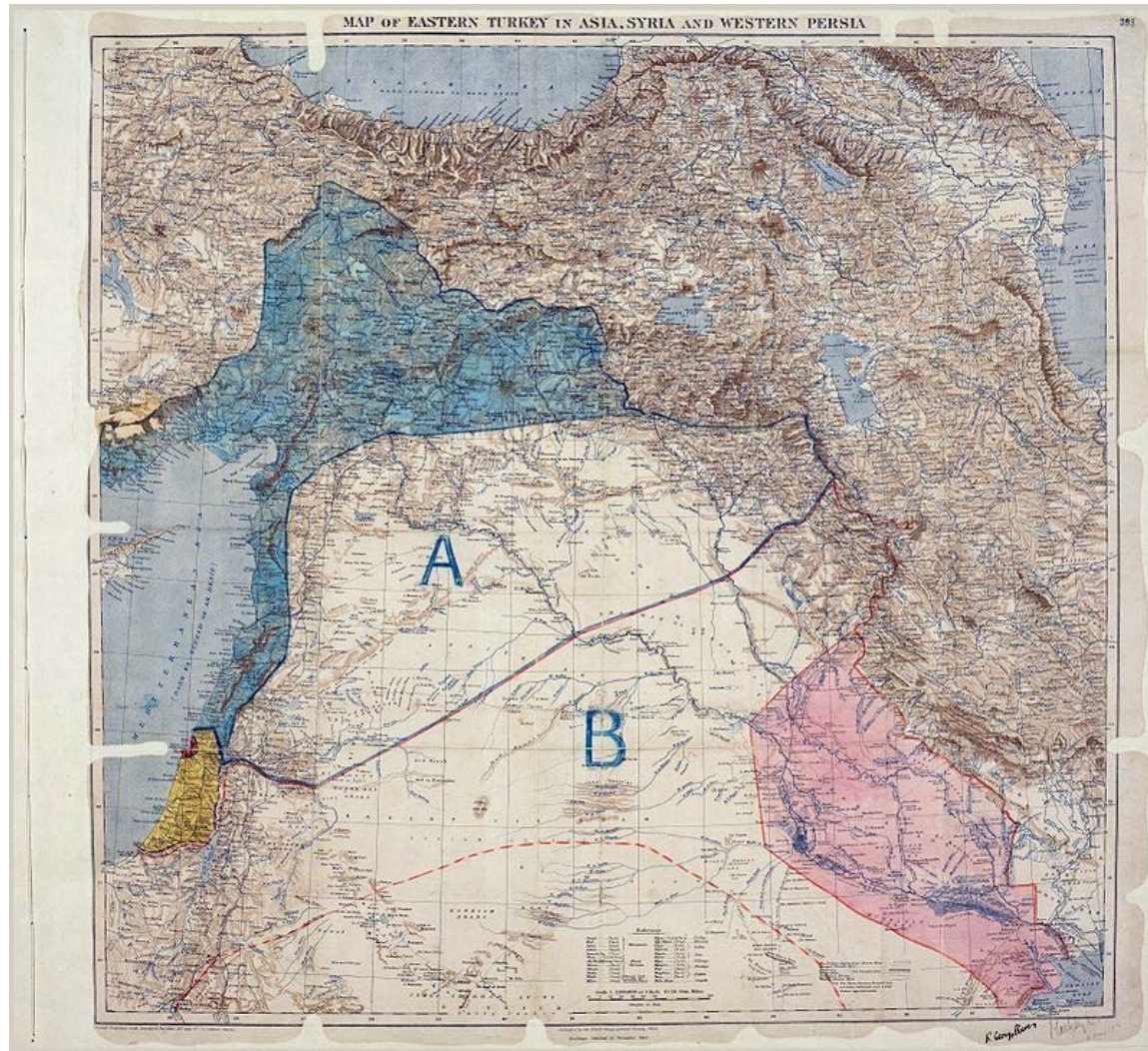
The end of the Ottoman rule

- Economic, social and trade decline starts about 1683
- Major loss was Egypt, Palestine (Suez to UK in 1882)
- Crete 1896
- 1902 “Young Turks” terror campaign in Macedonia, Bulgaria. Anarchist origins.
- 1914 Assassination in Sarajevo destabilizes Austro-Hungarian empire
- Ottoman, Austro-Hungarian and Germany Empires all fall after WWI
- Invaded by Britain, driving out German/Austro-Hungarian and Turkish troops about 1918
- Mustafa Kemal Atatürk leads war of independence for Turkey 1919-1922

