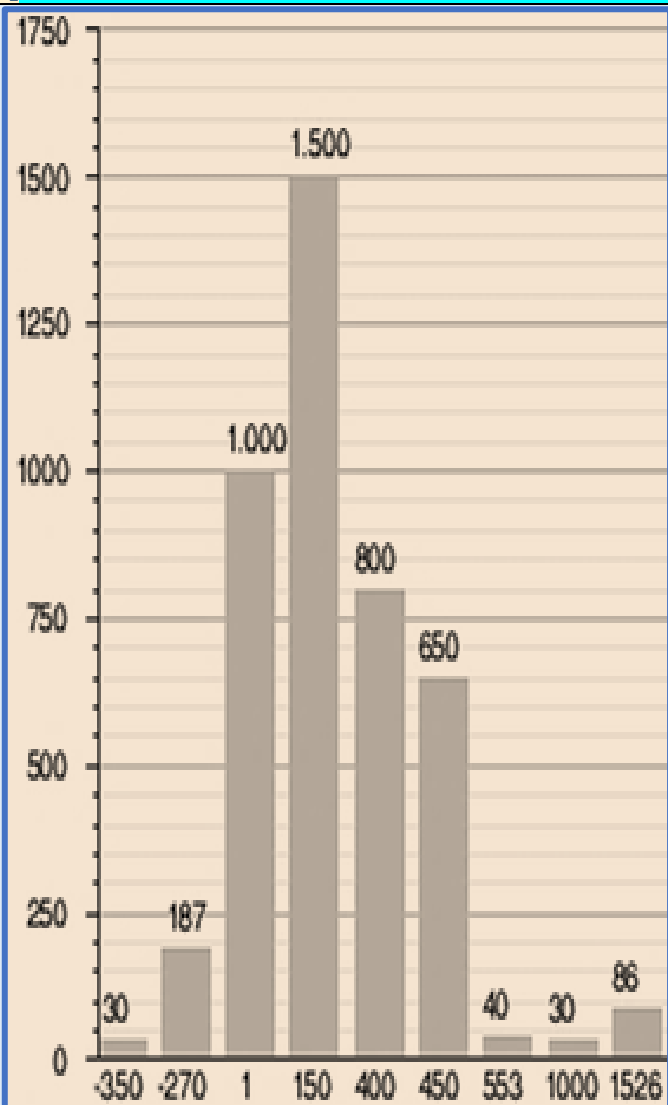


# Did Comet *HEINRICH-Swift-Tuttle* Terminate Roman and Global Civilization?

[ROME'S POPULATION CATASTROPHE: [https://it.wikipedia.org/wiki/Demografia\\_di\\_Roma](https://it.wikipedia.org/wiki/Demografia_di_Roma)]

G. Heinsohn, January 2021



In the first millennium CE, the people of **ROME** built residential quarters, latrines, water pipes, sewage systems, streets, ports, bakeries etc., but only during Imperial Antiquity (1-230s CE). No such structures were built during Late Antiquity (4<sup>th</sup>-6<sup>th</sup>/7<sup>th</sup> c.) or the Early Middle Ages (8<sup>th</sup>-930s CE). [See already <https://q-mag.org/gunnar-heinsohn-the-stratigraphy-of-rome-benchmark-for-the-chronology-of-the-first-millennium-ce.html>]

Since the **ruins of the 3<sup>rd</sup> c. CE lie directly beneath the primitive new structures that were built after the 930s CE** (i.e., BEGINNING OF THE HIGH MIDDLE AGES), Imperial Antiquity belongs stratigraphically to the period from 700 to 930s CE.

The steep decline in the population of Rome from 1.5 million to 650,000, dated in the diagram to "450" CE, must be accommodated archaeologically within Imperial Antiquity. This decline is due to the crisis caused by the Antonine Plague and Fires, the burning of Rome's State Archives (*Tabularium*), the Comet of Commodus before the rise of the Severan Emperors (190s-230s CE), and the invasion of Italy by proto-Hunnic Iazyges and proto-Gothic Quadi from the 160s to the 190s. The **160s ff.** are stratigraphically **parallel** with the **450s ff.** CE and its invasion of Italy by Huns and Goths. Stratigraphically, we are in the **860s ff.** CE, with Hungarians and Vikings.

The demographic collapse in the **CRISIS OF THE 6<sup>th</sup> CENTURY** ("553" CE in the diagram) is identical with the **CRISIS OF THE 3<sup>rd</sup> C.**, as well as with the **COLLAPSE OF THE 10<sup>th</sup> C.**, when **Comet HEINRICH-Swift-Tuttle** (after King Heinrich I of Saxony; 876/919-936 CE) **with ensuing volcanos and floods of the 930s CE** ) damaged the globe and Henry's Roman style city of Magdeburg). Therefore, the diagram's dates "553" and "1000" stand for the same demographic situation (3<sup>rd</sup>==6<sup>th</sup>== 10<sup>th</sup> c. CE).

It was that **Atlantis-like 930s cataclysm** that caused the **FALL OF ROME**. Invasions of Huns, Goths, and Arabs ["Migration Period"] preceded this disaster by some 70 years.

[See already <http://www.q-mag.org/gunnar-heinsohn-tenth-century-collapse.html>.]

Written sources dealing with the **930s CE CATAclysm** caused by **Comet HEINRICH-Swift-Tuttle**.

**Widukind von CORVEY (925-973 CE)**

*Rerum gestarum saxonicarum libri tres*

**Liber II: XXXII. DE PORTENTIS**

[[http://www.fh-](http://www.fh-augsburg.de/~harsch/Chronologia/Lspost10/Widukind/wid_sax0.html)

[augsburg.de/~harsch/Chronologia/Lspost10/Widukind/wid\\_sax0.html](http://www.fh-augsburg.de/~harsch/Chronologia/Lspost10/Widukind/wid_sax0.html).]

**MESOPOTAMIA**

**SHAYKH MUFID (948-1022 CE)**

*Kitab al-Irshad* (Book of Guidance)

[<https://www.shia-maktab.info/index.php/en/library/books/english?format=raw&task=download&fid=93>.]

**COMET HEINRICH-Swift-Tuttle**

(after Heinrich I of Saxony)

[Henry the Fowler; 876-936 CE]

“In the same year frightening omens were seen, namely **comets**, which were visible from October 17 to November 1. This phenomenon made many people tremble, because they feared a furious **plague** or at least an overthrow of the regime. At the least, many disturbing signs appeared before Heinrich's passing [936 AD] . The **sun was without light**, although the skies were clear and cloudless, but it looked blood-red through the windows. Also, it was said, the **mountain** in which the mighty king was buried **spat fire** in several places. / The **comet was followed by a flood** and the latter by a **pestilence of cattle**.

**The fact that Widukind does not speak of one comet, but in the plural of “cometS”, it could have been a double-headed comet prone to destabilization.**

“Traditions have been reported mentioning the signs for the time of the appearance of the Imam. / There will be an eclipse of the sun in the middle of the month of Ramaḍān; there will be an eclipse of the moon at the end of that month in contrast to ordinary happenings; **the land will be swallowed** up at al-Bayḍā’; it will be swallowed in the east - it will be swallowed up in the west; the **sun will stay still** from the time of its decline to the middle of the time for the afternoon prayer; it will rise from the west. / The **star will appear in the east** giving light just like the moon gives light; then (the new moon) will bend until its two tips almost meet; a color will appear in the sky and spread to its horizons; a **fire will appear for a long time** in the east remaining in the air for three or seven days. / A black wind will raise it at the beginning of the day and then an earthquake will occur so that much of it will be swallowed up. / **Swift death** (will occur) there and there will be a loss of property, lives and harvests; **locusts** will appear at / times not usual / and there will be little harvest for what the people planted. [...] Slaves will rebel / and kill their masters. / A face and a chest will appear in the sky before the people in the center of the sun. / That will come to an end / with **twenty-four continuous rainstorms** and the land will be revived by them after being dead. / We have only mentioned . [...] what is recounted in basic sources of tradition.”

