
Andreas Ranke

How Carnot became a lieutenant general in the Prussian Army

The following article, based on Andreas Ranke's speech to the Bad Schwalbach conference, was translated from German by George Gregory.

Lazare Nicolas Marguérite Carnot was born on May 13, 1753 in Nolay in Burgundy. Beginning in 1762, he attended the Collège d'Autun, a school of the Oratorian order. His studies included Cicero, Cato, Ovid, Virgil, Caesar, Terence, Sallust, Livy, Tacitus, Suetonius, Horace, Seneca, Demosthenes, Homer, Pindar, Sophocles, Euripides, as well as Erasmus and Comenius. Eight years later, he attended the school of de Longpré in Paris, where one of his teachers was the mathematician and encyclopedist D'Alembert, who noticed Carnot's talents quite early.

In 1771, Carnot applied to the School of Military Engineering, in Mézières. Since he was not a nobleman, he had to prove that there had been at least six officers of the French Army in his family. In general, the career opportunities for someone not from the nobility were limited to attaining the rank of captain. Carnot stayed in Mézières for two years. His most important teachers there were Charles Bossut and Gaspard Monge.

It was in 1772 that Benjamin Franklin visited Mézières. Franklin had been the American emissary in England since 1767, and from there he visited Holland and Prussia, in addition to France. It was there that he laid the foundations for the American War of Independence. In 1777, he wrote: "All of Europe is on our side, as far as applause and good wishes can carry. Those who live under despotism still think that freedom is good, and they strive for it. It is a general observation here [in Paris] that our cause is the cause of all mankind and that we are fighting for their freedom when we defend our own."

In 1773, Carnot left Mézières with the rank of lieutenant. He began to write his first work, *Mémoire sur la théorie des machines* (Memoir on the Theory of Machines), which he presented in 1779 in a competition of the Academy of Sciences in Paris. Later, his *Essai sur les machines en général* (Essay on Machines in General) developed out of this work, which was published in 1783.

But the work which represented his "breakthrough" and drew great attention to him, was his *Eloge de Vauban* (In Praise of Vauban), which he presented in a competition of the Academy of Dijon, winning first prize. Marshal of France

Sébastien de Vauban was not only the most important fortifications architect of the 18th century, but also one of the most influential mercantilists in France, who had no inhibitions against launching sharp attacks against the corruption under Louis XIV. Vauban's essay against the *Dîme Royale*, the royal tax tithe, made him particularly famous. He demanded a just system of taxation and criticized the injustices of the feudal aristocracy relentlessly. He also managed to impose the rule that a solid study in mathematics was obligatory for people working in military engineering.

Like Vauban, Carnot believed in the progress of mankind. In his *Eloge* he wrote: "Of what are men not capable if they summon up the forces which are fragmented by opposition and countless intervening factors, if the particular is subordinated to the universal?" And, like Friedrich Schiller, he, too, hoped for the advent of an "age of reason." He wrote: "The wise man hurries ahead of his time. . . . As philosopher, he has already broken through the boundaries which divide the empires, he has no adversaries any longer, he is a citizen of every place and a contemporary of all times."

Someone called Carnot's writing to the attention of Prince Henry, the brother of King Frederick II of Prussia, who was visiting Dijon en route to Paris. A "private presentation" by the author was arranged for the high-ranking guest. Later, Carnot sent the written work to the Prince, for which the Prince thanked him warmly. If we recall that Carnot was only a captain, and not nobility, this serves to emphasize the importance which Carnot already had.

Prince Henry travelled onward to Paris for secret negotiations, which were clearly an attempt to develop a continental European alliance against England. Since the Seven Years' War, in which British manipulation of Europe triumphed, the plan was to forge an alliance between France and Prussia via the "lever America" (in 1778, there was an alliance of France and America and also the League of Armed Neutrality of Russia and Prussia). In 1785, Franklin concluded the first trade treaty with Prussia on behalf of the young United States. The French Baron de Kalb, who later became a general in the American War of Independence, had been in America since the 1760s, to observe the developing potential for a revolt against England.

