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I; 1 'Blue Earth', the Mother Lode for Mining Amber, and Memories relating to 'Eastprussian Gold' [H.L.]

Preface: A school excursion to Samland's Amber coast -- St. Adalbert's Cross -- Blue Earth in the Open-Pit Mine -- Gathering methods of ancient eras-- Annual yield of raw amber at Palmnicken -- Amber Roads to Samland and related discussion in my history class -- Amber-related exhibits in Koenigsberg - International ado about Peter the Great's 'Amber Room' after WWII -- Amber-related discussion in my geography class -- Budding of thinking about the waxing and waning of the so-called Fenno-Scandian iceshield -- Latest support after learning about the Northamerican icesheet.

Important parts of my high school education were the annual daylong excursions led by the home room teacher to destinations not farther than 45 miles from Koenigsberg. In Part 'Q & A' of this interview I talked about the excursions to Rossitten, the University Geophysics Station, and to the Kopernikus Museum at Frauenburg. From each I took home some impetuses for my later career. Of longest-lasting and latest effect in my life as a geophysicist were stimulations during a 10th grade excursion. The destination was "*Bernsteinwerk Palmnicken*". The meaning of "*Bernstein*" is 'Combustible Stone'. The English name is Amber, a term of Arabian origin. It is a hard, translucent, yellow or brownish-yellow fossilized resin and has been called 'Eastprussian Gold'. It is easily carved to produce golden-yellow jewelry and ornamental objects with surfaces that can be polished to a high gloss. This resin is also used in the chemical industry and as a highly efficient electrical insulating material in scientific laboratories. Palmnicken is a village on Samland's amber coast and the major part of "*Bernsteinwerk*" is an open pit mine.

We reached it (1925) using the Koenigsberg/Pillau mainline, and a secondary line branching off at Fischhausen. Historical monuments were seen from the train windows. Near Fischhausen is a tall metal cross on a dune, visible far out to sea, in memory of St. Adalbert, who (AD 983) had become Bishop of Prague; he came to

Samland's amber coast not as merchant but as Christian missionary. Adalbert was slain by disciples of Perkunos, the god of the Pruzz as he entered (April of 997) a sacred grove. His companions took his body to Gnesen, ENE of Poznan, and St. Adalbert became one of Poland's patron saints. Then there were the restored walls of "Schloss Lochstedt", a fortification built (in the 13th century) by the 'Brethren of the German Order of Knights' at a Baltic Sea inlet. All amber unearthed had to be surrendered here to be stored and prepared for shipment to artisans in Koenigsberg and to foreign ports. A few miles farther north was 'gallows hill', erected by the Brethren more as warning for amber thieves than for executions.

In Palmnicken we visited first the enormous open-pit mine, displaying a wall where about 20 m of greyish diluvial soil extended horizontally above a 6 to 8 m thick layer of dark-bluish earth. Huge steam excavators removed the topsoil and loaded the 'blue earth' on open freight cars on rails at the flat bottom of the pit. Steam locomotives pulled the full cars to buildings on the surrounding plateau. We were guided to the shed where the load was discharged on wooden lattice palings of different grades and amber pieces were unearthed by water jets. We saw grayish lumps resembling small and large potatoes rolling down the sorting lattices to be collected by a type of railroad car that could be sealed. Trains of these cars went for further sorting and refinement to state-owned factories in Koenigsberg and Elbing. We learned that the "Werk" had become operational in 1913, that each cubic meter of 'blue earth' yielded about two pounds of raw amber, and that nowhere else on earth existed a counterpart.

The entrepreneur who had designed the "Werk" under contract with the State of Prussia had previously mined amber by steam dredges from the bottom of "Kurishes Haff". The primitive methods used in ancient times along Samland's Baltic Sea coast included: Beach-combing after days with windstorms; 'fishing' of amber pieces, caught within seaweed, using ringnets on long sticks by people wading in the shallows when the sea was calm; diving for amber, which had been the least efficient method. According to Gusovius [1966 c] open-pit mining at Palmnicken produced about one million pounds of raw amber per year during the time of our visit. This yield was mainly sold for oil and laquer production; only 20% was of sufficient quality for producing jewelry and art work by skilled craftsmen.

