A Sea of Peaks - James Cook's mapping in the 1770s

9th International Mountain Cartography Workshop

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Mountains

Mount Logan
Canada’s Highest (5959m)
One of the world’s most massive
rises 4150m above the Seward Glacier
19km ridgeline
Part of the St. Elias Mountains
St Elias Mountain Range

Contains the Highest 5 peaks in Canada

Logan, St. Elias, King, Steele are all above 5000m

Spans BC, Yukon, Alaska

Parks & conservation areas

Kluane National Park (Canada),
Glacier Bay National Park (USA),
Wrangell-St. Elias National Park & Preserve (USA)
Endeavour
Adventure
Discovery
Resolution
PRESIDENT BY DAY, HUNTER BY NIGHT.

ABRAHAM LINCOLN

VAMPIRE HUNTER

COMING SOON IN 3D
My fictional cartography:

Commander James Cook and his crew were the first recorded Europeans to circumnavigate the St. Elias Isles.
True

View of the Entrance of Nootka Sound, when the N. point of the

Mount St. Elias.

View when Mount St. Elias bore N. W.

Mount Logan?
Fiction

True
Endeavour
Adventure
Discovery
Resolution
“Raise” sea level by 2000m
Consider Cook’s original course
Chart Cook’s fictional course
Mapping the Coast
Attempting to capture the style

- Mountain chains
- Coastline
- Unfinished coast
- Vegetation
Depth Soundings

- Cook: Lead lines, measured
- Me: DEM, convert to fathoms
Magnetic Variation

NOAA: Historic Magnetic Declination by decade as far back as 1590
The Names Remain the Same

• Glacier might become a Bay
• Peak may become an island
• Ridge could transform into an Isthmus, Point, or Cape
• Range might be sunk and is now a sea, or an island
• Big mountains remain big mountains
Longitude West from the Meridian of Greenwich.
Type

• Ideally: manual, hand labelled

• Time constraints: True type font
Typeface checklist

• “Modern” fonts date from the late 18\textsuperscript{th} century
  • Acute distinction between thick & thin strokes
• Serifs
  • Straight serifs

Dominant Typeface: \Checkmark Botoni
Type quirks

• Botoni
  • Increased leading
  • Exaggerated tilt in italics
  • Deeper descenders
  • Prominent features as Small Caps
Type quirks

• Title block
  • 4 different fonts
  • 8 different sizes

• Numbers
  • Exaggerated descenders
  • Mixed fonts & sizes
  • Extreme kerning (x,y shifts)
  • Degrees: 0 vs 0
Endeavour
Adventure
Discovery
Resolution
The Resolution

Be confident. Use ink.
Sources

• Captain Cook Society
  http://www.captaincookssociety.com/

• Elevation Model: GTOPO30
  http://eros.usgs.gov

• Topo maps
  − ArcGIS NGS Topo US 2D
    server.arcgisonline.com/arcgis/services/NGS_Topos_US_2D/MapServer
  − Natural Resources Canada, CanMatrix
    http://geogratis.cgdi.gc.ca

• NOAA (Magnetic Data)

• David Rumsey Cartography Associates.
  www.davidrumsey.com

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