The great importance attributed to Carnot is also evident in the fact that—still a captain—he was accepted into the

French Academy of Sciences as a full member. It is also known that Prince Henry offered him a post in the Prussian Army. In 1785, Carnot participated in an essay competition of the Prussian Academy of Sciences with a *Dissertation sur la théorie de l'infini mathématique* (Dissertation on the Theory of the Mathematical Infinite). Three years later, he wrote an essay on defense policy, in which he rejected every form of war of aggression. The meaning of war could only lie in the "defense of civilization." Everything else was a crime. As he elaborated, "just war" can only be defensive, which included, of course, all manner of offensive operations. This was the reason why he appealed for the maintenance and further development of the French system of fortifications, and it makes Carnot the last military theoretician

who had a comprehensive moral-philosophical foundation.

In 1797, Scharnhorst, who was then working at the General Staff of Hanover, mentioned Carnot's *Eloge* in his essay, *Development of the General Cause of Success of the French in the Revolutionary Wars*; Scharnhorst could only have obtained a copy of Carnot's work from Prince Henry. Another area in which Carnot showed that he was thinking far ahead of his times, was in his essay on the future military importance of aerostatic balloon warfare.

The 'Organizer of Victory'

On April 20, 1792, Austria and Prussia declared war on the French Republic, in order to restore the power of Louis

Carnot and his times

1753: Lazare Carnot is born in Burgundy (May 13).

1773: Carnot studies under Gaspard Monge at the military academy in Mézières, where he meets Benjamin Franklin.

1783: Carnot becomes a captain in the army.

1789: French Revolution begins. Storming of the Bastille in Paris (July 14).

1791: Flight and capture of King Louis XVI. Carnot is elected to the new Legislative Assembly (Oct. 1), in charge of education. He writes his first proposals on reform of the army.

1792: France declares war on coalition of Austria and Prussia. Storming of the Tuileries (Aug. 10); overthrow of the monarchy. Chaotic situation in the army, with losses on all fronts, massacres in Paris. Carnot slowly begins to impose his policies. Carnot elected to National Convention (September); goes to the Pyrenees to organize defense against a possible attack from Spain.

1793: Louis XVI is executed (Jan. 16). France declares war on Britain, the Netherlands, and Spain. Northern front is collapsing. Carnot is sent there, writes a famous report stressing the need to strike the enemy on the flanks. He turns the military situation around, winning some battles. Girondists are driven from power by Jacobins (July). France is ruled by Maximilien Robespierre and the Committee of Public Safety. Reign of Terror results in guillotining of 1,251 people by July 1794. British Navy intervenes in the Mediterranean. France responds with mass mobilization (*levée en masse*). Carnot reforms the army and brings its strength up to 1 million men (4% of the population). Carnot named member of the Committee of Public Safety (August). He reorganizes and takes all military

operations under his control.

1793-94: Carnot's reforms: 1) formation of a new, mass-based army; 2) organization of military forces to fight "total war"; 3) new political strategy: Obtain the neutrality of Prussia. Disrupt communications between Austria and England. Concentrate efforts on attacking the English, leading to an invasion of England.

1794: France occupies the Netherlands (until 1795). French victory at the battle of Fleurus (June), in the north, followed by retaking of all the northern ports, crucial to getting U.S. help for the French. Coup of 9-10 Thermidor, led by Paul Barras, ends the Reign of Terror and leads to the arrest of Robespierre. Danton and Robespierre are executed (July). The authority and military influence of Carnot are used to remove Robespierre, although Carnot will never accept the reactionary policies of the Thermidorians. French armies continue to regain territory after territory. Creation of the Ecole Polytechnique (September).

1795: Dutch fleet captured by France. Prussia, Spain make peace with France. Carnot leaves the Committee of Public Safety, in opposition to the policies of Barras. He returns to power on April 11, becoming a member of the Directory, which rules France with a five-man executive committee.

1796: Napoleon Bonaparte leads French army in conquest of most of Italy by 1797. Carnot elected president of the Directory (April 30).

1797: Coup d'état of 18 Fructidor by General Augereau (Sept. 4). Carnot is removed from the Directory, escapes first to Switzerland, then to Germany. The Directory, now a triumvirate under Barras, becomes dependent on Napoleon.

1798: French occupy Rome, invade Switzerland. Bonaparte leads expedition into Egypt (until 1799), takes Cairo. British fleet defeats French in the Battle of the Nile.