Back at school in Koenigsberg we learned from our history teacher that amber had been known since ancient times. It had been unearthed in parts of present Romania. The Romans called it "succinum" or meltable stone, the Greek

"electron" and most likely the purity of any piece of amber was demonstrated by rubbing it on wool and showing that it 'raises hairs'. Anyone today knows about static charge but hardly anybody will connect 'electricity' with amber. Herodotus (\approx 450 BC), the father of history, had heard tales about exceptionally large chunks of amber to be found at seacoasts in Europe's northern regions. Tacitus (\approx 100 AD) in his "*Germania*" reported details about the Baltic Sea coasts. He called the people in the region where amber was found the "*Aestii*". Skillful mariners from Phoenicia were most likely the first to open an overseas trade route. Carved amber became highly esteemed jewelry in the ancient empires around the Mediterranean Sea.

During and after Caesar's time Roman merchants reached the Samland overland by the 'Amber Road'. The main route led from Aquileia at the northern Adria to Carnuntum, a Roman military post at the Danube in present Austria. From there, the merchant travelers had to navigate between Carpatian and Sudetic Mountains to the Oder, then to the Vistula and finally along "*Frisches Haff*". The Samland was entered by crossing the river Pregel at the main military border post of the "*Aestii*", an earth wall palisade, called "*Burg Twangste*", on the sandy moraine hill where "*Schloss , or, Burg Koenigsberg*" was built in 1255. An eastern branch of the 'Amber Road' reached Carnuntum across Thrace from Byzantium; see maps in Kinder & Hilgemann [1967].

Due to its origin as quasi-liquid resin some pieces of amber had foreign matter entombed. If of geological or biological interest that piece was added to the "*Bernstein Sammlung*" maintained and displayed at U. of Koenigsberg's Geology Department. When I returned to the Albertina (1938) I went to see Prof. Andrée, the chairman of the Geology Department, formally the head of the Geophysical Station; see Errulat [1966]. I donated a fist-sized lump of copal which I had bought earlier that year in Luanda, Angola. I knew that copal is a fossilized resin from tropical trees and related to amber; most copal is mined in Indonesia and used in varnishes and lacquer. Prof. Andrée was gladly accepting my gift saying that copal had been lacking in the Department's display of nearly 100,000 pieces of amber. Most famous was one piece with a well identifiable entombed flea, the "*Bernstein Floh*". Later I learned that a great variety of entombments in amberlike fossils have been studied by G.& R.Poynar [1999], permitting a detailed reconstruction of the insect world of the ancient algarrobo forest on the island now known as Hispaniola in the Caribbean Sea.

Solid proof of the amber trade are recoveries from ancient burial grounds.

According to Gusovius [1966 b], extraordinarily manifold coins were found all over the Samland in such quantities that around 1900 a special museum, the "*Münz Sammlung*", was established in Königsberg. Silver or copper coins showed prevailingly the heads of roman emperors reigning between 54 and 138 AD, i.e., from Nero to ~~V~~espasian to Trajan to Hadrian. Gold coins were predominantly from the Eastern Roman Empire with 4th and 5th century AD datings. Rarer are Arabian coins; most noteworthy are some by the 5th Abbasid caliph Harun-al-Rashid who reigned in Baghdad around 800 AD. A report by the amber trader Ibrahim ibn Jacob from Spain uses for the first time the name 'Brus' or 'Pruzz' instead of "*Aestii*".

The "*Bernstein Manufaktur*" of the State of Prussia maintained a marketing outlet in downtown Königsberg. The display of beautiful pieces of art in a big show window changed monthly. I stopped there every time when I walked by. Most vivid in my memory is a large chessboard using blondest versus darkest-brown amber in thin sheets for the board and beautiful carvings for the pieces..

However, ten centuries of peaceful trade were interrupted by seafaring Scandinavians. From the 8th through the 10th century AD, Vikings from Norway plundered the coasts of western and southern Europ; Vikings from Sweden devoted unwelcome attention to the coasts of the Baltic Sea. It took nearly three centuries to pacify and christianize the Samland. The Brethren of the Order of German Knights were successful because they built hospitals and wells, taught the Pruzz to make bricks, improve agriculture in general and especially dairy farming as well as horse breeding and fishery. The unearthing of Samland amber and its refinement for export was organized in a form lasting for the following seven and a half centuries, i.e., as long as the land of the Prussians remained stable. This is shown by Hammond's [1964] maps of Europe showing from 1200 AD on the rivers Vistula and Nemen as its borders. These remained unchanged after the 'First Partition of Prussia in 1919'.