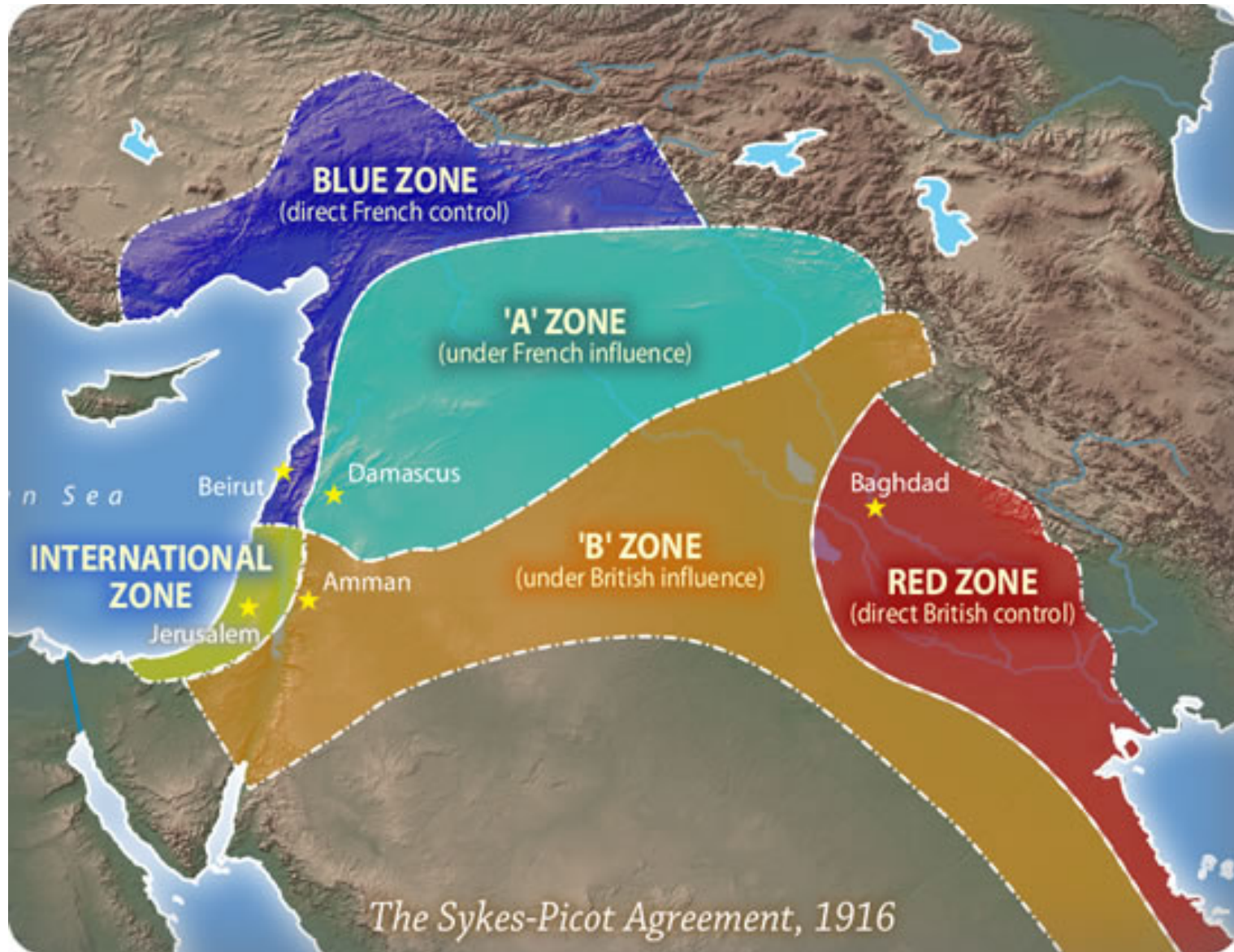
WWI aftermath

- French and British send armies and agents
- Foment revolts in the Arabian peninsula
- Seize Iraq, Syria and Palestine
- 1916 French and British reach secret Sykes-Picot agreement on “spheres of influence”
- Successor agreement adopted by League of Nations
- Resistance efforts emerged immediately

Sykes Picot Agreement Map. Enclosure in Paul Cambon's letter to Sir Edward Grey, 9 May 1916.