G. Heinsohn, January 2021

**POSSIBLE YEAR 934 CE OF HEINRICHS'S COMET** [from “Cloudy and clear stratospheres before A.D. 1000 inferred from written sources” by Richard B. *STOTHERS*, Institute for Space Studies, Goddard Space Flight Center, NASA, New York, USA. *JOURNAL OF GEOPHYSICAL RESEARCH*, VOL. 107, NO. D23, 4718, doi:10.1029/2002JD002105, 2002 [https://agupubs.onlinelibrary.wiley.com/doi/pdf/10.1029/2002JD002105] **G. Heinsohn, January 2021**

**“A.D. 934**

A dry fog is strongly indicated by a day-long red appearance of the Sun over Germany and Ireland [Stothers, 1998]. Schove [1984] has noted four other mentions of the **red Sun** in very late European chronicles, all of which have referred the event to the reign of Lothair II (931 – 950) in Italy. The assigned dates in these chronicles range from 937 to 963, but these are undoubtedly errors for 934, the date implied, somewhat approximately, by our main source, the contemporary chronicler **Widukind of Corvey in Saxony** [mentioning the **comet of Heinrich** that is here strangely omitted by *STOTHERS*; GH].

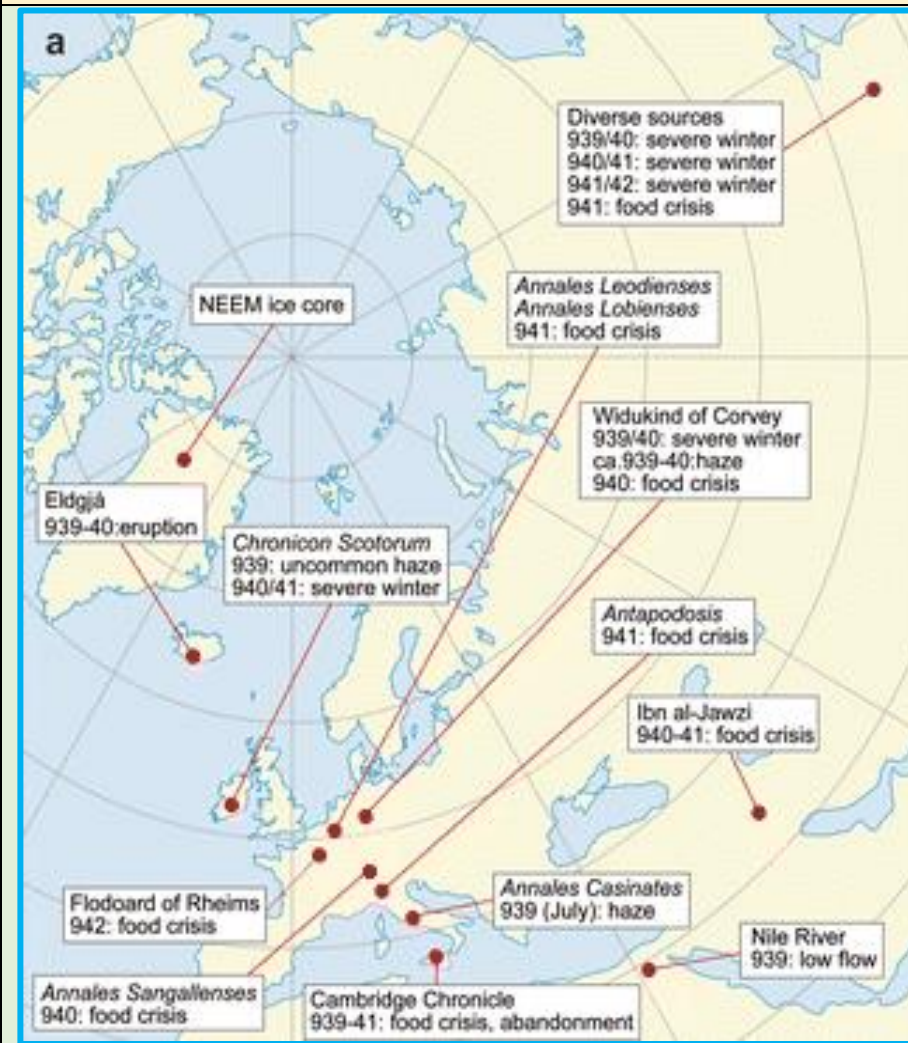
The volcano Eldgjá in Iceland erupted around this time, probably starting during the summer months. Greenland ice cores place the eruption date somewhere in the interval 934 – 938 [Hammer et al., 1980; Herron, 1982; Hammer, 1984; Johnsen et al., 1992; Zielinski et al., 1994, 1995; Zielinski, 1995; Clausen et al., 1997].

Although northern **tree ring signals around this date are sparse** [D’Arrigo et al., 2001], the documentary evidence is abundant and quite explicit about the atmospheric cooling (see also the contemporary Persian chronicler Hamza al-Isfahani, Annals 10.7, Gottwaldt). Climatic and historic evidence together tie the starting date to 934. The eruption itself was of fissure type and was apparently drawn out over several years [Thordarson et al., 2001].”

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## KNOWN FALLOUT FROM THE **ELDGJÁ ERUPTION** IN THE 930s CE OF **COMET HEINRICH-Swift-Tuttle**



During the 930s CE (time of **Comet of HEINRICH-Swift-Tuttle**) the Icelandic volcano Eldgjá exploded, causing the nearby Katla and Vatnajökull volcanos to erupt, as well.

The explosions (20 km<sup>3</sup> of lava ejected) **far exceeded** the global disruptions caused by the Tambora eruption of 1815 ("year without summer"), which, with the force of **170,000 Hiroshima bombs**, was considered the greatest volcanic catastrophe of historical times. After Eldgjá, around **220 million tons of sulphur dioxide** were spewed into the atmosphere and, through reaction with water and oxygen, become **450 million tons of sulphuric acid**, whose lethal aerosols covered the northern hemisphere:

“Human suffering in the wake of Eldgjá was widespread. **From northern Europe to northern China, people experienced long, hard winters and severe spring-summer drought. Locust infestations and livestock mortalities occurred.** Famine did not set in everywhere, but in the early 940s we read of starvation and vast mortality in parts of Germany, Iraq and China” (Oppenheimer, C. et al. 2018, “The Eldgjá eruption: timing, long-range impacts and influence on the Christianisation of Iceland”, *Climatic Change*, Vol. 147, issue 3-4, 369-381; see also <https://www.q-mag.org/gunnar-heinsohn-ravenna-and-chronology.html#yt10uVmL>, p. 86 ff.).

G. Heinsohn, January 2021

## Comet SWIFT-TUTTLE.

It is amended here to **COMET HEINRICH-Swift-Tuttle**.

[<https://solarsystem.nasa.gov/asteroids-comets-and-meteors/comets/109p-swift-tuttle/in-depth/>; <https://www.livescience.com/55484-swift-tuttle-collision-with-earth.html>]

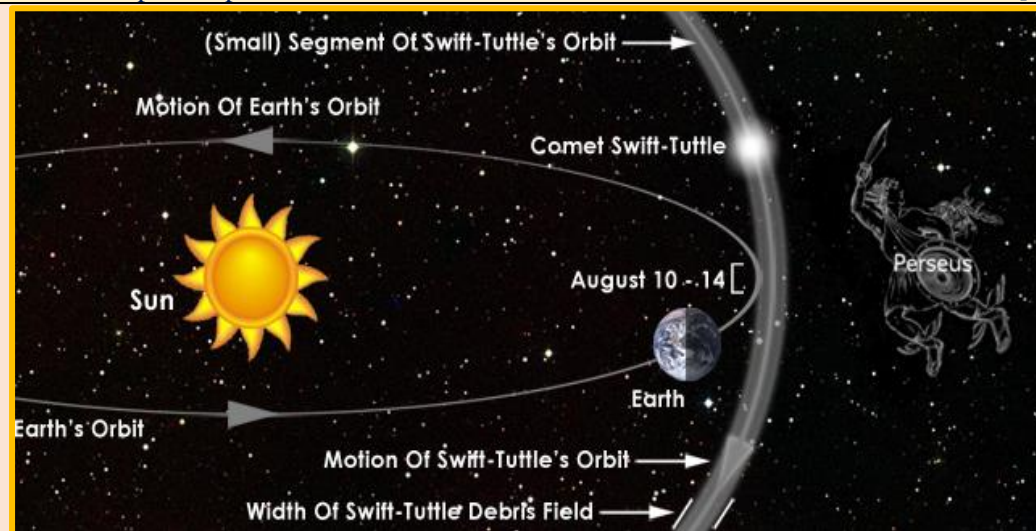
Icy body of dust and **dark organic matter**.