The utterly devastating change came after the 'Second Partition of Prussia in 1945'. According to Stanley [2000], many among the first Russian Settlers, likely assisted by soldiers, vandalized much of the then exiting German cultural landscape. German civilians were treated harshly, to say the least. This is documented among others by a Soviet officer [Solzhenitsyn, 1974], German officers [Kerwin, et al., 1966], and a German surgeon [Lehndorff, 1963] assigned to maintain a hospital in Königsberg by the occupation forces. The amber deposits at Palmnicken, now Jantarnyi, are sporadically exploited.

WW II produced an amber-related story. In September 1941, the German Army took Pushkin south of Leningrad and occupied Zarskoje Selo Palace. The Soviet Regime had converted the palace to a museum. During the German advance, all museum pieces had been moved farther inland except for the artistic amber panels which formed the walls of the 'Amber Room'. In our history class we had learned the story of this room.

It was first conceived as "*Das Bernstein Zimmer*" by Frederick I, who (1701) in Koenigsberg made himself King "in" Prussia. It took a team of experienced carvers a decade before enough panels were ready to be mounted in a room of Berlin's city palace. Peter I of Russia, later Peter the Great, travelled (1716) through Berlin, admired "*Das Bernstein Zimmer*" whereupon King Frederick William I offered it to him as a royal gift in exchange 'for a company of tall soldiers', to satisfy the king's fancy for "*Lange Kerls*". i. e., tall guys for his "*Gardedukorps*". The wall pieces of the 'Amber Room' were shipped to St Peterburg and three decades later installed in what was then called the Catherine Palace. In October 1941, the 'Amber Room' was back in Koenigsberg and tentatively reassembled in the south wing of the castle that served as a museum. During the nights of 26/27 and 29/30 the center of Koenigsberg had been burned down (as reported by K.L.) and according to Grimoni [1995] this included the castle and hence, the 'Amber Room'.

After the final defeat of "*Das Dritte Reich*" wild stories began to circulate in the international press. The debate still goes on. Typical is the story in the NEW YORKER of April 14, 2003, by Elizabeth Kolbert, one of the magazine's 'far-flung reporters', entitled: *FOREEVER AMBER, A room built for a king and treasured by an empress haunts two centuries*. Ms. Kolbert reports that the 750 year old Koenigsberg castle sat atop a 'network of vaulted cellars' that extended at least three stories deep. Well, 'fairy tales', from what I knew since 1938. As reported by Prof. Errulat [1966, p. 415], I brought (1938) with me after the appointment at the Albertina my highly sensitive tiltmeter and was looking for a deep cellar to mount it. Since I had heard rumors that there was a relatively deep basement beneath the south wall of Koenigsberg castle I went to the city's engineering office. Yes they said, there is a vaulted basement but only under the northwing and merely 10 steps down from the inside yard and at street level at the outside. Well, I had been in this basement for many 'happy hours' as student. It was the famous wine restaurant: "*Blutgericht*", i.e., 'blood court of law', so named because it had been the storage for the executioner's tools in very ancient eras [Grimoni, 1995]. But it was not deep enough

for my recordings.

I went to the Albertina's office of 'Buildings and Ground'. They said the best we can offer you is the "Karzer", i.e., the ancient dungeon, not used since 100 years. It is beneath the 4 centuries old university building on the Dom Island which then housed a city library. It was deep enough, 20 steps down and so moist that it remained empty. There were graffiti on the walls of fraternity logos, dated more than 100 years before. Anyways, I gave it a try, but found that the Dom Island (built on swampland) tilted with disturbing amplitudes when a car was driven across the 'Honey bridge'; see Appendix I;2. All what we could say was my three students, Kate, and I were the last people who had 'spent time' in Albertina's dungeon.

No cellars existed (1938) at Koenigsberg castle for my tiltmeter. Thus, most likely no vaults existed for hiding the Amber Room in 1944. Of the people who claim that crates with the Amber panels might sometimes be unearthed, none mentions that amber is combustible. Katharina was able to salvage some of our belongings after Koenigsberg had burned down in 1944 because the northern suburb was 'relatively lightly' demolished and only during the first raid. The center of the city and the castle had been hit hard by both raids and only non-combustible things were salvaged. Historians like Gusovius [1955 a] and Grimoni [1999] report that with the destruction of the castle (August 1944) the Amber Room was gone. Dr. Grimoni [1999] was invited to participate at celebrations in Zarskoje Selo Palace when a new Amber Room was installed with the work of paneling and carving financially supported by a German Gasmining Company.

