Reference List – Dr. John Freedman
Viking Mars - Caribbean & Panama Canal 2026
For my lecture handouts, visit my website: ScholarAtSea.com

XOCOLATL (Chocolate), GIFT OF THE MAYA

BOOKS:
The True History of Chocolate , by Sophie & Michael Coe
The Chocolate Tree: A Natural History of Cacao , by Allen M. Young
A Cultural and Natural History of Cacao by Maricel Prescilla
Chocolate Nations by Orla Ryan
Chocolate Islands: Cocoa, Slavery and African Colonies by Catherine Higg
The Columbian Exchange by Alfred Crosby
The Maya by Michael Coe and Stephen Houston
The Gods and Symbols of the Maya by Mary Miller
The Ancient Maya by Robert Sharer and Loa Traxler
Aztec & Maya- An Illustrated History edited by Charles Phillips
Breaking the Maya Code by Michael D. Coe
The Popul Voh translated by Dennis Tedlock
Finding Zero by Amir Eczel
Jungle of Stone by William Carsten

ON THE WEB:
World's Oldest Chocolate Was Made 5300 Years Ago
https://www.science.org/world-s-oldest-chocolate-was-made-5300-years-ago-south-american-rainforest
The Creation Story of the Maya (in 2mins56sec!) – from the *Popul Vuh* – You Tube video
https://www.youtube.com/watch?v=Jb5GKmEcJcw
***Who Were The Maya*?** by Robert Sharer http://www.ancientscripts.com/maya.html
Mayan Civilization Timeline http://www.mexconnect.com/articles/3191-the-mayan-civilization-time-line
Mayan Script http://www.ancientscripts.com/maya.html
How The Mayan Calendar Really Works http://www.livescience.com/25662-how-mayan-calendar-works.html
Probing the Mysteries of the Maya in Smithsonian magazine
http://www.smithsonianmag.com/history/el-mirador-the-lost-city-of-the-maya-1741461/
The Origin of Zero in Scientific American https://www.scientificamerican.com/article/history-of-zero/
Archaeologists Discover Huge 'Lost Civilization' in Guatemala
https://www.vice.com/en/article/3admdv/archaeologists-discover-huge-lost-civilization-in-guatemala
The Popol Vuh and the Globalization of Chocolate
https://chocolateclass.wordpress.com/2014/02/21/the-popol-vuh-and-the-globalization-of-chocolate/
Pedro de Alvarado: A Timeline
http://timelinesandsoundtracks.blogspot.com/2017/07/pedro-de-alvarado-timeline.html
Flavors and Aromas of Varietal Chocolate *http://www.thenibble.com/reviews/main/chocolate/flavors-2.asp*
Chocolate and Slavery *by Samantha Weinberg*, in The Economist
http://www.intelligentlifemagazine.com/places/chocolate-and-slavery
Claudio Corallo,The Chocolate King of Sao Tomé
http://www.newstatesman.com/food/2009/01/corallo-chocolate-cocoa-sao
The Dark Side of Chocolate https://www.youtube.com/watch?v=7Vfbv6hNeng
Cocoa-nomics – CCN Freedom Project, 2014
http://www.cnn.com/2014/02/13/world/africa/cocoa-nomics-does-chocolate-grow-on-trees/
Fair Trade Glossary *http://www.fairtrade.net/fileadmin/user_upload/_fair-trade-glossary_.pdf*
Preventive Effects of Cocoa and Cocoa Anti-oxidants in Colon Cancer, by MA Martin *et al.*
http://www.mdpi.com/2079-9721/4/1/6/pdf
The Sugar 'Conspiracy' in The Guardian - informative article- just ignore the conspiracy mindset-
http://www.theguardian.com/society/2016/apr/07/the-sugar-conspiracy-robert-lustig-john-yudkin