The **comet's perihelion is just under that of Earth**.

Every August “Earth passes through a section of Swift-Tuttle's cometary tail—a cloud of particles [Perseids] ejected from the comet, most of which have been in this formation **for a thousand years**” [<https://phys.org/news/2018-08-cautionary-tail-comet-swifttuttle.html>].

Edward C. Herrick's [1811-1862] search for reports on August meteors [Perseids] revealed “seven cases, from **1029** in Egypt to **1833** in England”

[<https://skyandtelescope.org/observing/celestial-objects-to-watch/the-discovery-of-the-perseid-meteors/>].



Swift-Tuttle is “**the single most dangerous object known to humanity**” (Gerrit L. Verschuur).

A direct Earth hit would equal the **energy of 20 million hydrogen bombs** (28 times the dinosaur killer).

**Unusual** is its orbit because it was, only **1000 years ago**, captured into a 1:11 orbital resonance by Jupiter.

It was the **first comet** in a **retrograde orbit** to be found in a resonance.

**Back-calculating Swift-Tuttle's orbital period, whose 133 years is an average and not a regular value, its appearance in the first half of the 10<sup>th</sup> century CE is likely. If young Swift-Tuttle has been a double-headed comet (Widukind calls Heinrich's celestial body “CometS”), it could have lost a head or part of it in the process. This could have contributed to the global **YOUNGER FILL** (page 7 below). At the same time such a loss of mass would have led to a modified and therefore less dangerous orbit.**

## WHY NOT HALLEY'S COMET IN THE 930s CE?

In **912 CE**, Comet Halley may have been referred to in the anonymous *Annals of Ulster*:  
 “A DARK AND RAINY YEAR. A COMET APPEARED.” [<https://celt.ucc.ie/published/T100001A/>.]

*This statement does not contain any reference to disasters, although for the same year even house fires caused by carelessness are mentioned. Moreover, it is irrelevant for the 930s CE.*

## COMETS AND EARTH

[*The Edinburgh Encyclopaedia*, VI, by David Brewster – **1832**;

<https://archive.org/details/edinburghencyclo06brew/page/624>; <https://malagabay.wordpress.com/2019/01/11/the-hecker-horizon-cometary-coincidences/>]

Already David BREWSTER (1781-1868) pondered on comets and terrestrial catastrophes:

“The transient effect of a comet passing near the earth, could scarcely amount to any great convulsion;

but if the earth were actually to receive a **direct impulse** from one of these bodies, the consequences **would be awful.** /

**Islands and continents, the abodes of men and animals, would be covered by the universal rush of the waters /**

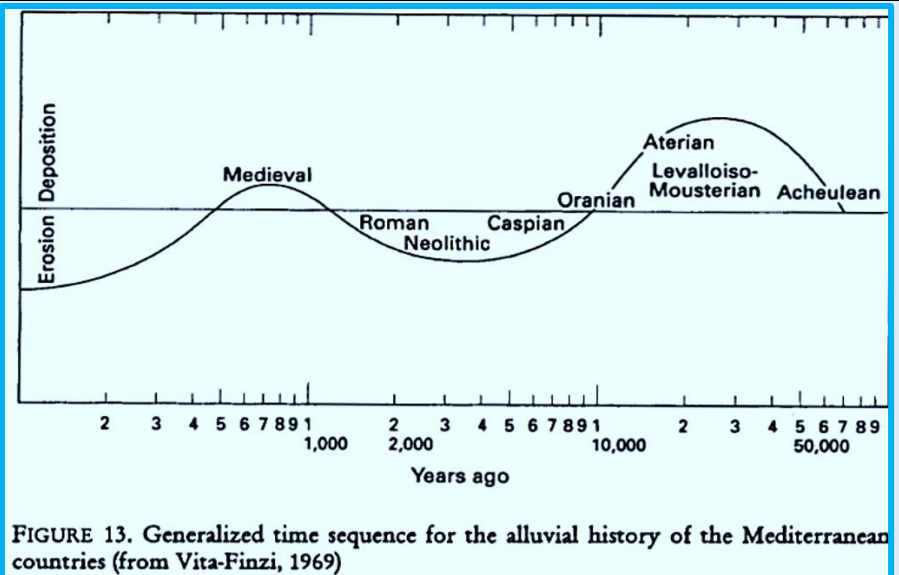
The chances against such an event, however, are so very numerous, that there is no dread of its occurrence.”

**AND YET THE **YOUNGER FILL** STRANGLED ROMAN CIVILIZATION  
 AND ITS CONTEMPORARIES WORLDWIDE!**

## YOUNGER ALLUVIAL FILL

[[http://eps.berkeley.edu/people/lunaleopold/\(169\)%20Valley%20Changes%20in%20the%20Mediterranean%20and%20Americas%20and%20Their%20Effects%20on%20Humans.pdf](http://eps.berkeley.edu/people/lunaleopold/(169)%20Valley%20Changes%20in%20the%20Mediterranean%20and%20Americas%20and%20Their%20Effects%20on%20Humans.pdf); p. 11]

The experienced geologists, Claudio Vita-Finzi and Luda Leopold, date the **YOUNGER FILL** to Imperial Antiquity, but also to (“Byzantine”) Late Antiquity or to the Middle Ages. Their findings and intuition indicate that there was just one distinct major **YOUNGER FILL** event. But AD-historians compel them to have three **YOUNGER FILLS**, in the 3<sup>rd</sup>, in the 6<sup>th</sup>/7<sup>th</sup> and in the 10<sup>th</sup> century AD. However, they find nowhere three **YOUNGER FILLS** stratigraphically on top of each other. As a last resort, they would be left with a surreal flood that flushed for 700 years. Logically and empirically, however, only the 10<sup>th</sup> century CE remains for this Atlantis-like event.



“Throughout the Mediterranean Basin, the Levant, Iran, and southeast Arabia, many valleys display **two alluvial fills** of which the older dates from about 30,000-10,000 yr BP and the younger from about A.D. 400-1850. In general the older fill, up to 30 m thick, is the product of ephemeral flow, and its upper horizons are locally rich in calcium carbonate.

The **YOUNGER FILL** is well sorted and stratified and, as in Mexico, displays silt-clay depletion as well as iron loss when compared with the older fill deposits from which it is often derived. In Wadi Kofrein, Jordan, peaty conditions and freshwater mollusks indicate permanent or semi-permanent flow in a channel now subject to ephemeral discharge. The younger fill is seen in many widely separated areas to cover structures of **Roman age**, as the period of deposition extended into **Byzantine** and even **medieval times**.

The history of erosion and alluviation is one in which there are two main periods of deposition, the first extending through the late Pleistocene to the early Holocene, and a later one in **Roman and medieval times.**”