Amber is still fixed in my memory. I was taught at high school in Geography that Samland's amber was produced in the rootzones of araucaria-like trees that formed a forest during the Tertiary on the large plain - more than 1000 km long but less than 200 km wide - east of the Scandinavian Mountain range. In the late Tertiary and Quaternary, glaciers created out of that plain the basin filled now by the Baltic Sea. The forest floor was 'bulldozed' to form the layer of 'blue earth' that I had seen in Palmnicken. Thus, it was a part of the end-moraine that is most of the Samland. Lesser amounts and smaller pieces of amber are found at other beaches of the Baltic Sea, the North Sea, and at the bottom of Kurisches Haff.

When my family went for summer vacation to one of the resort villages at Samland's northshore, my brother and I, like other children, made beachcombing for amber a habit. We were told that pieces larger than an acorn belonged to the state. When we found a piece of that size it always turned out to be belemnite. But

pea-size to bean-size amber pieces were found and kept, most readily at the western resorts where Samland's northcoast was an escarpment and huge boulders were lying along the beach.

Our geography teacher told us the the boulders at Samland's northshore came from the Aaland Islands between Sweden and Finland. I found it hard to believe. These flat Islands were straight north at a distance off ≈ 600 km and Haparanda, Finland, at the northernmost stretch of glacier action, was another ≈ 500 km away. I argued that the Aalands are low and that there are hardly any mountains north and east of Haparanda to produce glaciers. However, significantly closer was the highest peak of the Scandinavien mountains, Glitterlind (8110 ft) ≈ 900 km to the NW. Conventionally, it was assumed that stone moving glaciers came from the highest elevation of the Scandinavien Range. But the geological evidence for the Aalands as source of the boulders at Samland beaches was overwhelming. After our trip to Palmnicken it began to dawn on me that, possibly, there might be natural causes for formation of the ice age glaciers on flat lands. The thickness of the mother lode of 'blue earth' suggested indeed that it required bulldozing the soil of the amber forest over the entire northward stretch up to Haparanda. Glaciers from the high elevation of the Scandinavien Range could bulldoze no more than a stretch of about 200 km of Amber forest soil.

The waxing and waning of icevolumes - significantly larger than the Antarctic shield - but between about 50 and 70 deg N is now documented to have been repeated five times during the last half million years. It took me a long lifespan before I was convinced about two features. (1) The waxing occurs *in situ* and is not a process of extending pre-existing glaciers on conveniently located relatively low mountains. (2) The waning is relatively rapid but does not require a general warming of the Earth's climate. Unexpected support for my thinking came in Madison after getting acquainted with studies of the Wisconsin Age. Flint [1949] assumed that piedmont glaciers were the source of the North American icesheet. However, postglacial rebound measured later around Hudsonbay and ≈ 120 degree of longitude eastward in Finland provided one of the last supports for my thinking. I finalized my ideas by beginning to understand the natural causes for the waning phase. More about that at the appropriate part of this interview.

I; 2 The Seven Bridges of Old Koenigsberg and Euler's Networktheory

Preface: Koenigsberg, the seven-bridges town --University town Koenigsberg, a waystation for travelers between Berlin and St. Petersburg --Euler's challenge and solution by a new branch of mathematics -- Euler's rule applied to rowing cruises passing under the classical seven bridges .

Koenigsberg, up to 1726 a conglomerate of three 'walled towns', was built around the banks of the forked Pregel River and on an island formed by a channel connecting the two forks before the Pregel became one broad stream. Throughout the 18th century there were seven bridges. The island town Kneiphof was connected with Altstadt and Löbenicht to the north by bridges #1 & 2, to lands in the south by bridges #3 & 4; bridge #5 crossed the channel from the island to the "Urstromtal" or upstream valley floor from where bridges #6 & 7 spanned each fork from south to north. The island with the Cathedral and the original buildings of the Albertina was the town's spiritual center. Professors like other Kneiphof citizens had gardens on the upstream valley floor. Fittingly the bridge #5 was named 'Honey Bridge'. During the 18th century, Immanuel Kant [1729 -1804] taught at the Albertina. Academies of Science were founded in Berlin [1700] and St. Petersburg [1725]. The famous mathematician Leonhard Euler [*1707 in Zürich] became a member of both academies and used to stop in Koenigsberg while traveling repeatedly between Berlin and St. Petersburg.