Middle East 1916 Division



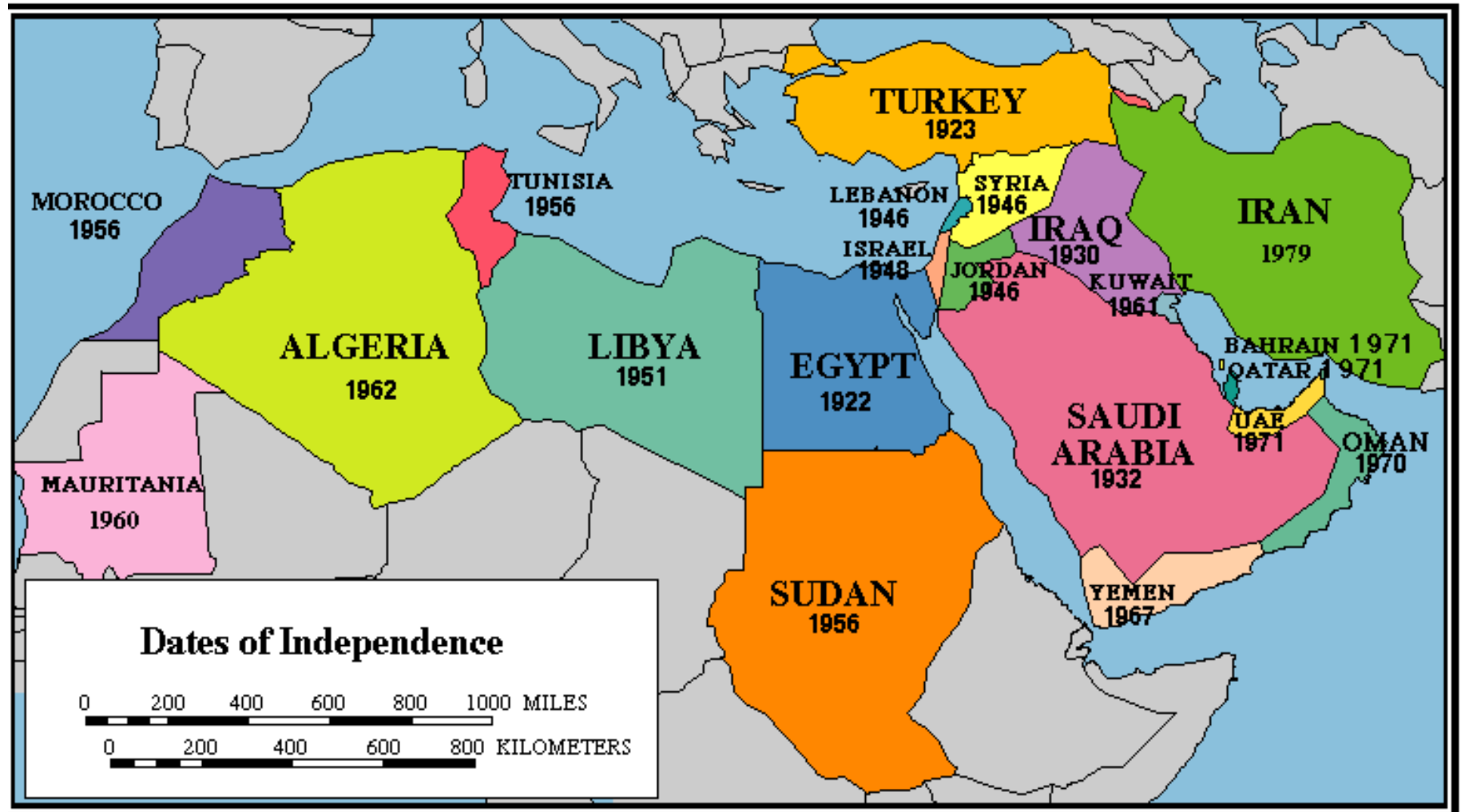
1920 League of Nations Mandates



British Palestine 1925-1948



The Middle East: Independence



1947 Division and the 1967 War



Decorative map of the Turkish empire by Dutch map maker Nicolaus Visscher Amsterdam, 1680-90