<p>More <b>CIVILIZATIONS DESTROYED in the 930s CE</b> by <b>COMET HEINRICH-Swift-Tuttle</b>. [G. Heinsohn, 1/2021]</p> <p>Some authors tie this cross-continental decline to an interrelated economic crisis of as yet unknown causes.</p>	
	<p>“The <b>tenth century</b> was the ‘<b>age of Iron</b>’ (<i>saeculum ferreum</i>), the <b>Dark Age</b> (<i>saeculum obscurum</i>). / The development of <b>Latin Europe</b> became retarded. / From about <b>920-960</b> / <b>nothing of any great interest in the fields of intellectual development</b> or literature appeared”. [Strzelczyk, J. (2001), “The Church and Christianity about the Year 1000“, in P. Urbanczyk, ed., <i>Europe around the Year 1000</i>, Warszawa, 2001, 41-68].</p>
<b>SCANDI-NAVIA</b>	<p>“Viking Age: the old rural places of power, commonly called <b>central places, all met their end</b> / <b>around the turn of the millennium</b>.” [Skre, D. (2012), “The Development of Urbanism in Scandinavia“, in Brink, S., Price, N., eds., <i>The Viking World</i>, London &amp; New York: Routledge, 83-93/86].</p>
<b>AACHEN GERMANY</b>	<p>“Exposure to <b>fire</b>. / Buildings in the surrounding area / had fallen victim to a <b>catastrophe</b>. / The <b>'mud or flood layer'</b> /overlays the purely Roman [1<sup>st</sup>-3<sup>rd</sup> c.] layers in great thickness. / The <b>upper part of the dark mud layer</b> / was characterized by <b>High Medieval sherds [after 930s]</b>” [Sage, W. (1982), „Die Ausgrabungen am ‚Hof‘ 1965“, in Cüppers, H. et al., eds., <i>Aquae Granni</i>, Köln &amp; Bonn: Rheinland &amp; Rudolf Habelt, 91-100/93 f./ 85.]</p>
<b>FRANCE</b>	<p>“The <b>tenth-century social and political collapse</b> in West Francia constituted a major disruption in the order of Frankish society. / There were a number of <b>famines</b> in West Francia. / <b>Climate change</b> / was taken by many contemporaries to be a sign of the impending <b>apocalypse</b>” [Mills, D.M. (2015), “The Tenth-Century Collapse in West Francia and the Birth of Christian Holy War”, <i>Newcastle University Postgraduate Forum E-Journal</i>, Edition 12, 2015, <a href="https://www.societies.ncl.ac.uk/pgfnewcastle/files/2015/12/Mills-Tenth-century-collapse.pdf">https://www.societies.ncl.ac.uk/pgfnewcastle/files/2015/12/Mills-Tenth-century-collapse.pdf</a>, 24-33].</p>
<b>POLAND</b>	<p>“There was a <b>rapid, sometimes catastrophic, collapse</b> of many of the pre-existing tribal centers. These events were accompanied by the permanent or temporary <b>depopulation</b> of former areas of settlement. / New centers representative of the Piast state arose on new sites, thus beginning <b>[in 966 CE]</b> the thousand-year history of the Polish nation.” [A. Buko, <i>Archeologia Polski</i>, Warszawa: Wydawnictwo TRIO, 2011, p. 464.]</p>
<b>CZECHS SLOVAKS</b>	<p>“<b>Castles of regional chieftains were destroyed.</b>” / “The <b>most recent burnt horizons</b> give evidence for a gigantic annihilation that is roughly datable to the <b>time of 900 CE.</b>” [P. Sommer (2012), “Der frühe böhmische Staat und die Christianisierung seiner Gesellschaft“, in Heinrich-Tamáška, O. et al., eds., <i>Christianisation of Europe: Archaeological Evidence</i>, Regensburg: Schell &amp; Steiner, 261-273. / L. Poláček (1999), “Großmährisches Reich“, in <i>Reallexikon der germanischen Altertumskunde</i>, Berlin &amp; New York: Walter de Gruyter, vol. 13, 82. ]</p>
<b>AUSTRIA</b>	<p><b>10<sup>th</sup> c. Salzburg/Iuvavum</b> turned from stone to wooden houses and got "<b>many times smaller than the Roman city</b>" (W. Kovacsovics, mail 03-03-16).</p>
<b>MESOPO-TAMIA</b>	<p>“In Baghdad, the <b>first half of the tenth century</b> had a greater frequency of <b>significant climate events</b> and more intense cold than today, and probably also than the ninth century and the second half of the tenth century.” [F. Domínguez-Castro et al. (2012), “How useful could Arabic documentary sources be for reconstructing past climate?”, 27 February; <a href="http://onlinelibrary.wiley.com/doi/10.1002/wea.835/full">http://onlinelibrary.wiley.com/doi/10.1002/wea.835/full</a>.]</p>
<b>ARAL</b>	<p><b>Climate change of as yet unknown causes collapsed</b> the Aral-Basin high civilization, <b>Transoxania</b>, that blossomed between ca. the “seventh and early ninth century CE” [<a href="https://www.inverse.com/science/new-analysis-rewrites-ancient-civilizations-demise/">https://www.inverse.com/science/new-analysis-rewrites-ancient-civilizations-demise/</a>].</p>
<b>SRI LANKA</b>	<p>The Singhalese Anuradhapura civilization developed Asia’s most sophisticated water systems. Its stupas were the largest human-made structures of the 1<sup>st</sup> mill. CE. By the 11<sup>th</sup> c. their sites were deserted though traces of military destructions have not been found. They were rediscovered in 1875.</p>
<b>CHINA JAPAN</b>	<p>The collapse of the Chinese <b>Bohei Empire</b> (dated <b>late 920s CE</b>) may match a Japanese report on “white ash falling like snow” (dated 940s CE) that is tied to the <b>Changbaishan volcano</b> (inside Bohei): “Its eruption in <b>946</b> was one of the most violent of the last two thousand years and is thought to have discharged around <b>100 cubic kilometers of ash and pumice</b> into the atmosphere — enough to bury the entire UK knee deep.” [ C. Oppenheimer et al. (2017), “Multi-proxy dating the ‘Millennium Eruption’ of Changbaishan to late 946 CE“, <i>Quaternary Science Reviews</i>, 158: 164.]</p>



More written sources dealing with the **930s CE CATAclysm** caused by **COMET HEINRICH-Swift-Tuttle**

**SCANDINAVIA**

**VOELUSPÁ**, the first poem of the *EDDA*, was probably created by an Icelandic seer of the later **10<sup>th</sup> century AD**. Its earliest audience may have personally survived the cataclysm. [<http://www.sacred-texts.com/neu/poe/poe03.html>].

“36: From the east **there pours** | through poisoned vales /With swords and daggers | the **river Slith**./

39: Nithhogg sucked | the blood of the slain, and the wolf tore men; | would you know yet more?

40: The giantess old | in Ironwood sat, in the east, and bore | the brood of Fenrir; among these one | in monster's guise / was soon to steal | the sun from the sky.

41: There feeds he full | on the flesh of the dead, / and the home of the gods | he reddens with gore; **dark grows the sun**, | and in summer soon / come mighty storms: | would you know yet more?

47: Yggdrasil shakes, | and shiver on high./ The ancient limbs, | and the giant is loose.

52: Surt fares from the south | with the scourge of branches. The sun of the battle-gods | shone from his sword. The crags are sundered, | the giant-women sink. The dead throng Hel-way, | and heaven is cloven.

57:The **sun turns black**, | **earth sinks in the sea**, / **the hot stars down | from heaven are whirled**; fierce grows the steam | till fire leaps high | about heaven itself.

59: Now do I see | the earth anew / Rise all green | from the waves again; the cataracts fall, | and the eagle flies / and fish he catches | beneath the cliffs.

62: Then fields unsowed | bear ripened fruit, / All ill grows better, | and Baldr comes back.”

**CENTRAL EUROPE**

Rodulfus **GLABER** (**985–1047 AD**)

*Historiarum Libri Quinque* (*The Five Books of the Histories*)

[<https://sourcebooks.fordham.edu/source/glaber-1000.asp>].

“Therefore these things aforesaid befell more frequently than usual in all parts of the world about the thousandth year after the birth of our Lord and Savior. /