Euler may have stayed with a colleague at the Albertina and walked with his host from the island across the Honey Bridge. As mathematicians, while enjoying the garden and 'shoptalking' they might have come upon a problem: We could return home via the Honey Bridge or, by a detour, via Löbenicht and Altstadt, i.e., the nearest two of the North Fork bridges, . Can we also reach home via a greatly extended detour, crossing each of the other six bridges only once? Euler thought about it and developed a new kind of math: TOPOLOGY, a network theory applicable to one-way-streets connecting points on a map. Later came application to power lines serving a network of customers. The application of Euler's rules to conditions in Koenigsberg yielded: The walk from home to garden and return as a 'seven-bridges walk' is not a solvable one-way-network problem.

A railroad-pedestrian bridge build around 1850 across the river downstream from where the two forks join made it possible to return from the garden to the island home, crossing each of the then existing *eight* bridges only once.

Two centuries later we heard about Euler's story in Burg High math class, but then the number of bridges in Koenigsberg was ten. On river outings as 'coxed fours' we could not help seeing the undersides of all of them. It intrigued us to modify Euler's problem: Can we leave the boathouse and return to it after passing *under* each of the historical seven bridges only once? Even extending the cruise to the upstream point where the forks join, we found no solution, and that in agreement with Euler's rules. Our math teacher in the eighth grade suggested we could test Euler's rules using our bikes. But it was no fun any more because of traffic and the fact that ten bridges offered too many choices.

With reference to *Marilyn vos Savant's* column in PARADE MAGAZINE of March 5, 1995, the 'seven bridge problem' is a mainstay in U.S.A. high schools. Holt [1975] illustrates Euler's theory lucidly but assumes erroneously that a 'solution-providing eighth bridge' was built after the Russians took Koenigsberg and named it Kaliningrad. In fact, after the siege and conquest by the Soviet Army, all bridges were destroyed. A tourist map of Kaliningrad (1950) shows only five bridges.

I; 4. Koenigsberg and its Castle, a short Chronology

Preface : Twangste becomes "*Burg Koenigsberg*" (1255) --Foundings of three walled cities around the castle(1286 -1333) -- The castle's Belfry (1387) -- Albert, last "*Hochmeister*", a convert to protestantism is first Duke of Prussia (1525) -- Koenigsberg, capital of the Duchy of Prussia, becomes university town (1544) -- 'Heaven of Peace' during Germany's 30-years war era -- Duke of Brandenburg crowned himself "*König in Preussen*" in the castle's chapel (1701)but Berlin/Potsdam remains (1701-1918) the residence "*der Könige von Preussen*" -- After four centuries as 'Three-Town' settlement, Koenigsberg is one city (1724) --SW-section of the castle is modernized during Russian occupation (1758-62) -- S-wing becomes U-library and museum (1765) -- N-wing cellar becomes wine restaurant (1799) -- Napoleon resides temporarily in the castle (1809, 1812) -- NE-section is modernized as seat of High Court (1812 -1944) -- William I crowns himself king in the castle's chapel (1861) -- W-wing wall is adorned with bronze plaque of Kant's aphorism (1904) -- After the end of the Hohenzollern monarchy, S-wing is remodeled to serve as museum for art and archaeological artifacts (1919- 1944) -- Dr. Gördeler, {whom I remember as Koenigsberg's Mayor} is executed after attempted assassination of Hitler at his temporary HQ in Rastenburg, Eastprussia (July,1944) -- Castle destroyed by incendiary bombs (August 1944) -- Castle ruins further demolished during siege by Soviet army (1945) -- The ruins of the castle are razed by order of Leonid Breshnev (1968).

I used the detailed chronologies provided by Gause [1987], Grimoni [1995], and Wadishat [1995 & 1996] for assembling the 'preface' above. In the following I restrict myself to what I learned from my history teacher -- in agreement with Gause [1987] - that the history of Koenigsberg is the history of a European city. But I wonder if anything can help to convert those who still think of Koenigsberg and its castle as an 'ultimate' symbol of 'Prussian militarism'. Actually, during my first scientific employment (1931-1933) I stumbled across lots of such symbols in Potsdam and Berlin but hardly anything of that as high school student in my hometown.