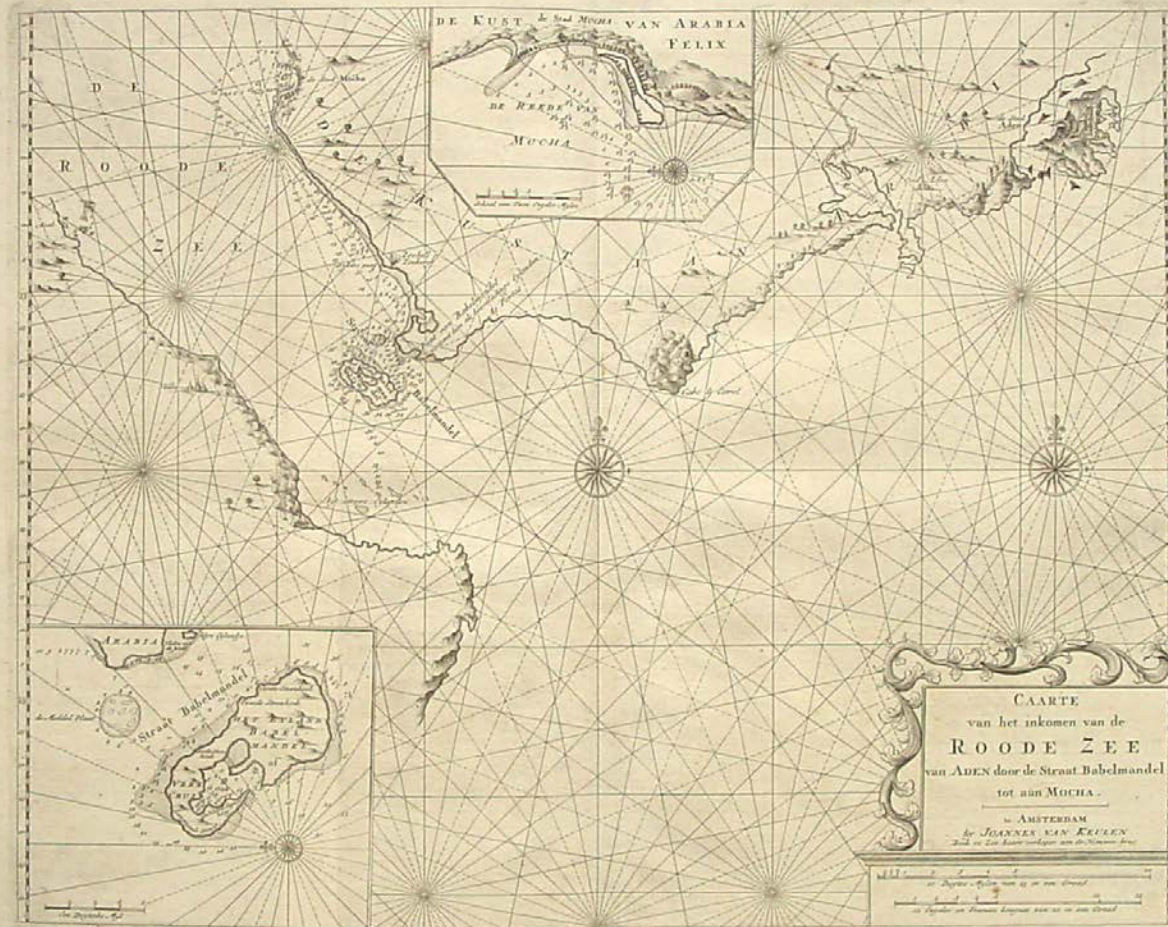


Palestinae sive Totius Terrae Promissionis Nova Descriptio Auctore Tilemanno Stella Sigenens,