Unfair Trade, in Foreign Affairs https://www.foreignaffairs.com/articles/africa/2013-04-04/unfair-trade
Why Fair Trade is Fair, in Foreign Affairs
https://www.foreignaffairs.com/articles/africa/2013-08-20/fairtrade-fair
US Weighs Plan to Boycott Ivory Coast Cocoa
https://www.washingtonpost.com/buiness/2019/08/07/ivory-coast-first-lady-says-ban-cocoa
Everything You Need to Know About Chocolate
https://www.nytimes.com/2020/02/11/dining/chocolate-bar.html
Cocoa and Cardiovascular Health – *in the journal* Circulation:
http://circ.ahajournals.org/content/119/10/1433.full
What Science Says About Chocolate and Health
https://mcpress.mayoclinic.org/living-well/what-science-says-about-the-health-benefits-of-chocolate/
Top 100 Anti-oxidant Foods *http://modernsurvivalblog.com/health/high-orac-value-antioxidant-foods-top-100/*
***Harvard Healthbeat- Health and Chocolate*:**
http://www.health.harvard.edu/blog/sweet-dreams-eating-chocolate-prevents-heart-disease-201506168087
http://www.health.harvard.edu/healthy-eating/is-chocolate-really-a-health-food?
Fat Is Not the Culprit http://awakenhealthfitness.com/fat-is-not-the-culprit-a-fresh-look-at-healthy-eating/
FDA Total Diet Study Report https://www.fda.gov/media/159745/download
Chocolate Consumption and Nobel Prize Winners
https://www.biostat.bio621/Chocolate consumption cognitive function and nobel laurates (NEJM).pdf
Dietary Flavonoids and Cancer Risk by Marian Neuhouser- in Journal of Nutrition & Cancer
http://www.tandfonline.com/doi/abs/10.1207/s15327914nc5001_1?journalCode=hnuc20
Heavy metals in Dark Chocolate:
https://www.consumerreports.org/health/food-safety/lead-and-cadmium-in-dark-chocolate-a8480295550/
https://time.com/6243073/heavy-metals-dark-chocolate-food/
https://www.mcgill.ca/oss/article/food-health-news-toxicity/lead-stain-chocolate
https://www.thechocolateprofessor.com/blog/chocolate-heavy-metals-hazards
https://thechocolatelife.com/the-irresponsible-demonization-of-cadmium-in-chocolate/

COSTA RICA AND THE ODYSSEY OF COFFEE

BOOKS:
Uncommon Grounds: The History of Coffee by Mark Prendergast
Coffee: A Global History by Jonathan Morris
The World Atlas of Coffee by James Hoffmann
Coffee by Dinah Lenney
The History of Costa Rica by Ivan Molina and Steven Palmer
History of the Discovery and Conquest of Costa Rica by Ricardo Fernandez Guardia

ON THE WEB:
The Columbian Exchange by Nathan Nunn & Nancy Qian in Journal of Economic Perspectives
http://scholar.harvard.edu/files/nunn/files/nunn_qian_jep_2010.pdf
Interactive Modern Pangea https://brilliantmaps.com/interactive-modern-pangaea/
How To See Sloths in Costa Rica https://costaricatravelblog.com/sloths-in-costa-rica/
The Shocking Truth About Sloths https://therevelator.org/shocking-sloths/
SLOTHOPEDIA https://www.slothconservation.org/slothopedia
Globetrotting Foods https://www.npr.org/sections/thetwo-way/globe-trotters-tomatoes-coffee-and-pepper
What To Know About Coffee
https://www.medicalnewstoday.com/articles/282857 - benefits
An Animated History of Central America https://www.youtube.com/watch?v=vM0l_lrfyKs
Coffee: From Shrub to Mug
https://tazzadiluna.files.wordpress.com/2014/05/zettwoch_coffee_blueprintsketch.jpg
The History of Coffee http://www.gocoffeego.com/professor-peaberry/history-of-coffee

The Long History of the Espresso Machine in Smithsonian magazine
http://www.smithsonianmag.com/arts-culture/the-long-history-of-the-espresso-machine
10 Differences Between Arabica and Robusta Coffee Beans
http://theroasterspack.com/blogs/news/15409365
Starbucks History Timeline
https://www.starbucks.com/about-us/company-information/starbucks-company-timeline
Why Is Costa Rican Coffee the Best?
https://www.craftcoffeeguru.com/costa-rica-coffee/
What Is Honey-Processed Coffee?
https://bigislandcoffeeroasters.com/blogs/blog/what-is-a-honey-processed-coffee
Best Costa Rican Coffees- A Guide https://www.homegrounds.co/best-costa-rican-coffee/
Coffee Hunters: Costa Rica https://www.coffeehunter.com/coffee-country/costa-rica/
What Is Coffee Rust? https://ticotimes.net/2020/11/02/what-is-coffee-rust-its-cause-and-effect
Effect of Climate Change on Costa Rican Coffee
https://ticotimes.net/2020/10/11/effects-of-climate-change-on-costa-rica-coffee
How Coffee Became A Necessity https://www.wsj.com/articles/how-coffee-became-a-modern-necessity
Coffee, Caffeine and Health – A July 2020 review in the New England Journal of Medicine
https://www.nejm.org/doi/full/10.1056/NEJMra1816604?query=featured_home
Coffee drinking and mortality in 10 European nations - Gunter M *et al.* Annals of Internal Medicine
http://annals.org/aim/article/2643435/coffee-drinking-mortality-10-european-countries-multinational-cohort-study
Coffee consumption and mortality - Pak *S et al.* Annals of Internal Medicine July 11 2017.
https://annals.org/aim/article-abstract/2643433/
Association Between Coffee and Decreased Risk of Heart Failure
https://www.ahajournals.org/doi/10.1161/CIRCHEARTFAILURE.119.006799
Coffee Reduces Mortality **(again!)** https://academic.oup.com/eurjpc/advance-article/doi/10.1093/eurjpc/zwac189/6704995?login=false
The Health Effects of Coffee: More Than Just A Hill of Beans
https://www.medscape.com/viewarticle/954638
4 Surprising Health Benefits of Coffee
https://www.washingtonpost.com/wellness/2026/07/02/4-proven-health-benefits-drinking-coffee/
Coffee and Cancer Reduction
https://www.medscape.com/viewarticle/coffee-and-tea-linked-reduced-cancer-risk-cup-murky-2025a10003ca
Coffee Consumption Slows Cognitive Decline
https://www.frontiersin.org/journals/aging-neuroscience/articles/10.3389/fnagi.2021.744872/full