1799-1800: Bonaparte invades Syria. Coalition formed of Britain, Austria, Russia, Portugal, Naples, and

XVI. The actual reason for the war, as so often, was to prevent “American conditions” from emerging in Europe. On Sept. 6, Carnot was elected a member of the Convention for the district of Pas de Calais. The first major battle was the famous “bombardment of Valmy” on Sept. 20, 1792, which was indeed only a bombardment, in which two starving and exhausted armies took their distance from each other as fast as they could, after having shot off a bit of ammunition. From September to November 1792, Carnot was in the Pyrenees as a special emissary of the Convention. After his return, he presented proposals for the economic development of the otherwise backward mountain region (developing its textile industry) so that it could free itself from British domination.

Ottoman Empire against France. French driven out of Italy. Coup d'état of 18 Brumaire: Bonaparte returns to France, overthrows the Directory, and sets up a Consulate, which rules until 1804. Carnot returns, is named minister of war; but resigns in opposition, 1800.

1802: Treaty of Amiens between Britain and France. Bonaparte is created First Consul for life, over Carnot's opposition.

1803: War breaks out between Britain and France.

1804: Bonaparte crowns himself emperor. First Empire lasts until 1814. Third Coalition is formed by Britain, Russia, Austria, and Sweden against France.

1805: France defeats Austria at Battle of Ulm. British defeat Franco-Spanish fleet at Battle of Trafalgar. France defeats Austria and Russia at Battle of Austerlitz.

1806: Napoleon dissolves Holy Roman Empire. Prussia defeated by France at Jena and Auerstädt.

1807: Carnot withdraws from public life.

1808: France occupies Spain.

1810: France annexes Holland.

1811: French driven out of Portugal.

1812: Napoleon invades Russia; occupies Moscow, but is forced to retreat.

1813: Prussia begins War of Liberation from France. Coalition against France formed by Russia, Prussia, Britain, Austria, and Sweden. France defeated at Battle of Leipzig, Battle of Vittoria. Allied forces invade France.

1814: Coalition forces enter Paris in March. Carnot is appointed governor of Antwerp by Napoleon. Napoleon abdicates and is exiled to Elba. Louis XVIII becomes King of France. Treaty of Paris ends Napoleonic Wars. Congress of Vienna (to 1815).

1815: The Hundred Days: Napoleon returns to Paris. Carnot serves as Minister of the Interior. Battle of Waterloo: Napoleon defeated and exiled to St. Helena. Carnot is exiled from France (July).

1823: Carnot dies in Magdeburg.

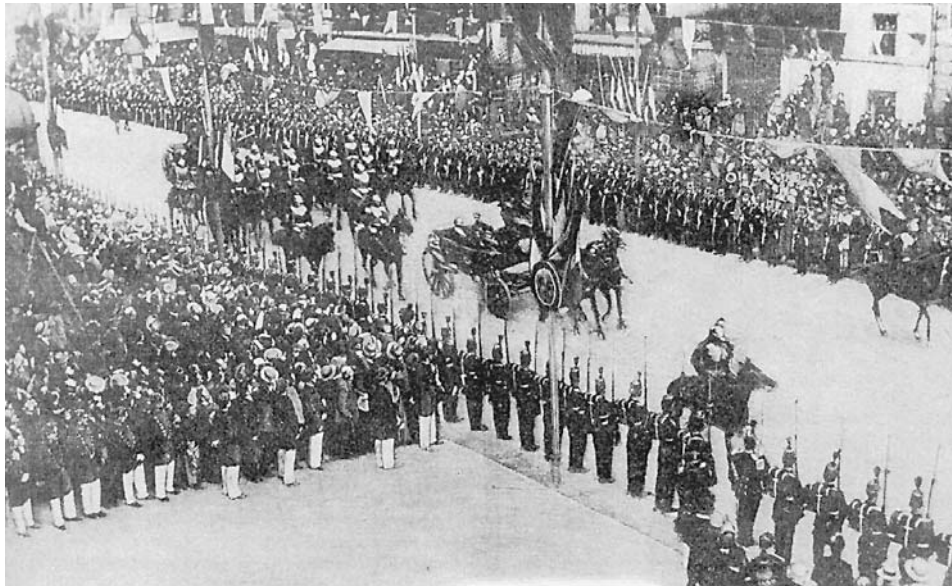
Since the allies Austria and Prussia suffered a defeat that year at Jemmapes, Britain was forced to enter the war against France in February 1793, following some propaganda work of the chief of the British secret service, Edmund Burke. The British strategy was simple and brutal: France was to be attacked from the sea and by land simultaneously. The country was to be starved into submission by means of a blockade. Part of the operation included inciting revolts in the Vendée, Toulon, and Lyons. The commander of the French northern army, Dumouriez, deserted on April 2, 1793 and went over to the British. This led to a complete disintegration of the French Army.