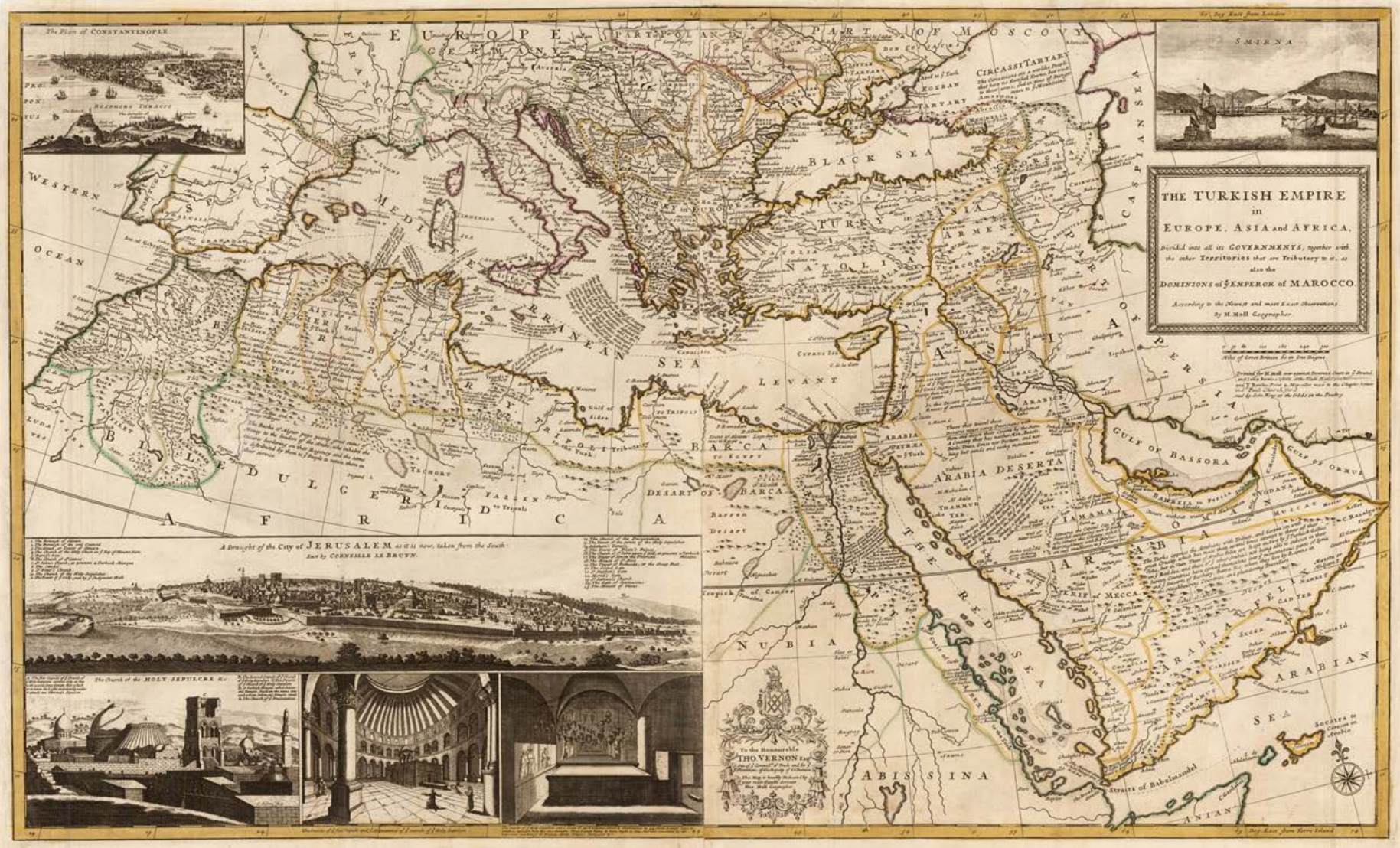
c1572, Abraham Ortelius, Antwerp



van Keulen 1753 Red Sea Yemen



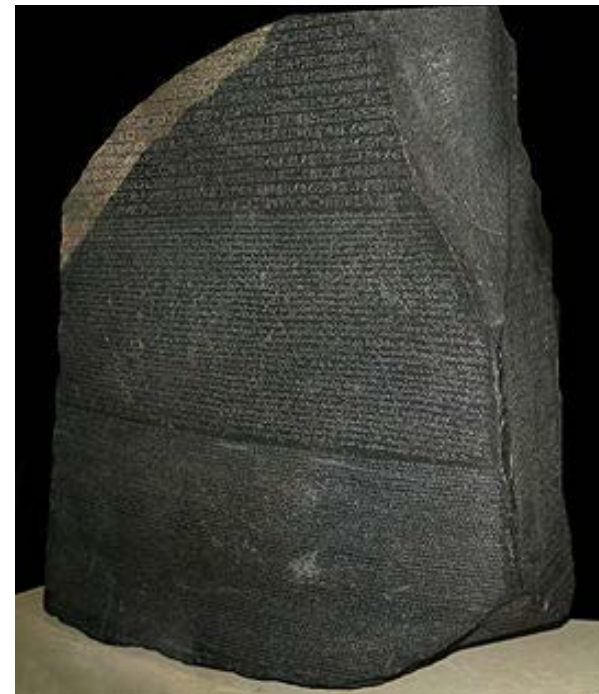