THE STUPENDOUS STORY OF THE PANAMA CANAL

The Path Between the Seas by David McCullough (1977)
The Big Ditch by Noel Maurer and Carlos Yu
The Building of the Panama Canal in Historical Photographs by Ulrich keller
History of the Panama Canal by Ira E. Bennett (1923)
The Impossible Dream: the Building of the Panama Canal by Ian Cameron (1972)
And the Mountains Will Move by Miles by P. Du Val (1975)
Suez and Panama: Turbulent History – Charles River Editors
American Daredevil by Cathryn Prince
The Tailor of Panama by John Le Carré

ON THE WEB:
Timeline of Formation of the Panama Isthmus
https://www.tamug.edu/newsroom/2016articles/FormationIsthmusPanama.html
The Great American Biota Interchange (GABI)
https://theaveragescientist.co.uk/2023/05/09/the-great-american-interchange-when-worlds-collide/
SLOTHOPEDIA https://www.slothconservation.org/slothopedia

Indigenous Cultures of Panama- An Introductory Guide
https://www.zegrahm.com/blog/indigenous-cultures-panama-introductory-guide
How The Lowly Mosquito Helped America Win Independence
https://www.smithsonianmag.com/how-lowly-mosquito-helped-america-win-independence-180959411/
A Stamp That Changed History https://postalmuseum.si.edu/a-stamp-that-changed-history
Teddy Roosevelt and the Panama Canal
https://ca.pbslearningmedia.org/resource/theodore-roosevelt-and-the-panama-canal
An Economic History of the Panama Canal
https://www.hbs.edu/ris/Publication%20Files/06-041.pdf
A History of the Panama Canal http://www.pancanal.com/eng/history/history/
***President William Howard Taft in Panama-* live footage** https://www.wdl.org/en/item/7053/
History of the Panama Canal –1915 classic by Ira E. Bennett, beautifully written:
https://web.archive.org/web/20141030005620/http://www.czbrats.com/Menus/bennett.htm
The Panama Railroad http://www.panamarailroad.org/
Panama Canal and Its Engineers- Vintage Photos
https://www.researchgate.net/The_American_Engineers_that_Built_the_Panama_Canal
Goethals and The Culebra Cut (PBS 3-minute video with live footage)
https://www.pbs.org/video/american-experience-culebra-cut/
Practical Engineering: How the Locks of the Panama Canal Work
https://www.marineinsight.com/guidelines/how-the-water-locks-of-panama-canal-work/
How the Canal Works – in 17 seconds: https://www.youtube.com/watch?v=9ro-dr6t36g
Modern Marvels: Building the Panama Canal
https://www.youtube.com/watch?v=6LnuRW9t4JA
How The Panama Canal Works – by Tim Urban, in his *Wait But Why* series
https://waitbutwhy.com/2014/09/panama-canal-works.html
Lighthouses of the Panama Canal http://www.lighthousesrus.org/showSql.php?page=SA/Panama
The Economic Impact of the Panama Canal *https://www.jstor.org/stable/40056435?seq=1*
Panama Canal: Troubled History, Astounding Turnaround
https://hbswk.hbs.edu/item/panama-canal-troubled-history-astounding-turnaround
The Real Panama Hat https://www.smithsonianmag.com/travel/the-real-panama-hat-180980525/
Panama Canal From the Skydeck – a well-written, short & classic (1978) cruise transit travelogue
https://www.nytimes.com/1978/03/12/archives/the-panama-canal-from-the-sky-deck-the-long-debate-a-difference-of.html
Panama Canal in the 21st Century https://www.wsp.com/en-RO/projects/panama-canal-expansion
Panama Canal Shows Success Can Follow Epic Failure
https://www.freightwaves.com/panama-canal-story-shows-success-can-follow-epic-failure
Panama Canal Statistics https://www.pancanal.com/eng/op/transit-stats/
Inauguration of the 'New Panama Canal' 2016 https://www.youtube.com/watch?v=yqqQpwLj958
Canal de Panama mobile app***: Download from Apple or Android App Store***
Panama Canal Timelapse Full Transit Atlantic-to-Pacific
https://www.youtube.com/watch?v=q67o-ysPqYU&t=196s
Drought Saps the Panama Canal, Disrupting Shipping
https://www.nytimes.com/2023/11/01/business/economy/panama-canal-drought-shipping.html
A Tunnel Now Crosses The Panama Canal https://tunnelingworld.com/?p=20131

FILM:
The Tailor of Panama, 2001, based on LeCarré's 1996 novel. Directed by John Boorman, starring Pierce Brosnan,Geoffey Rush,Jamie Lee Curtis,Brendan Gleeson and (in his film debut) Daniel Radcliffe.