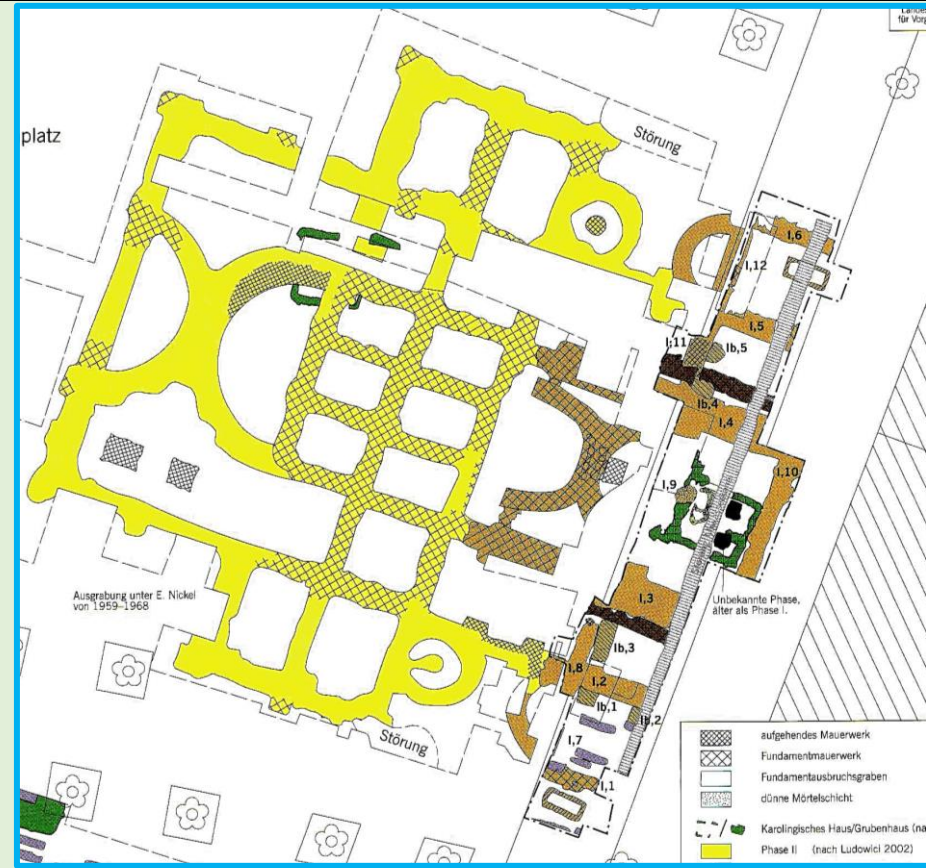
In the seventh year before that date, Mount **Vesuvius** (which is also called **Vulcan's** Caldron) gaped far more often than his wont and **belched forth a multitude of vast stones mingled with sulphurous flames** / and thus by the stench of his breath he began to make all the surrounding province uninhabitable. /

It befell meanwhile that almost all the **cities of Italy and Gaul were ravaged by flames of fire, and that the greater part even of the city of Rome was devoured** by a conflagration. /

Moreover, about the same time, a most mighty famine raged for five years throughout the Roman world, so that no region could be heard of which was not hunger stricken for lack of bread, and many of the people were **starved to death**. In those days also, in many regions, the terrible famine compelled men to make their food not only of unclean beasts and creeping things, but even of men's, women's, and children's flesh, without regard even of kindred; for so fierce waxed this **hunger** that grown-up sons devoured their mothers, and mothers, forgetting their maternal love ate their babes.”

G. Heinsohn, January 2021

**HEINRICH'S MAGDEBURG: 10<sup>th</sup> century Northern Church** (“Nordkirche”; below left; Kuhn 2014) was completely forgotten before excavations of the 1960s and early 2000s. With opposing apses, it looks like an adaption of **Hadrian's (117-138 CE) Roma-Venus temple**. The sector known was at least 41 m wide and up to 40 m high. There were marble columns, a Roman marble bust, “**floors in opus sectile-technology / made of antique Mediterranean marble / from Italy**” (Kuhn 2014). Indeed, “Antiquity was brought to Magdeburg from Italy by the tons” (Kowa 2010). To this day, it remains a mystery why the Roman-style building from the 10<sup>th</sup> century was not only destroyed, but – notwithstanding its never surpassed splendor – even forgotten. **Comet HEINRICH-Swift-Tuttle of the 930s CE** may have been the **adequately powerful smoking gun** that wiped out not only the building but also those who remembered it. G. Heinson, January 2021



**Heinrich I (919-936 CE in Roman chlamys (seal: Henricus rex).**



**Opus sectile from Magdeburg's Northern Church (possible assemblage)**



(Roman materials from Kuhn 2014)

**Cippolino marble from Magdeburg's Northern Church**



**Roman style glass tesserae from Magdeburg's Northern Church**



-Kowa, G. (2010), “Nachricht aus dem Mittelalter”, in *Mitteldeutsche Zeitung*, 22 March.  
 -Kuhn, R. (2014), “Antike Spolien im mittelalterlichen Magdeburg”, <https://docplayer.org/26490988-Antike-spolien-im-mittelalterlichen-magdeburg.html>.

**WERLA: A residence of Heinrich I** (Henry the Fowler) in the **920s CE** (mentioned by Widukind von Corvey). In 924 or 926 CE, Heinrich took shelter in Werla. With a captured Hungarian leader he expected an approaching Hungarian army.

**Attempt at partial reconstruction** [[https://en.wikipedia.org/wiki/Royal\\_palace\\_of\\_Werla#/media/File:Werla\\_Schautafel.jpg](https://en.wikipedia.org/wiki/Royal_palace_of_Werla#/media/File:Werla_Schautafel.jpg)]. G. Heinsohn, January 2021



Werla hill has material remains since the Neolithic Age. But in the 1st c. CE something mysterious happens. There are small finds, but no buildings from Imperial Antiquity: “Recent excavations provided evidence for **a settlement gap between the Roman Imperial period (1<sup>st</sup>-3<sup>rd</sup> century) and the early Middle Ages (8<sup>th</sup>/9<sup>th</sup> century).** / It is only for the 9<sup>th</sup> century that there is evidence of extensive settlement on the site” (Königspfalz Werla 2020; [https://de.wikipedia.org/wiki/K%C3%B6nigspfalz\\_Werla](https://de.wikipedia.org/wiki/K%C3%B6nigspfalz_Werla)).

Heinrich I not only wore the Roman chlamys, but also had flat glass windows and a heating system installed that was considered high-tech at the time: “The hot-air heating system excavated in the palace is among the first post-Roman north of the Alps” (Pfalz Werla 2015; <http://www.denkmalpflege.bsl-ag.de/index.php?id=150>). The fortress is severely damaged shortly thereafter. In the process, the warm-air heating system is destroyed and never repaired afterwards, although the hill is used until the 12<sup>th</sup> century and its fortifications are constantly reinforced. This rupture of civilization has never been explained. However, Comet *HEINRICH-Swift-Tuttle* has been passed over in the search for an explanation of these destructions just as it has been passed over in the search for an explanation of the extinction of the Roman style building from Magdeburg's 10<sup>th</sup> century. Since the 700 empty years between Werla's Roman small finds and Saxon buildings with Roman technology are without settlement layers, **Heinrich's Roman style Early Medieval buildings in Saxony and the dwellings of Imperial Antiquity in the city of Rome are destroyed simultaneously in the 930s CE.**



More 9<sup>th</sup>/10<sup>th</sup> century German-Roman architecture in 2<sup>nd</sup>/3<sup>rd</sup> century style that was destroyed by Comet *HEINRICH-Swift-Tuttle* in the 930s CE.

Carolingians and Saxons of the 9<sup>th</sup>/10<sup>th</sup> century do **not** pursue a renaissance of 700 years earlier Roman buildings of the 2<sup>nd</sup>/3<sup>rd</sup> century, but are part Rome's cultural sphere itself, which, however, is dated 700 years too early.

[See already <https://www.q-mag.org/gunnar-heinsohn-hadrian-umayyads-in-jerusalem.html>, p. 12.]

[G. Heinsohn, January 2021]

Aachen Aula



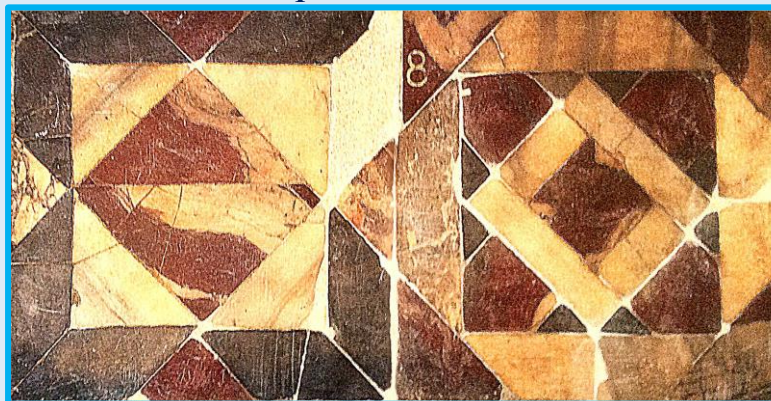
Ingelheim Exedra Palatium



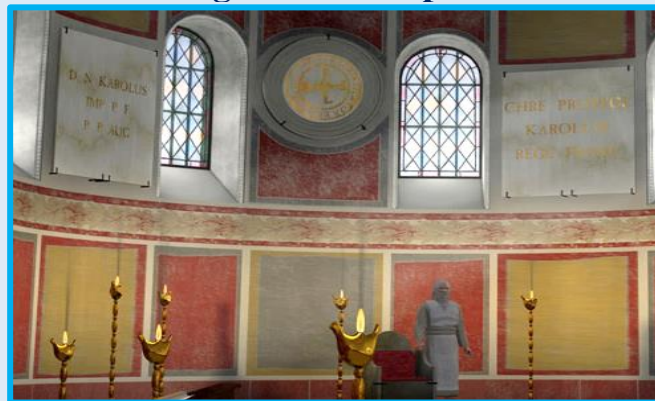
Ingelheim Gate



Aachen *opus sectile* floor tiles



Ingelheim wall paint



Paderborn colored window glass





**Roman “Eifel Aqueduct” (horizontal black line) of 224 CE was buried under 7 m of sand and gravel (Elsbachtal) It had been completely forgotten until search for lignite brought it back to light.** [From W.G. Horn, ed., *Ein Land macht Geschichte: Archäologische Ausgrabungen in Nord-Rhein-Westfalen*, Mainz 1995; see already <https://q-mag.org/ewald-ernst-toppling-romes-obelisks-and-aqueducts.html>.]