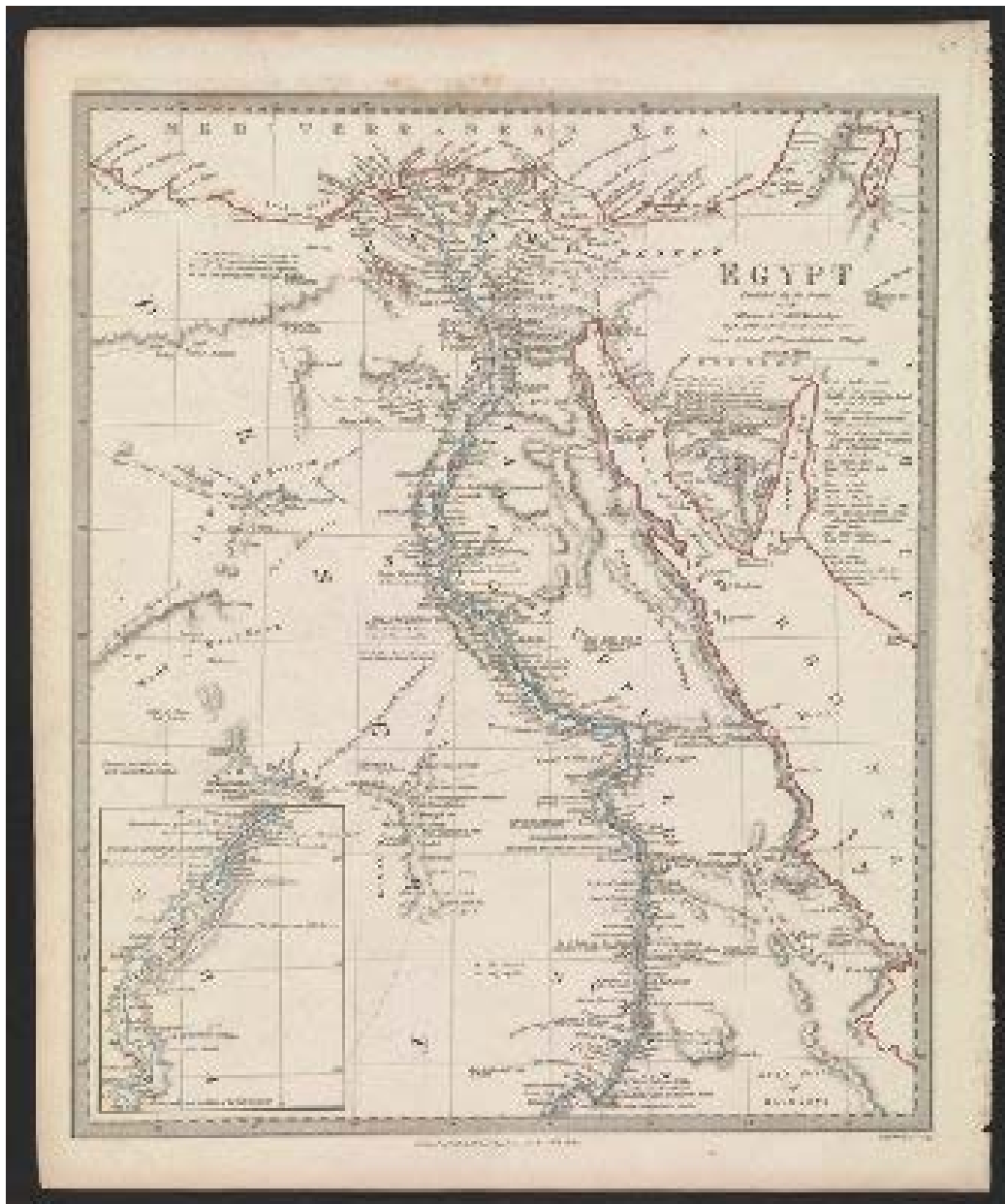
The Turkish Empire in Europe, Asia and Africa. Divided into all its Governments, together with the other Territories that are Tributary to it, as also the Dominions of ey Emperor of Marocco. According to the Newest and most Exact Observations. London, Th. Bowles and John Bowles 1708-26