CHRISTOPHER COLUMBUS: MAN, MYTH, MONSTER

BOOKS:
The Four Voyages: Log-Book, Letters and Dispatches by Christopher Columbus.
Columbus: The Four Voyages by Lawrence Bergreen

Admiral of the Ocean Sea by Samuel Eliot Morison
The Last Voyage of Columbus by Martin Dugard
The Life and Voyages of Christopher Columbus by Washington Irving
1492: A Novel by Newton Frolich - well-researched historical fiction, about the man and the era
Isabella of Castille by Giles Tremlett - the gal who made it happen
The Caribbean by James Michener - especially Chapter 3, 'Columbus in Hispaniola'
Columbus: The DNA of His Writing by Estelle Irizarry (Thesis: Columbus was a Spanish Jew)
Columbus, The Untold Story by Manuel Rosa (Thesis: Columbus' origin was Polish- outlandish but fun)
Diary of Christopher Columbus' -1st Voyage (abstracted)- translated by Oliver Dunn & James Kelley
The Columbian Exchange by Alfred Crosby

FILM:
***1492: Conquest of Paradise*,** 1992, directed by Ridley Scott, flawed but interesting- worth a watch
***Christopher Columbus, The Discovery*,** 1992, directed by John Glen, flawed and barely watchable
Columbus in America, 2018 documentary, on the dark side - free on Amazon Prime video
When Christopher Columbus Flopped at the Box Office
https://www.forbes.com/sites/scottmendelson/2014/10/13/when-christopher-columbus-flopped

ON THE WEB
Coming To America: Who Was First
https://www.npr.org/templates/story/story.php?storyId=15040888
Christopher Columbus Timeline
http://www.datesandevents.org/people-timelines/15-christopher-columbus-timeline.htm
Christopher Columbus - nicely done section on the Florida Museum's *Caribbean Archaeology* website
https://www.floridamuseum.ufl.edu/caribarch/education/columbus/
20-Year Columbus DNA Study Aims to End Dispute
https://www.irishtimes.com/world/europe/2023/01/22/christopher-columbus-dna-tests/
Christopher Columbus: A Catalan Jew From Ibiza?
https://www.academia.edu/5034254/Cristopher_Columbus_a_Catalan_Jew_from_Ibiza
Carl Sagan on the Brilliance of Eratosthenes
https://greekreporter.com/2022/11/01/carl-sagan-ancient-greek-eratosthenes/
Columbus and Toscanelli the Cartographer
https://archive.schillerinstitute.com/fidelio_archive/1992/fidv01n02-1992-columbus_and_toscanelli.pdf
The Tale of A Lost Admiral (wonderful 1928 *NY Times* article on Columbus marooned in Jamaica)
https://timesmachine.nytimes.com/timesmachine/1928/10/14/936853862.pdf
On The Travels of Sir John Mandeville
https://volodymyrbilyk.medium.com/travels-of-sir-john-mandeville-1053d8f85694
Queen Isabela in the Movies
https://frockflicks.com/wcw-isabella-of-castile/
The Log of Christopher Columbus https://everything2.com/title/The+Log+of+Christopher+Columbus
The Martellus Map of 1491: Did This Map Guide Columbus?
https://www.smithsonianmag.com/history/did-this-map-guide-columbus-180955295/
Icon For a New Nation: The Re-making of Christopher Columbus
https://www.smithsonianmag.com/history/why-christopher-columbus-was-perfect-icon-180956887/
Who Were The Taino?
https://www.smithsonianmag.com/history/who-were-taino-original-inhabitants-columbus-island-73824867/
How A Lunar Eclipse Saved Columbus
https://www.space.com/2729-lunar-eclipse-saved-columbus.html
Columbus and the Night of the Bloody Moon
https://www.theguardian.com/science/1999/jul/15/technology
Columbus: The Lost Voyage – The History Channel's excellent documentary on the 4th voyage - available on Amazon Prime and Hulu.
Columbus' Last Letter - Written in Jamaica 1503
https://content.wisconsinhistory.org/digital/collection/aj/id/4414