In that period, Carnot was elected to the Committee of Public Safety, the highest institution in France, where he was responsible for military planning and the movements of the armies. The French Army had been severely weakened by the desertion of over 6,000 noble officers. Nepotism and political factionalization prevailed. Carnot's major task was to combine the remainder of the army units with the newly recruited, but untrained masses (“*levée en masse*”) to form a capable force, and to reestablish the authority of the officer corps. Moreover, the entire army structure had to be changed. Carnot reduced the number of the armies from ten to six, and then to five. He introduced brigades and divisions and attempted thereby to improve the mobility of the formations. Another of his tasks was to promote “young talents,” such as Lazare Hosch, who was promoted to the rank of general at the age of 24.

Carnot was well aware that the employment of the most modern science and technologies would be decisive for victory. He was the first to implement a scientific-technological “crash program.” Scientists such as Berthollet, Chaptal, Monge, Prier, Guyton, de Morreau, Vandermonde, Foucoy, and Hasenfratz were brought in. Monge, for example, wrote a handbook on the production of cannon, and set up an immense cannon factory in Paris. Vandermonde was responsible for the mass production of bayonettes, Chaptal worked on the production of gunpowder and saltpeter. It did not take long before there were 258 forges in Paris, which produced over 1,000 cannon barrels per day, and the powder-works in Grenelle produced, with a newly developed procedure, 30,000 pounds of gunpowder daily. A census of all industrial labor in Paris was carried out, and many workers were pulled out of private industry and assigned to state production facilities. A research unit for balloon warfare was set up in Chateau Petit Meudon.

Of course, the Ecole Polytechnique, which Carnot established, was of the utmost importance, and its first head was Gaspard Monge, Carnot's former teacher and friend.

In September 1793, the allies (Austria, Prussia, and Britain) had advanced to Mauberge, the last fortification before Paris. If this fortification fell, Paris would have been opened up to an attack by the allies. Fortunately, the allies made a mistake. In a typically British manner, the Duke of York left the army under the command of General von Coburg, in order



On Aug. 4, 1889, General Carnot's body was returned to France for burial in the Panthéon in Paris.

to capture Dunkirk for the British Empire. On Sept. 6, he was defeated at Houchard and retreated to the north.

Carnot went to the front himself and devised a plan to attack Coburg's main forces at Wattignies. His plan was a double flanking attack. The left flank under General Fromentin was directed at Wattignies. The right flank under Duquesnoy and Carnot was to advance at the same time, while the center, under Ballard, Mortier, and Bernadotte, was to delay and hold the line. The attack on the right flank on Oct. 15 was a success, but the attack on the left flank broke down. In an evening evaluation discussion, everyone, with the exception of Carnot, demanded that the left flank be reinforced. Carnot rejected that idea and carried out a reinforced attack on the right flank the next day.

Carnot, as a member of the Committee of Public Safety, grabbed a rifle from a soldier who was standing nearby, and, in his civilian clothes, recognizable only by the large feather he wore in his hat, he himself led the attack at the head of his troops. General Gratien thought this attack was too daring, so Carnot ordered his arrest right there on the battlefield. The psychological effect of the attack was devastating. Coburg withdrew to the north the next day, and Paris was saved.

In 1794, Carnot developed a military plan for the liberation of France. With the victory of the French at Fleurus, the tide had turned. In the same year, James Monroe, who would later be the American President, came to Paris and became friends with Carnot.

In 1796, Carnot developed a second war-plan, whose chief thrust was against Britain. The core of the plan was the idea of a landing operation in Ireland. To this end, the Irish freedom fighter Wolf Tone came to France to work closely with Carnot. The commander of this operation was to be La-

zare Hosch. Unfortunately, Carnot received no support from his colleagues in the Directory, and because Napoleon acted on his own, in 1796, France shifted the thrust of its operations increasingly to the south.