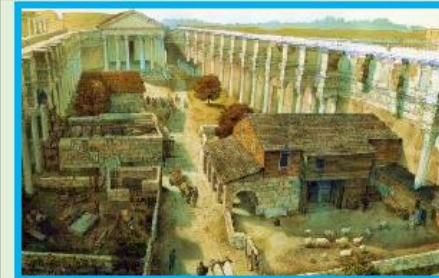
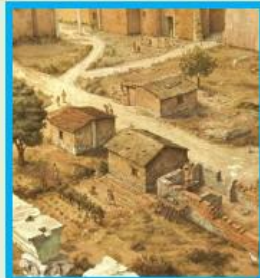
**ROME'S DEVASTATION IN THE 3<sup>rd</sup> C. CE WAS NOT CAUSED BY GERMANIC MIGRATIONS.** The floor of Trajan's Forum (**PIANO ANTICO 2<sup>nd</sup> /3<sup>rd</sup> c. AD**; ending with the Severan Dynasty of 190s-230s) was covered by **dark FANGO (mud) that sealed Roman Civilization for good.** It was **terminated** (vaguely dated to the 9<sup>th</sup>/10<sup>th</sup> c.==IX-X SEC.) **by HEINRICH-Swift-Tuttle.** In the very heart of Rome there are no buildings for Late Antiquity (3<sup>rd</sup>/4<sup>th</sup> to 6/7<sup>th</sup> c.) and the Early Middle Ages (8<sup>th</sup> to 930s CE). 1<sup>st</sup> to 3<sup>rd</sup> c. Imperial Antiquity is immediately succeeded by the High Middle Ages (**BONIFICA**) of the **930s CE.** **No houses, streets, water pipes, canals, or latrines were built between den 230s and 930s CE.** [Bernacchio, N., Meneghini, R. (2017), *I Fori dopo I Fori*; Roma, fig. 8.] G. Heinsohn, January 2021





**No residential quarters, latrines, aqueducts, sewers, roads, ports, bakeries, etc. were found in ROME from the 230s CE to the 930s CE.**

**HIGH MIDDLE AGES**  
**11<sup>th</sup> c. CE**  
 to  
**930s CE**  
 Ruins of 10<sup>th</sup> c. comet with survivors' primitive huts of the High Middle Ages.



**EARLY MIDDLE AGES**  
 to **930s CE**  
**7<sup>th</sup>/8<sup>th</sup> c. AD**

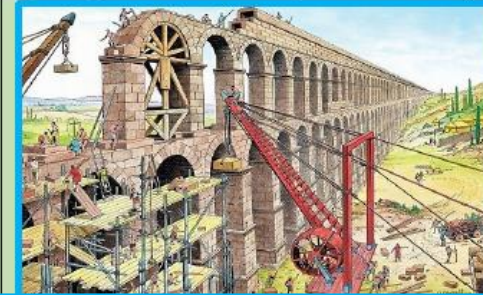
**“Nothing is known of the shape of the residential houses.”**

(R. Krautheimer, *Rom: Schicksal einer Stadt, 312-1308*, Leipzig: Koehler & Amelang, 1987, 126).

**LATE ANTIQUITY**  
**6<sup>th</sup>/7<sup>th</sup> c. CE**  
 to  
**230s CE**  
 230s-930s chronology error

The **EMPERORS did not build** because “it was enough to reflect themselves in the monumental buildings of the developed Principate [of the 1<sup>st</sup>/2<sup>nd</sup> c. AD].”  
 The **SENATORIAL CLASS did not build** because “a return to a generous building policy would not have turned a profit.” (From R. Behrwald, *Die Stadt als Museum?*, Berlin: Akademie Verlag, 2009, 281).  
 The **ARISTOCRACY did not build** “because impressive buildings [of the 1<sup>st</sup>/2<sup>nd</sup> c. AD] were probably still in use.” (R. Behrwald, C. Witschel, eds., *Rom in der Spätantike*, Stuttgart: Franz Steiner, 111-138 / 130f.).

**IMPERIAL ANTIQUITY**  
**230s CE**  
 to  
**1 CE**



G. Heinsohn, January 2021



## ROME: CIRCUS MAXIMUS IN THE 3<sup>rd</sup> CENTURY AND IN 1575

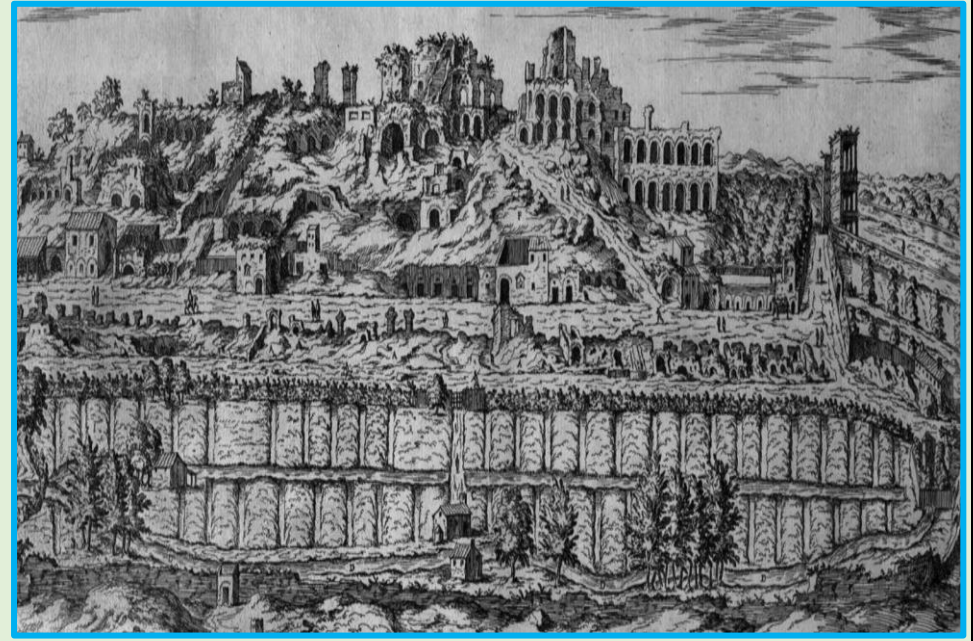
[LEFT <http://www.mdweil.com/mediterranean-site/rome.htm>. RIGHT: E. Dupérac [ca. 1525-1604;  
<https://upload.wikimedia.org/wikipedia/commons/e/e6/Peracvestigi157512.jpg>]

G. Heinsohn, January 2021

### Michel de MONTAIGNE (1533-1592) in 1581:

“This was nothing but **Rome’s sepulcher**. The world, hostile to its long domination, had first **broken and shattered all the parts of this wonderful body**; and because, even though **quite dead, overthrown, and disfigured**, it still terrified the world, the world had buried its very ruin. [...] It was likely that these disfigured limbs that remained were the least worthy, and that the fury of the enemies of that immortal glory had impelled them to destroy first of all what was most beautiful and most worthy; and the buildings of this bastard Rome which they are now attaching to these ancient ruins [...] reminded him precisely of the nests which sparrows and crows in France suspend from the arches and walls of the churches”.