Christopher Columbus in the Movies
https://www.medievalists.net/2020/08/christopher-columbus-movies/
Columbus's Fifth and Final Voyage (nice summary of the travels of his remains)
https://www.historiadelnuevomundo.com/en/christopher-columbus-fifth-and-final-voyage/
Columbus Day: A Clash of Myth and History
https://freepress.org/Backup/UnixBackup/pubhtml/solomon/columbus.html
'On Geography and Some Explorers' - by Joseph Conrad in March 1924 *National Geographic*
- it points out the fanciful, wholly unscientific nature of geography before Columbus
https://w3.ric.edu/faculty/rpotter/temp/geog_and_some.html
How The Lowly Mosquito Helped America Win Independence
https://www.smithsonianmag.com/how-lowly-mosquito-helped-america-win-independence-180959411/

THE BITTERSWEET STORY OF SUGAR

BOOKS:
Sweetness and Power: The Place of Sugar in Modern History by Sidney Mintz
Sugar Changed The World by Marc Aronson & Marina Budhos
The Slave Trade, by Hugh Thomas
The Atlantic Slave Trade by Herbert S. Klein
The Rise of African Slavery in the Americas by David Eltis
Atlas of the Transatlantic Slave Trade by David Eltis
Sugar in the Blood: A Family's Story of Slavery and Empire by Andrea Stuart
Sugar and Slaves-Rise of the Planter Class in the British West Indies by Richard S. Dunn
The Interesting Narrative by Olaudah Equiano
Ebony & Ivy by Craig Steven Wilder (exploring the ties of prestigious universities to the slave trade)
The Caribbean by James Michener, especially Chapter 3, 'The Sugar Interest'
Atlantic Africa and the Spanish Caribbean by Daniel Wheat
The Case Against Sugar by Gary Taubes

FILM:
Amistad directed by Steven Spielberg, 1997
12 Years A Slave directed by Steve McQueen, 2013
Behind the Sun directed by Walter Salles, 2001- a glimpse of the challenges of sugar milling
Amazing Grace directed by Michael Apted, 2007 – excellent treatment of the British abolition movement with Benedict Cumberbatch and the late great Albert Finney shining
Emancipation directed by Antoine Fuqua, 2022 - historical fiction based on the life of 'Whipped Peter'
Belle directed by Amma Asante, 2013 - good historical fiction, with the story of the Zong massacre as seen through the eyes of a freed slave who was raised in the house of the judge presiding over the case

ON THE WEB:
How Sugar Is Made http://www.madehow.com/Volume-1/Sugar.html
The Barbaric History of Sugar
https://www.nytimes.com/interactive/2019/08/14/magazine/sugar-slave-trade-slavery.html
The Illustrated History of Sugar https://www.saveur.com/sugar-history-of-the-world/
The Atlantic Slave Trade in 2 Minutes- Animated Interactive Learning Tool
http://www.slate.com/articles/life/the_history_of_american_slavery/2015/06/animated
Scandinavians and The Atlantic Slave Trade
https://ehne.fr/en/encyclopedia/europe-and-atlantic-slave-trade/scandinavians-and-atlantic-slave-trade
The Santo Domingo Slave Revolt of 1521 – A Quincentennial Monograph
http://www.dominicanlandmarks.com/Slave-Revolt-1521-Slave-Laws-1522-Monograph.pdf
Brown University Website on Slavery and Justice http://www.brown.edu/Research/Slavery_Justice/

The 1619 Project - 6 part documentary available on Hulu - informative and provocative but take it with a grain of salt as the historical assertons are not all well-founded
The Great Boston Molasses Flood
https://www.history.com/this-day-in-history/molasses-floods-boston-streets
The Pandora Papers: Bitter Sugar
https://www.washingtonpost.com/2021/tax-haven-south-dakota/?itid=hp-top-table-high
Is Sugar Really Toxic? Sifting Through the Evidence in Scientific American, July 2013
http://blogs.scientificamerican.com/brainwaves/2013/07/15/is-sugar-really-toxic-sifting-through
The Relationship of Sugar Intake to Diabetes Prevalence
https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0057873
The Sugar Conspiracy in The Guardian – very informative, but ignore the overdone 'conspiracy' mindset – it was largely an epidemiologic medical error, albeit avidly supported by industry for their gain
http://www.theguardian.com/society/2016/apr/07/the-sugar-conspiracy-robert-lustig-john-yudkin
Fat Is Not the Culprit http://awakenhealthfitness.com/fat-is-not-the-culprit-a-fresh-look-at-healthy-eating/
Glycemic Index and Cardiovascular Mortality https://www.nejm.org/doi/full/10.1056/NEJMoa2007123
Artificial Sweeteners Beat Sugar https://www.medscape.com/viewarticle/970097
Beyond Sugar https://pmc.ncbi.nlm.nih.gov/articles/PMC12470175/