Between 1701 and 1918, the "*Hohenzollern-Könige*" included: two Wilhelms, three Friedrich Wilhelms, and four Friedrichs. Each had his own castle in Potsdam in addition to a "*Stadt Schloss*". I found walking on weekends in the well-kept parks around Potsdam's "*Schloesser*" pleasanter than listening to tour guides inside the buildings. In Park Sansouci, the 'decor' ranged from the relatively humble abode, "*Sanssouci*", of Frederic the Great to the lavish "*Neues Palais*" of William II. I looked up at Potdam (1931) the subdivision of single-family abodes with doors, windows, and ceilings nearly one foot taller than customary. These special housings had been build by Frederic William I for the 'tall guys' of his "*gardeducorps*" received from Peter the Great as returngift for the 'Amber Room'.

From then on the thrifty 'soldier king' Friedrich Wilhelm I had instructed his agents to look for 'tall women' to be married to the 'tall guys.' Obviously, he had hoped that they would produce an offspring of 'tall boys'. This king organized (1729) the immigration of 26,000 protestants from Austria's Salzburg region [Walker, 1992]. Most were settled in Eastprussia after the bubonic plague (1709/1710) had decimated this province by nearly 1/3 of its inhabitants, especially in the eastern parts.

In Berlin, I found not only numerous "*Schlösser*" but also the "*Sieges Säule*" i.e., victory column, celebrating two victory parades (1815, 1871) of Prussian troops in Paris. On the roof of "*Brandenburger Tor*" stood (and still stands) 'The Quadriga'. Napoleon had transplanted it to Paris, but after Waterloo the quadriga returned to Berlin and became an 'ultimate' symbol of Prussian militarism because Napoleon had suffered his final defeat by Wellington in alliance with Blücher, the Prussian general. Monuments, not only for each of the kings but also their predecessors, the markgraves and electors of Brandenburg, lined the avenue around Berlin's central park, the "*Tiergarten*"..

My hometown's central park served other purposes. It was fronted on the west by the university building, on the north by the Operahouse and on the east by a double row of stately chestnut trees. It was called "*Paradeplatz*", but of the three monuments on it only that of William I was 'military'; on the southside was Kant's life-sized bronze statue and on the theater plaza, Goethe stood hand-in-hand with Schiller. I remember the concertos of classical and popular music given there every summer-sunday around 11 p.m. by one of the military bands, playing under the chestnut trees. Listening to the music were citizens of all ages and students grouped by the fraternity colors of their caps, all walking leisurely back-and-forth on the broad boardwalk in front of Gräfe & Unzer, Germany's largest bookshop.

Koenigsberg Castle began (1255) as a redoubt on a moraine hill adjacent to the ancient fortification known to the ancient amber traders as Twangste.

Archaeologists called it a "*Flieburg*"; according to Gronau [1966], 43 of such 'pallisade-on-earthwall structures' existed in the Samland. Ottokar II of Prague, one of the Przemyslides dynasty - in alliance with the German Knights - occupied (1255) the hill. A more substantial Burg with brickwalls around a large court (115 x 75 yd) was erected and called 'kings mountain' in Ottokar's honor. At the SW side of the Burg a walled town called Altstadt was founded (1286). Its escutcheon shows Bohemia's crown in a white field and the Maltesian cross in a red field beneath, i.e.,

'white over red', as on the flag of Poland or of the Czech Republic. At the SE side of the Burg another walled town called Loebenicht was founded (1300). The building of a cathedral, or Dom, (1330 - 1380) on the island at the S-side of the Burg led to the foundation (1333) there of a third town called Kneiphof. Bridges were built to connect the three cities, and four centuries later Koenigsberg became known as the 'City of Seven Bridges'. I brought up in Appendix I.2 the story of how this hometown feature related to Euler's creation of a new branch of mathematics.

A belfry (1387) at the SW corner of the castle became the distinctive landmark of the three city settlement. Since 1525, the fire lookout on the belfry had been ordered to use his trumpet for playing Lutheran chorals at 11 a.m and 9 p.m; this was still done four centuries later. Listening to the melodious tune of "*Nun ruhen alle Wälder*" i.e., 'now it's quiet over all the forests', from the belfry is one of my childhood memories.