The insanity of the Napoleonic era

In the beginning of 1797, Carnot was practically out of power, and on Sept. 4, 1794 the Fructidor coup took place, during which Carnot was forced to leave France as quickly as possible. Hosch died on Sept. 21, 1797, which cleared the way for the Napoleonic insanity of a new empire. With this strictly imperialistic thrust, the

last positive potentials of the French Revolution were destroyed. Carnot's flight, pursued by Fouché, led him through Switzerland and then into the vicinity of Augsburg, in Germany.

Carnot was able to return to France, with Napoleon's permission, in 1800. Napoleon had himself named First Consul in 1799. For six months, Carnot had the practically meaningless post of Minister of War. His main efforts were devoted to the support and development of new technologies. He promoted Robert Fulton's project, for example, to develop a submarine and a steamship, which then, indeed, sailed on the Seine in 1802. Later, in 1814-15, Fulton built the first steam-powered warship in the world, in the United States. In 1806, Alexander von Humboldt had settled in Paris and quickly became friends with Carnot, as the Prussian author von Dorow reports.

Carnot once more took up his studies of fortification, which resulted in his major work, *De la défense des places fortes* (The Defense of Fortified Places), published in 1808. This work was so important that Scharnhorst, with the help of Varnhagen van Ense, attempted to obtain a copy of it. He failed, but the Saxon officer Rüde von Liebenstein, had a German translation under the signature R.v.L., dedicated to the Prussian King. As thanks, the King took him into the Prussian Army as a colonel.

In February 1814, Carnot was promoted to lieutenant general and made commander of the fortress of Antwerp. Napoleon was quite amazed that Carnot was still a lieutenant colonel, because he had never given himself any promotions. That forced Napoleon to promote him from lieutenant colonel to lieutenant general in just one day. During Napoleon's 100 Days, Carnot became Minister of Interior again.

Post-Napoleonic France

After Napoleon was overthrown, Carnot nearly became the head of the provisional government, but that was sabotaged by Joseph Fouché. At that point, it became increasingly clear that there were but two scenarios for post-Napoleonic France. On the one hand, there was the British-Austrian plan to return the Bourbons to the throne — under British control, of course. On the other hand, there was the concept of a continental alliance of sovereign nation-states, with a constitutional reform, in which Prussia and France would be the bulwark against the resurgence of imperial ideas — and this plan was by no means a dead letter. The main representatives of this potential in Prussia were the so-called Reformers (Humboldt, Stein, and Hardenberg, to a certain degree, as well as leading personalities in the Prussian military such as Scharnhorst's student Boyen, and Grolmann and Gneisenau). The Prussians were basing their work on the promises for a constitution given by Frederick William III in 1813. These Prussians understood that their partner in France was Carnot, the friend of Alexander von Humboldt. Hardenberg wrote on July 3: "Wellington, Castlereagh and Pozzo di Borgo bring Louis XVIII to Paris — a major mistake." On July 15, Hardenberg, Stegman, Jordan, and Varnhagen travelled to Paris. The Prussians' role in the negotiations was an isolated one. Pozzo di Borgo wrote: "Prussia has posted itself at the head of a revolution. A military conspiracy has taken power there."

On July 24, a proscription list against the so-called "57 regicides" was published—the signer was the "regicide" Fouché. The "regicides" were those deputies who had voted for the execution of Louis XVI. The list was only a pretext to move against all of the remaining republican networks, especially Carnot. Varnhagen wrote, "The proscription lists make a very bad impression." Fouché took a perverse pleasure in handing the list over to Carnot personally. Carnot then asked him: "Where can I go now, traitor?" Fouché replied: "Wherever you want, idiot." For Carnot, as for Dante, treason was the worst of all crimes.