THE REAL PIRATES OF THE CARIBBEAN

BOOKS:
A General History of the Pyrates (1724) by Captain Charles Johnson
Treasure Island by Robert Louis Stevenson
The World Atlas of Pirates by Angus Konstam
Pirates: An A to Z Encyclopedia by Jan Rogozinski
The Real Pirates of the Caribbean by Charles Rivers Editors
A Brief History of the Caribbean by Jan Rogozinski
The Republic of Pirates by Colin Woodard
Treasure Island by Robert Louis Stevenson
Henry Morgan, 17th Century Buccaneer by Henry Weintraub
Howard Pyle's Book of Pirates by Howard Pyle
Quest For Blackbeard by Baylus C Brooks
The King of Pirates by Daniel DeFoe
Thomas Jefferson and the Tripoli Pirates by Brian Kilmeade
William Dampier: A Pirate of Exquisite Mind by Diana and Michael Preston
Caribbean by James Michener

FILM:
Captain Blood 1934, starring Errol Flynn and Olivia de Haviland
Treasure Island and ***Long John Silver –*** Disney's 1950 and 1954 originals starring Robert Newton – the original "Aarrgghh" exclaimer. Available on DVD or streaming from Amazon.
Hook 1991 directed by Steven Spielberg and starring Dustin Hoffman as Captain Hook (and Robin Williams as Peter Pan and Julia Roberts as Tinkerbell)
Pirates of the Caribbean series –the 'new classic' channeling past historical pirates - with flair
The Pirate Code – National Geographic Special – available on DVD from Amazon

ON THE WEB:
The Sea People
https://www.nationalgeographic.com/history/pirates-once-swashbuckled-across-ancient-mediterranean
Pirates of the Ancient Mediterranean
https://www.nationalgeographic.com/history/history-magazine/article/pirates-once-swashbuckled-across-ancient-mediterranean
True Caribbean Pirates- The History Channel
https://www.youtube.com/watch?v=2PTYwxivSG0
Ten Notorious Dutch Pirates https://www.worldhistory.org/article/1883/ten-notorious-dutch-pirates/

Blackbeard, Terror At Sea – National Geographic Channel
https://www.dailymotion.com/video/x1xn44z_blackbeard-terror-at-sea_shortfilms
The Last Days of Blackbeard https://www.smithsonianmag.com/history/last-days-blackbeard-180949440/
Robert Newton- The Man Who Taught the World to Talk Like A Pirate
http://sabotagetimes.com/tv-film/the-man-who-taught-the-world-how-to-talk-like-a-pirate
Queen Teuta, the Fierce Illyrian Queen
http://www.ancient-origins.net/history-famous-people/fierce-queen-illyrians-teuta-untameable-003126
What Be A Pirate? – A Lexicon of Piratical Terms http://pirates.hegewisch.net/diff.html
Barry Clifford on The Treasures of the Wydah https://www.youtube.com/watch?v=XZCvZ8ToSj0

SIR FRANCIS DRAKE, THE QUEEN'S PIRATE

The Queen's Pirate: Sir Francis Drake by Kevin Jackson
In Search of A Kingdom- Drake, Elizabeth and Empire - by Laurence Bergreen
The Life and Death of Sir Francis Drake by Charles Fitz-Geffrey
Sir Francis Drake by John Sugden
Elizabeth's Sea Dogs: How England's Mariners Became the Scourge of the Sea by Hugh Bicheno
The Sea King: Sir Francis Drake and His Times by Albert Marrin
The Life, Voyages & Exploits of Admiral Sir Francis Drake by John Barrow
Sir Francis Drake, England's Greatest Seafarer by Ernie Bradford
No Limits to Their Sway: Cartagena's Privateers by Edgardo Morales
The Great Expedition by Angus Konstam
The World Encompassed by Francis Drake (Drake's nephew), 1628
The Secret Voyage of Sir Francis Drake by Samuel Bawlf
Caribbean by James Michener (Chapter 4)
ON THE WEB:
A Pictorial History of Sir Francis Drake – U.S. Library of Congress
https://www.loc.gov/rr/rarebook/catalog/drake/index.html
Sir Francis Drake: Fact and Biography
https://www.history.com/topics/exploration/sir-francis-drake
Sir John Hawkins- Admiral, Privateer, Slave Trader
https://www.rmg.co.uk/stories/topics/john-hawkins-admiral-privateer-slave-trader
Sir Francis Drake Timeline (this is nicely detailed and accurate)
http://timelinesandsoundtracks.blogspot.com/2017/04/francis-drake-timeline.html
Queen Elizabeth I: A Timeline
http://timelinesandsoundtracks.blogspot.com/2020/12/elizabeth-i-timeline.html
Drake's Attack on San Juan, 1595
https://workmall.com/wfb2001/puerto_rico/drake_s_attack_on_san_juan_1595.html
The Battle That Turned Sir Francis Drake Into Spain's Worst Nightmare
https://historyhowithappened.com/the-battle-that-made-francis-drake-spains-worst-nightmare/
Sir Francis Drake 1540-96
https://library.princeton.edu/visual_materials/maps/websites/pacific/drake/drake.html
Sir Francis Drake- The Dark Side
https://www.nationalgeographic.co.uk//2021/07/queen-elizabeth-is-favorite-pirate-dark-side
The Execution of Thomas Doughty by Francis Drake
https://englishhistoryauthors.blogspot.com/2013/04/the-execution-of-thomas-doughty-by.html
Did Sir Francis Drake Land in California?
https://www.smithsonianmag.com/history/did-francis-drake-really-land-california-180973219/