The Order's last High Master was Albert, one of the Hohenzollern dynasty. Following the advice of Martin Luther, he converted to protestantism, and made Koenigsberg the capital (1525) of the Duchy of Prussia. He founded the university (1544) which in his honor was called 'The Albertina'. Albert desired that Koenigsberg's U. should be a place where also the neighboring countries could have the opportunity to educate not only Lutheran-protestant theologians but also administrators and historians. Koenigsberg became (around 1700) a refuge for about 500 Huguenots, among them were business men and bankers. According to Arnold [1995], the Albertina's student body totaling about 1000 men (1744) were 36% foreigners from Poland, Russia's Baltic provinces, and from Lithuania. Wiechert [1949] noticed (around 1900) a significant number of fellow students from Russia, nearly exclusively anti-czarists.

During the 17th century, Koenigsberg was hardly touched by the horrors of the 30-years war. A union between the duchies of Prussia and Brandenburg began (1618). The splendor-loving and least military minded of the Dukes of Brandenburg crowned himself (1701) in the church in the castle's westwing as Frederic I, "*König in Preussen*". According to Dr. Grimoni [1955] all of the following kings (with the exception of Wilhelm I) came to Koenigsberg not for coronation but appeared briefly for a less expensive 'homage'. Beginning with Frederic William I (1713-1740) they called themselves "*König von Preussen*".

In 1724 the three towns adjacent to Koenigsberg castle had to give up their own city halls. Thus, the city of Koenigsberg was formed. Its escutcheon is -- as my

history teacher once remarked -- an oversized Brandenburg's Eagle with two crowns of the Hohenzollern kings, holding in his clutches the escutcheons of each of the really historic three old cities.

The chronology of Königsberg during the following years offers little favoring Prussian militarism. Frederic II, 'The Great', did nothing to defend Eastprussia during the Seven Year's War (1756-1763). The army of Czarina Elizabeth (1727 -1762) -- the owner of the 'Amber Room', after Czarina Catharine I (1725-1727) -- occupied Eastprussia peacefully; a Russian Governor (1758-1762) enlarged the southeastern part of the castle by a sizable modern-looking 3-story building. Czar Peter III (1762) made peace with Frederic II, the Russians withdraw, but the Great Fredric 'punished' the Eastprussian people by never returning to Königsberg during the remaining years of his life. The south wing of the castle housed Albertina's library temporarily. Immanuel Kant (1724-1804) served here (1765 -72) as librarian. My way to school led me past the westwall of the castle, where an ornamental bronze-plaque bore Kant's aphorism -- not the categorical imperative -- but that about 'the wonders of the starry sky above me and the moral laws within me'.

In 1799 the city administration leased the vault (10 steps below the inner yard but at street level on the castle's north side) to an importer of wine from Spain. He transformed the three rooms of the vault into a cellar-restaurant, installed beautifully carved ornamental tuns, teakwood tables and benches, and named it "*Blutgericht*", because centuries ago the executioner's tools were stored in one of the rooms. This restaurant became renowned all over Europe. My friend Steckel and I went there (March, 1927) to celebrate our "Abitur" by a bottle of the famous import from Spain labeled "*Blutgericht No 7*".

Finally, there was no Prussian among the Germans condemned and executed at the first international Warcrimes Trial in Nuremberg. However, Königsberg's Mayor during my high school years, Dr. Gördeler, was among the Germans condemned and executed by German Courts after the attempt to assassinate Hitler (July 1944) at the German Army's temporary H.Q. near Rastenburg, Eastprussia. The ruins of the castle walls were razed on order by Breshnev in 1968 [Wadischat .1995 & 1996]

The end of the Soviet empire and Gorbachev's "*perestroika*" permitted (1990) a German-Russian student exchange [Falcke, 1995]. It began by meetings in the relatively well conserved building of Burg High, built 1925-1926, into which I

had moved with my 12th grade class (Spring 1927). It houses the Russian Gymnasium # I. Falcke, a teacher at the Mercator-Gymnasium in Duisburg, was impressed by the offerings of classes in foreign languages, fine arts, and even a 'school for fine needle work' occupying the part of the building which 1927-1944 had been the school principal's apartment. When I read that I could not help thinking back to early morning of the first of May, 1927, when "Herr and Frau Director Dräger" had entertained us at festive breakfast tables.

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