French Campaign in Egypt and Syria (1798–1801) Phyllae

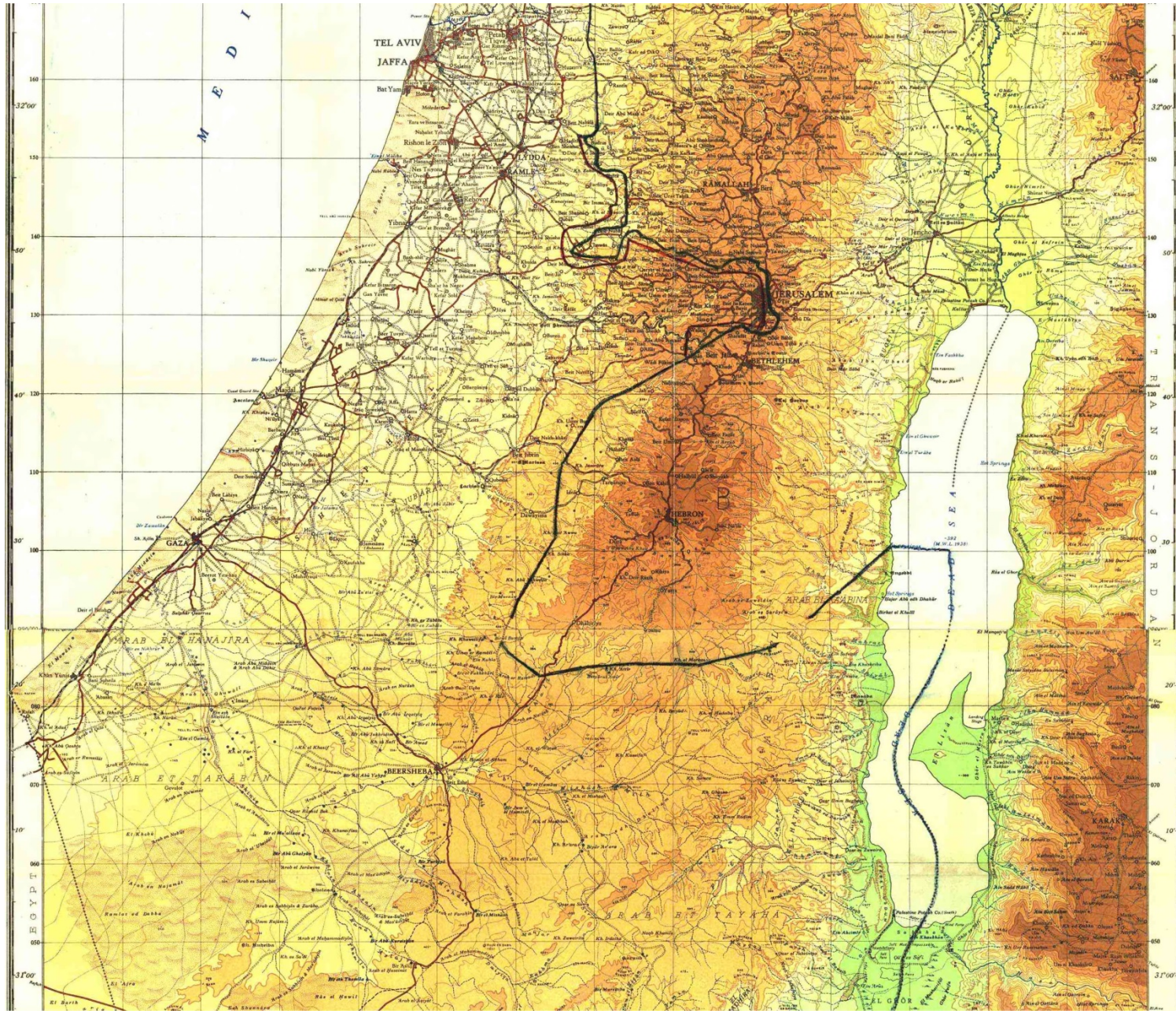


**Long, George, 1800-1879; Society for the Diffusion of Useful Knowledge
(Great Britain) 1831**



Rosetta Stone 1799

British Palestine Survey: 1:250,000 series





MIDDLE EAST GRAPHIC

Scale: 1:4,500,000

POPULATION (millions)

- 100,000 and over
- 50,000 to 100,000
- 10,000 to 50,000
- Less than 10,000

Other symbols:

- ★ Baghdad
- Jeddah
- Tabriz
- Almaty
- ▲ Asmara
- International Airport
- Other boundary

Infrastructure:

- ✈ 8000 ft. Runway
- ✈ 3000 ft. Runway
- ✈ 1500 ft. Runway
- ✈ 500 ft. Runway
- ✈ 100 ft. Runway
- ✈ 50 ft. Runway
- ✈ 25 ft. Runway
- ✈ 10 ft. Runway
- ✈ 5 ft. Runway
- ✈ 2 ft. Runway
- ✈ 1 ft. Runway
- ✈ 0.5 ft. Runway
- ✈ 0.2 ft. Runway
- ✈ 0.1 ft. Runway

DEPTHS IN METERS

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SUITABLE FOR REFERENCE PURPOSES ONLY

Summary

- Both Africa and Middle East had extensive early structure, mostly ignored during colonial expansion
- Africa explored from Coasts, Middle East from trade routes
- Break up of Colonial Powers led to a rewriting of the colonial boundaries after both WW I and II
- Restructured less during era of Independence (1950s-70s), but political problems remain
- Excellent but ignored cartographic history