FILM:
Elizabeth, The Golden Age, 2007 film starring Cate Blanchett, directed by Shekhar Kapur, sequel to 1998 ***Elizabeth*** – Sir Francis gets upstaged by his distant cousin Sir Walter Raleigh in this film, but the film nicely sets the scene and the tone of the times.

THE GREAT EXCHANGE

BOOKS:

The Columbian Exchange by Alfred W. Crosby
A Movable Feast: Ten Millennia of Food Globalization by Kenneth Kiple
Columbus: The Four Voyages by Lawrence Bergreen
The Four Voyages: Log-Book, Letters and Dispatches by Christopher Columbus.
Precious Cargo and **Founding Foodies** by David DeWitt
The Food Explorer by Daniel Stone
1493 by Charles Mann
The Cambridge World History of Food edited by Kenneth Kiple (2-volume encyclopedic tome)
The Great Irish Potato Famine by James Donnelly (Sutton Publishing, 2002)
The Tomato in America- Early History, Culture & Cookery by Andrew Smith
Sweetness and Power: The Place of Sugar in Modern History by Sidney Mintz
Coffee by Dinah Lenney
Pizza: A Global History by Carol Helstosky
The True History of Chocolate , by Sophie & Michael Coe
The Lost Lady of the Amazon by Anthony Smith.
The Thief At the End of the World by Joe Jackson
King Leopold's Ghost by Adam Hochschild
The Miraculous Fever Tree by Filametta Rocco
Oranges by John McPhee
The Codebreaker by Walter Isaacson (all about the discovery and uses of CRISPR gene editing)
Tulipmania by The Charles River Editors
A Perfect Red:The Story of Cochineal by Amy Butler Greenfield

ON THE WEB:

The Columbian Exchange by Nathan Nunn & Nancy Qian in Journal of Economic Perspectives
http://scholar.harvard.edu/files/nunn/files/nunn_qian_jep_2010.pdf
Interactive Modern Pangea https://brilliantmaps.com/interactive-modern-pangaea/
Globetrotting Foods https://www.npr.org/sections/thetwo-way/globe-trotters-tomatoes-coffee-and-pepper
Hernan Cortez: A Timeline
http://timelinesandsoundtracks.blogspot.com/2016/07/hernan-cortes-timeline.html
Our Vegetable Travelers https://aggie-horticulture.tamu.edu/plantanswers/publications/vegetabletravelers/
The Food That Built America https://play.history.com/shows/the-food-that-built-america
UN Food & Agriculture Organization statistics website http://www.fao.org/statistics/en/
Vegetable Facts- The History of Vegetables http://www.vegetablefacts.net/vegetable-history/
The Strange History of 'King Pine' (the Pineapple)
https://www.theparisreview.org/blog/2018/04/25/the-strange-history-of-the-king-pine/
Ancient DNA Unearths Corn's History
https://www.smithsonianmag.com/2020/12/14/how-ancient-dna-unearths-corns-maize-ing-history/
How The Potato Changed The World by Charles Mann.
http://www.smithsonianmag.com/history/how-the-potato-changed-the-world-108470605/
How The Potato Changed The World's History by William McNeill
http://www.dvrhs.org/cms/lib2/NJ01001243/Centricity/Domain/606/SS 9th - McNeill-Potato.pdf
What's the difference? Sweet Potatoes and Yams
https://www.triviagenius.com/whats-the-difference-between-sweet-potatoes-and-yams/X5GYuJEgZAAGUgZY
Peanut Facts – *The Peanut Institute* http://www.peanut-institute.org/peanut-facts/history-of-peanuts.asp
A Brief History of Peanut Butter – Smithsonian magazine
https://www.smithsonianmag.com/innovation/brief-history-peanut-butter-180976525/
The Social History of the Pineapple http://www.levins.com/pineapple.html
World's Hottest Peppers https://pepperhead.com/top-10-worlds-hottest-peppers/
How Peppers Proliferated https://www.nytimes.com/2021/08/17/science/peppers-gene-banks.html
World Carrot Museum www.carrotmuseum.com
Bananas in World History https://humwp.ucsc.edu/cwh/bananas/Site/Welcome.html