**The Circus Maximus had been divided into small gardens so that survivors could grow vegetables inside the walls.**





**Rome's ports, Ostia (right) and Porto, in the 2<sup>nd</sup>/3<sup>rd</sup> century CE (Golvin reconstruction).**

[<http://jeanclaudegolvin.com/en/project/italy/italie-ostia-ostie-rome-jc-golvin-2/>]



**Ostia in 1911 with still 80 % under mud and meadows.**

[A. Pellegrino, *Ostia: Guide to the Archaeological Excavations*, Rom: I Cigno GG EdizioniPellegrino, 2013, pp. 8/9.]



**Catastrophic shift of the coast at Ostia and Porto by 3 to 4 km to the west (new land in light blue)**

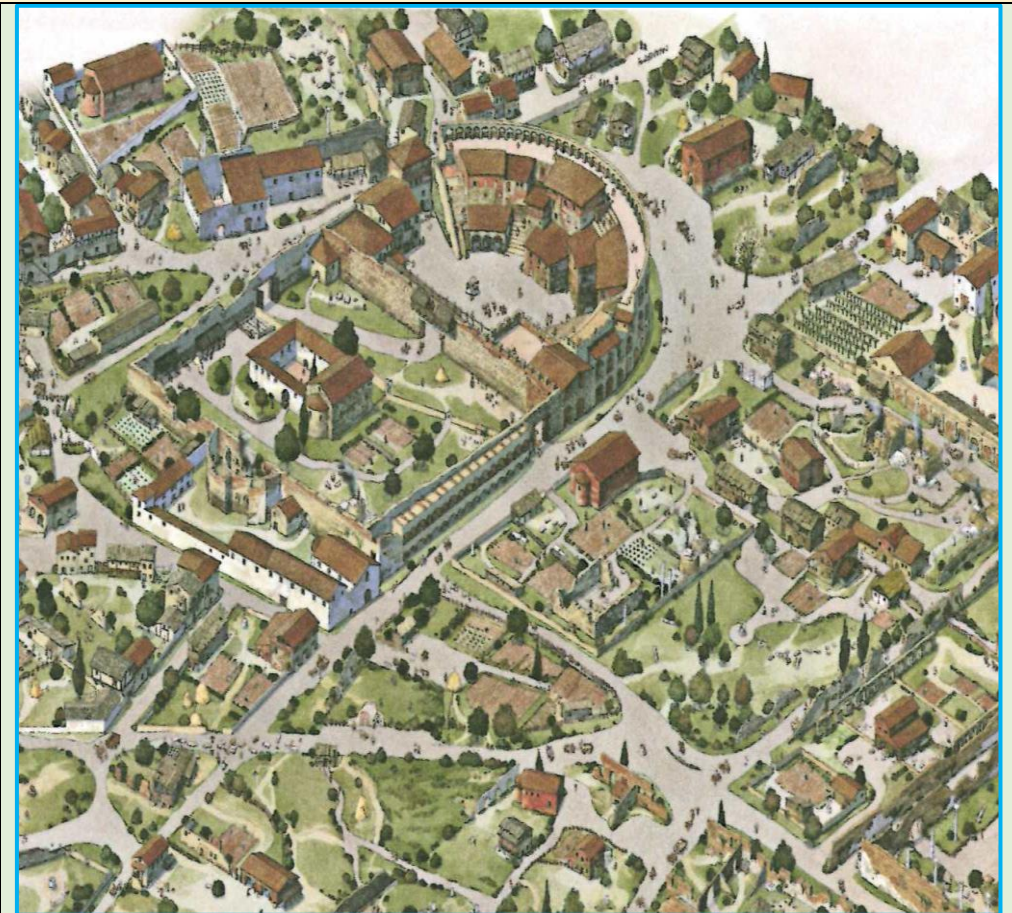
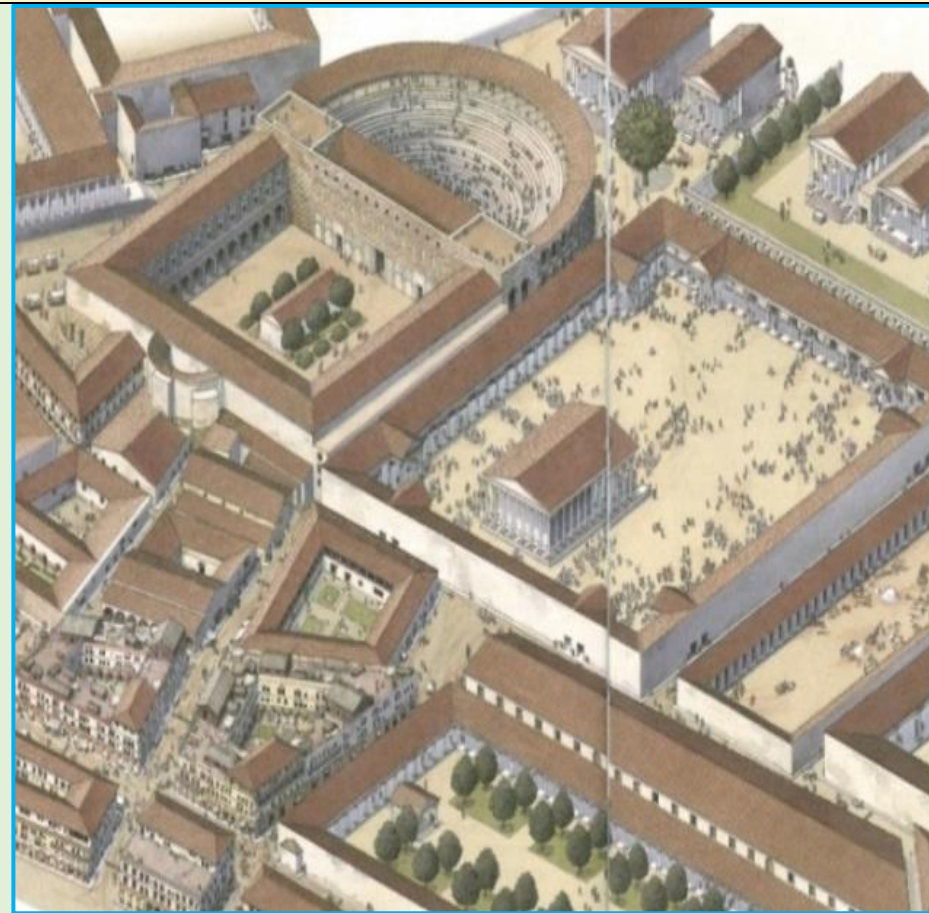
[<http://www.romaeterna.org/forum/porto.gif>]

G. Heinsohn, January 2021





Rome's Balbi-quarter in the 3<sup>rd</sup> century and in the High Middle Ages of the 11th century with no urban structures for some 700 years in between. As in many of the ca. 4,000 destroyed cities of Roman style, round and therefore more stable structures (circus ends, castrum corners, amphitheaters, coliseums etc.), are converted into fortified settlements, where survivors defend themselves against wild animals and fellow human predators. [Venditelli, L., ed., (2012), *Crypta Balbi: Guida*, Roma: Electa.] G. Heinsohn, January 2021





## POLAND's *Janow Pomorski/Truso* (8th-10th c.) before and after annihilation around the 10th c. CE

The “abrupt, episodic ***Alnus* [Alder] population decline** at the **end of the first millennium CE** was a much more widespread event than has been previously reported, spanning large areas of the temperate and boreal zones in Europe. The data from **Poland** suggest that the decline was roughly synchronous and most likely occurred **between the 9<sup>th</sup> and 10<sup>th</sup> centuries, with strong indications for the 10<sup>th</sup> century**. The pollen data indicate that human impacts were not a major factor in the event. Instead, we hypothesize that one or a series of abrupt climatic shifts that caused floods and droughts at the end of the first millennium CE could have initiated this ecological disturbance.” [Latałowa, M. et al. (2019), “Abrupt *Alnus* population decline at the end of the first millennium CE in Europe – The event ecology, possible causes and implications”, *The Holocene*, Vol. 29, issue: 8, 1335-1349 /1335, <https://journals.sagepub.com/doi/10.1177/0959683619846978>.]



Foto J. Sidorczak-Heinsohn at *Muzeum Archeologiczno-Historyczne w Elblągu*.