On Stein's initiative, Justus von Gruner was named police chief of Paris on Aug. 8, 1813. Von Gruner was one of the most remarkable personalities among the reformers, and he developed the Prussian counter-intelligence service from 1811 onward. Varnhagen wrote that he had been able to accomplish certain things "without commission" because of his connection with the Chancellor (Hardenberg). Gruner wrote to Hardenberg: "I have put Prussia on the path of winning over the entire constitutional party of France. If we fail at this, no one can foresee the consequences." Gruner, a secret service man, intercepted a memorandum of the leading royalist de Lièges, in which the royalists were warned against Hardenberg, Gneisenau, Humboldt, and Gruner. The Prussian Interior Minister, a leading agent of Metternich, stated the issue point-blank in a letter to von Bülow: "Carnot has been much favored by Gruner and his friends, and they have many ideas in common with this man."

A British officer summed up, that there was a peculiar phenomenon, that the political spirit of the Prussian Army was in harmony with the public opinion of the nation. Alexander I of Russia went so far as to assert that it might be necessary to come to the aid of the Prussian King against his own army.

Carnot in exile

On Sept. 9, 1815, the Holy Alliance was founded. That meant that the ideas of Wellington and Metternich had won out over the compromiser Frederick William III. It also meant that the situation in France became deadly for Carnot. He obtained a false passport under the name "Gerault" and 1,500 francs from Gruner, and he also obtained a Russian passport to go to St. Petersburg. On Oct. 12, Gruner was made a nobleman and was fired. On Oct. 17, Carnot crossed into Belgium as a merchant under the name of "Roxan." From there, he proceeded to Warsaw.

Alexander I had great interest in Carnot as a military expert, but far less interest in his political thinking. Carnot's position in Warsaw become increasingly difficult because his relationship to the brother of Alexander I, Grand Prince Constantin, who was the commander in Poland, had deteriorated. This was no secret to the Prussians, so they sent two emissaries to Warsaw to secretly negotiate for Carnot to come to Prussia. The negotiations were conducted by Julius Schmidt and the young officer Leibzius. Under the pretext that he wanted to take a vacation in Tepel, Carnot reached Breslau on Sept. 29, 1816, and then Berlin on Oct. 10.

There is a very interesting letter which Carnot wrote to Schmidt on July 4, 1816, stipulating his conditions for going to Prussia. He demanded a position as lieutenant general and specified that he never be required to fight against France.

Unfortunately, all of the Prussian Army files were burned during the bombing of Potsdam in April 1945, but it is known that, after Carnot's death, Government President Motz wrote a letter to Chateaubriand, mentioning that Carnot had drawn a salary of 1,200 thaler. That sum corresponds precisely to the annual income of a lieutenant general in the Prussian Army. In Berlin, there was a direct conflict between Minister of War Boyen and Interior Minister Wittgenstein, whom Boyen once called "prime minister behind the scenes." The idea of making Carnot the head of the department for fortifications or the head of an Ecole Polytechnique for Prussia, could not be fulfilled.

Carnot could not remain in Berlin under the pressure from Wittgenstein, so he decided to move to Magdeburg, arriving there on Nov. 3, 1816. Magdeburg was then one of the strongest Prussian fortifications, and from 1807-14 it had been the headquarters of the French Elb Department. Hardenberg wrote to the Government President von Bülow (an adversary of Carnot) that Carnot "was well educated and studied." In his first discussion with von Bülow, Carnot said, "The British have imposed an unworthy and hated tribe of regents [the

Bourbons] upon France.” And Wittgenstein wrote to Metternich that Hardenberg was not to be trusted.

Because the military files on Carnot were burned, the only extant reports are those of the police, filed under “State criminals, domestic and foreign.” One of these reports notes that Carnot, through one of his servants, had delivered a package of letters to the commandant of the fortification. This commandant was General von Horn, who established the direct connection between Carnot and Minister of War Boyen. At that time, 1817, French exiles still had hopes of exerting influence on Alexander I, because he saw the Bourbons as protégés of the British.

The two leaders of the so-called “Refugees,” Vielcatel and Chiarandia, visited Carnot in Magdeburg and proposed he act as emissary to the court of Alexander I. This plan had emerged with the obvious support of Hardenberg, but it could not be carried out.

Carnot’s role for the Prussian military was of the greatest importance. The chief of the Prussian fortifications, General von Aster, sent Colonel Le Bauld de Nans et Lagny as a liaison to Carnot. Lagny and Aster were responsible, for example, for the construction of the Ehrenbreistein fortress in 1817.