The Humble Sweet Potato Colonized the World
https://www.nytimes.com/2018/04/12/science/sweet-potato-pacific-dna.html***?***
Jamaica-The First Bananas *https://jamaicans.com/did-you-know-jamaica-was-the-first-country-in-the-western-hemisphere-to-produce-bananas-commercially/*
Why The Tomato Was Feared in Europe for 200 Years – in Smithsonian magazine
http://www.smithsonianmag.com/arts-culture/why-the-tomato-was-feared
Who Invented Pizza? https://www.history.com/news/a-slice-of-history-pizza-through-the-ages?cmpid=email-hist-inside-history-2021-0208
The Storied Origins of Black Pepper
http://www.lifescript.com/food/articles/t/the_storied_origins_of_black_pepper.aspx
The Truth About Genetically Modified Food in Scientific American
https://www.scientificamerican.com/article/the-truth-about-genetically-modified-food/
What To Know About Coffee https://www.medicalnewstoday.com/articles/282857 - benefits
Coffee: From Shrub to Mug
https://tazzadiluna.files.wordpress.com/2014/05/zettwoch_coffee_blueprintsketch.jpg
The History of Coffee http://www.gocoffeego.com/professor-peaberry/history-of-coffee
The History of Coca-Cola https://www.thoughtco.com/history-of-coca-cola-1991477
The Citrus Family Tree https://www.nationalgeographic.com/magazine/article/explore-food-citrus-genetics
Honey Is Basically Bee Vomit– in The Huffington Post 3/14/2017..
https://www.huffingtonpost.com/entry/what-is-honey_us_58c6a525e4b0d1078ca80e2c
GMO FAQs – Excellent fact-based review https://gmo.geneticliteracyproject.org/
Neil deGrasse Tyson gets to the bottom of GMOs https://www.youtube.com/watch?v=aMDhUsxom0U
The Clash of Civilizations – classic piece by Samuel Huntington in Foreign Affairs magazine
https://www.jstor.org/stable/20045621?seq=1 - page_scan_tab_contents
All About Frangipani http://www.allthingsfrangipani.com/frangipanis.html
The Deep History of the Coconut – Decoded
https://source.wustl.edu/2011/06/deep-history-of-coconuts-decoded/
When Nuts Aren't Nuts https://www.mentalfloss.com/article/617729/nuts-that-arent-actually-nuts
Nuts Are A Nutritional Powerhouse
https://well.blogs.nytimes.com/2015/03/30/nuts-are-a-nutritional-powerhouse
Health News Review-Critical Thinking About Health Care https://www.healthnewsreview.org/
Earthworm Invaders https://ecosystemsontheedge.org/earthworm-invaders/
When Mosquitoes Brought Yellow Fever to the Caribbean
https://time.com/5693134/columbus-explorers-yellow-fever-slavery/

SOME GENERAL REFERENCES:

"Why We Travel" by Pico Iyer**.** Originally published in 2000 in *Salon* magazine, this classic piece on the joys of travel is one of my favorites: http://www.worldhum.com/features/travel-stories/why-we-travel-20081213/

The National Geographic Archive – 'Every Page, Every Issue Since 1888' – a treasure trove!
https://archive.nationalgeographic.com/landing

Smithsonian 'History of the World Map by Map' - Smithsonian /DK Books - A beautiful and comprehensive book with 140 infographic maps and explicatory text covering world history from early hominids through the telecom revolution. A history buff's coffee table dream come true.
UN Human Development Index – The United Nations Development Program's comprehensive metric for assessing a country's composite level of achievement in key areas of health, wealth, and education
http://hdr.undp.org/en/countries

The Metropolitan Museum of Art Heilbrunn Timeline of Art History – Fabulous website providing an encyclopedic overview of art history – just enter in any place name, cultural term or keyword and it will provide information and images of important works of art of the period and place.
https://www.metmuseum.org/toah/

"Life is short, break the rules, forgive quickly, love truly, laugh uncontrollably,
and never regret anything that made you smile.
Twenty years from now you will be more disappointed by the things you didn't do
than by the ones you did.
So throw off the bowlines. Sail away from the safe harbor. Catch the trade winds in your sails.
Explore. Dream. Discover!"

- **not Mark Twain** (source disputed**,** but still a great quote!)

THANK YOU

for your companionship on our voyage of discovery on the beautiful *Viking Mars*
. Please feel free to share your thoughts, feedback, suggestions, and any tips on interesting books, films, websites, apps or podcasts with me at: ScholarAtSea@gmail.com.

For travel-related (no politics!) intellectual content, check out my posts on Twitter/X: @DrJohnFreedman