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M. F. Jagodziński, *Truso: MiedzyWeonodlandema Witlandem/ BetweenWeonodlandandWitland*, Elbląg: MuzeumArcheologiczno-Historyczne w Elblągu, 2010, 87.



**JERUSALEM's** destructions hit fewer, but no less magnificent buildings than in Rome. However, the dating varies between the 8<sup>th</sup> and 11<sup>th</sup> centuries CE. The untenability of **749 CE** is indicated by the limitation of the enormous damage to a small area where no sufficient trigger for such apocalyptic obliterations is known. The fact that the **restored buildings** are not repaired before the 11<sup>th</sup> century indicates that, as in the rest of the world, the **destruction occurred in the 10<sup>th</sup> century**. [See in detail <https://www.q-mag.org/gunnar-heinsohn-hadrian-umayyads-in-jerusalem.html>; G.H. *Israel's First Millennium CE*; in preparation.]

<p><b>(1) Destruction in 747/749 CE</b> <i>(Ra'ash Shevi'it )</i></p>	<p><b>Left in ruins forever</b> (Surprise that <b>the mysteriously huge but regionally restricted earthquake</b> left the other four structures standing.)</p>	<p><b>UMAYYAD PALACES</b></p>	
<p><b>(2) Destruction between 870-940 CE</b></p>	<p><b>Left in ruins forever</b> [Hagia Zion thought to be destroyed in 7<sup>th</sup> c. was covered by <i>Sancta Maria in Monte Sion</i> in <b>12<sup>th</sup> c. CE</b>].</p>	<p><b>JUSTINIAN'S THEOTEKOS NEA-BASILICA</b></p>	
<p><b>(3) Destruction in 1009 CE</b></p>	<p><b>Building with new ground plan completed in 1149 CE.</b></p>	<p><b>CHRISTIAN HOLY CROSS [later HOLY SEPULCHRE BASILICA]</b></p>	
<p><b>(4) Destruction in 1015/16 CE</b></p>	<p><b>Rebuilding begins in 1021/22 CE.</b></p>	<p><b>UMAYYAD DOME OF THE ROCK</b></p>	
<p><b>(5) Destruction in 1033 CE</b> The earthquake's apocalyptic dimension (also wipes out Tiberias) is unexplained.</p>	<p><b>Rebuilding begins in 1035 CE.</b></p> <p style="text-align: right; border: 1px solid black; padding: 2px;">G. Heinsohn, January 2021</p>	<p><b>UMAYYAD AL-AQSA MOSQUE</b></p>	



**LEFT: *Durovernum Cantiacorum* (CANTERBURY/England) around 230 CE.**  
**RIGHT: *Durovernum Cantiacorum* (CANTERBURY) around 950 CE [reconstruction].**  
**There are no settlement strata for some 700 years in between.**

[[http://1.bp.blogspot.com/\\_0YOjaotivQ/SwRZwb-B1GI/AAAAAAAAI-A/H5d2by7\\_j64/s1600/roman+canterbury.jpg](http://1.bp.blogspot.com/_0YOjaotivQ/SwRZwb-B1GI/AAAAAAAAI-A/H5d2by7_j64/s1600/roman+canterbury.jpg) / <http://www.historyfiles.co.uk/KingListsBritain/EnglandKent.htm>]

G. Heinsohn, January 2021



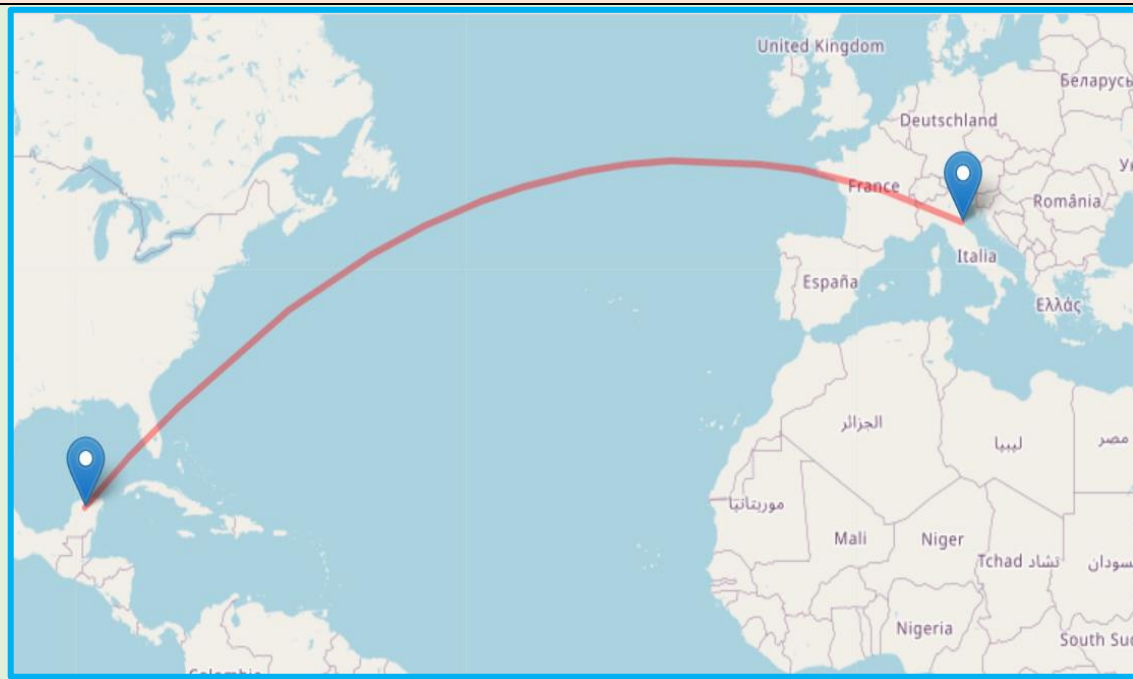
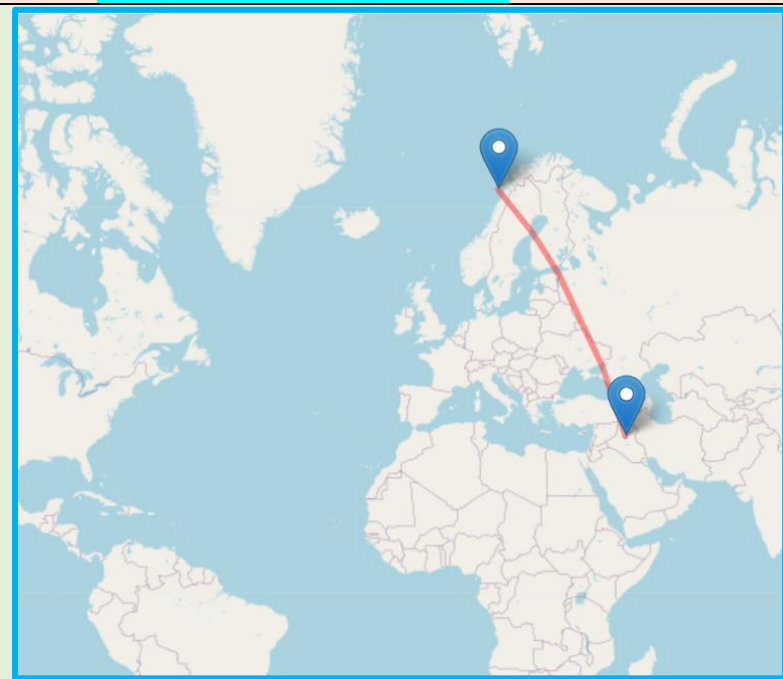
## Distances between cultures that perished simultaneously in the 930s CE Cataclysm

[See already <https://www.q-mag.org/gunnar-heinsohn-ravenna-and-chronology.html#ytl0uVmL.>]

G. Heinsohn, January 2021

Distance of more than **4,200 km** as the crow flies between **Samarra** in Iraq and the Viking village near **Vestvågøya (Lofoten)** in Norway. Both sites were **devastated in the 930s CE**.

Distance of more than **9,200 km** as the crow flies between **Ravenna** and the **Yucatan (Mexico)** where the *Classic Maya Collapse* occurred **between 900 and 950 CE**. [[https://www.distancecalculator.net/.](https://www.distancecalculator.net/)]



<http://heinsohn-gunnar.eu/>

<https://www.q-mag.org/the-1st-millennium-ad-chronology-controversy.html>

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