The other area in which the Prussian military were most interested was the establishment of an Ecole Polytechnique on the French model, for which Carnot wrote a memorandum, *Etablissement d’instruction professionnelle théorique et pratique pour les diverses carrières civiles et militaires* (Establishment of Professional Theoretical and Practical Training for Various Civilian and Military Careers).

Carnot’s younger son, Hippolyte, accompanied him to Magdeburg, where they both studied the German classics in German: Goethe, Schiller, Körner, Gleim, and Gellert. Carnot himself began to write poetry. He composed a version of “Don Quixote,” translated Schiller’s poem “The Glove,” and wrote a poem in praise of Theodor Körner. These poems were published in 1820 as *Opuscules poétiques* (Poetic Works) in Paris.

Carnot befriended many of the German scientists, such as Natasius, who built the first steam engine in Magdeburg in 1817. In addition to Colonel Le Bauld de Nans et Lagny, another Magdeburger was among his friends: the young Louis Gruson, who was almost the same age as Carnot’s son, Sadi. He was the son of a respected councilman, also a friend of Carnot. Louis Gruson’s son, Hermann, who contributed to the development of machinery factories in Magdeburg, recalled in his older years, that his father used to talk proudly about how the great Carnot had praised him when he was younger. On May 6, 1818, Carnot was an eyewitness when the first steamship arrived in Magdeburg from Hamburg.

Carnot was also closely acquainted with the chancellor of the University of Halle, Professor Niemeyer, who had a reputation in Halle and Magdeburg similar to that of Humboldt in Berlin. It was probably through Niemeyer that Carnot

came in contact with the pedagogue and theologian Heinrich Gottlob Zerenner. Zerenner was appointed Inspector of Schools in 1819 in Magdeburg. Carnot, as well as Zerenner, held to the principle of “mutual education,” that is, instruction of the younger students by the older ones. In 1815, as Napoleon’s Interior Minister, Carnot had proposed introducing “mutual education,” because, as his memorandum said, the purpose was to allow the “poorest classes” to share in the “benefits of education.” Carnot saw this method as a way “to turn the children into teachers among themselves for moral leadership as well as intellectual instruction.” In the same spirit, Zerenner wrote: “The reciprocal system of education is excellently suited to educate an entire school and even large numbers of children, and to purposefully promote the moral education of the youth.”

In nearby Haberstadt, two other “refugees” were living. One, Boulay de la Meurthe, was an important jurist who had participated in drafting the Napoleonic Code. His patron in Prussia was Counsel of State Staegemann, who had been commissioned by Hardenberg to prepare the Prussian constitution. The other exile was Jean Baptiste Bory de St. Vincent, who had made a name for himself as a geographer. He was also General of the Army under Marshal Nicolas Soult. Alexander von Humboldt had personally intervened to assure that Bory could come to Prussia. Through Boulay, Carnot’s became acquainted with the Cathedral Deacon Körte, one of the grand-nephews of the poet Gleim. Körte decided to write a biography of Carnot in 1829, which was a daring venture in the period of the Carlsbad Decrees. This biography was published, together with other unpublished poems of Carnot, by Brockhaus in Leipzig in 1820. As Varnhagen wrote, Körte was “cursed” because of this biography.

On March 23, 1819, the student Sand shot the playwright Kotzebue, which was later taken as the pretext for the Carlsbad Decrees. This, in turn, led to the “minister crisis” in Prussia, in the course of which all of the reformers lost their posts. Only Hardenberg remained in office, but he was largely demoralized and isolated.

As for Carnot, his health deteriorated. In 1820, he wrote: “Success is a perspective and hope leads us to the point from which we can be happy about it. Our worries come from our exaggerated ideas of happiness, which we seek beyond the measure which human nature permits.” His old friend Gaspard Monge, who was a broken man after his exclusion from the Academy (Carnot was also excluded), was impoverished and alone, and died in Paris on Aug. 28, 1818.

On Aug. 2, 1823 Carnot died in Magdeburg and was buried in the Protestant military cemetery. At the end of his life, this great scientist and republican had to watch as France degenerated to become a “lap dog” of the British Empire. Thus died the great Carnot as a Prussian lieutenant general, in Magdeburg, betrayed by his homeland. To remain true to his ideals and his homeland, he had no other choice but to end his life as a French patriot in Prussia.