I An Intellectual Vagabond

An Adventurous Life

After his 14 tumultuous years in Scandinavia, in 1728–29 the older Dippel unsuccessfully attempted to find a place to settle in Germany. He only succeeds after roaming around for a year, as he arrives in November 1729 at Berleburg in central Germany where the pious Count Casimir von Wittgenstein, in his small principality, is gathering pietists, separatists, dissidents, and freethinkers of various stripes. The Count notes in his diary that in the week leading up to 13 November 1729 "... nothing particular has happened, other than that the world-famous Dippelius who, under name of Democritus, is known by the learned, has arrived here". Dippel was world-famous, even after he had just been completely out of the game during his seven years of imprisonment on Bornholm.

Dippel's fame had several reasons. He was probably the loudest and most provocative among the challenging "radical pietists" who would dissolve not only the Lutheran churches, but church institutions as such. He claimed that true faith could be found in the heart of the believer and would only be distorted or persecuted by clerical institutions, and he produced such claims in provocative writings ranging from scholarly treatises in the vernacular to rude and satirical pamphlets. Anyone who took interest in actual debates in theology, philosophy, chemistry, or medicine in the first half of the eighteenth century would know about Dippel.

But already in his lifetime, he was a fabled figure also for other reasons – his personal life as an intellectual vagabond. Rumors flew. He experimented with dead animals – maybe also human corpses? He was able to make gold. This granted him access to smaller and bigger princely courts. He mixed with royals, counts, barons, bishops, but also industrialists, merchants, alchemists, theologians, mystics, doctors, and devoted disciples – not to speak about deceased spirits. He was banished from place to place, again and again. Clerical theologians despised him and saw him as a tool of the Devil; other believers cherished him and celebrated him as a new reformer, a saintly figure, a holy man. He escaped persecution from theological and political enemies as well as from creditors. His writings were burned at the stake; he himself was thrown in jail, if he did not succeed in fleeing. He had escaped an accusation for murder in Strassburg where he was, time and again, involved in dueling. He sinned lustfully during daytime and spent the night in prayers for forgiveness of debaucheries. He was pious and

⁶ Quoted from Goldschmidt (2001, 11n).

virtuous and claimed that real believers simply become parts of God himself. He had invented a sort of funnel able to transfer the soul from one body to the next. He invented remedies like Dippel Oil, wound balm, and a "sour elixir" against podagra and scurvy. He mixed an elixir for exorcism; another that granted eternal life. He chased the universal medicine, the one that may cure any disease, a no less splendid aim for alchemy than gold itself. He claimed the 1,000-year reign of the Millennium was imminent, with light and justice and social equality for all, eliminating princes and churches. He literally claimed that Christ was a doctor of the soul. He discovered Prussian Blue. He demanded that true believers imitate Christ – and his own identification with following Christ culminated when he died the night before Easter Sunday 1734 at the Schloss Wittgenstein. Hereafter, his blue ghost haunts the castle

Far from all of such rumors were true, but it was not easy to distinguish what was what, for Dippel lived an adventurous life.

An Orthodox from Frankenstein

Dippel was born on 10 August 1673 at the Burg Frankenstein in Hesse, south of Darmstadt, on the edge of the large Odenwald forest, with a wide view of the Rhine Valley over to Worms, and sometimes his name is added the location of "Franckensteiniensis" – from Frankenstein (Fig. 1). His parents had fled up to the stronghold because of skirmishes between the Imperial and French troops down in the valley during the Franco-Dutch war (1672–78). Dippel was the son of a local vicar and of a family of Lutheran clericals all the way back to the Reformation. This gave the young Dippel – so he later claimed in a fit of self-criticism – an arrogant and boastful appearance: he himself wanted to become a theologian and found that his ancestry gave him a privileged point of departure. He was pregnant with doctorates in three subjects, theology, philosophy, and medicine, as he says, and after having attended school in the village of Nieder-Ramstadt not far from Frankenstein around 1678–86 he began, in 1691, the study of theology at the university in the small town of Giessen north of Frankfurt. Here, the strong pietist awakening of the period was gradually gaining ground at the Theological Faculty.

⁷ The overview over Dippel's youth in this section largely builds on Goldschmidt (2001) which charts Dippel's life and thought in detail, until around 1700. Other biographical accounts include the assumed publisher Canz's afterword in Eröff III from 1747, partially informed from conversations with Dippel himself, Buchner (1858), Bender (1882), Voss (1970), Schneider (2007), and Kraft (2019). Dippel's birth date of 10 August is according to the old Julian calendar then still in use in protestant areas; in the Gregorian calendar the date would be 20 August.



Figure 1: Dippel was born 10 August 1673 at the Burg Frankenstein in the low mountains on the edge of the large forest known as the Odenwald where his parents, the priestly couple of Johann Philipp Dippel and Anne Eleonora Münchmeyer, sought refuge from the French-Dutch war ravaging the Rhine valley below. The stronghold of Frankenstein sat in the small county of Hesse-Darmstadt, where Dippel spent most of his years of study. The depiction from 1840 is titled "Burg Frankenstein mit der Aussicht nach Darmstadt", showing the ruins of the castle, seen from the south with a view of Darmstadt in the distance.

Pietism is normally dated to Philipp Jacob Spener's Pia desideria of 1675, whose "pious wishes" claim that the existing Lutheran church has grown dry and dogmatic and is in need of a new, deep, and pious awakening led by persons whose faith does not consist in merely repeating some dogmatic sentences, but makes of them better human beings, performing concrete acts of love. Christendom must live among people, not only in churchly settings, and it must be disseminated by "conventicles", meetings outside of the church, centered on Bible readings by laypeople. The eternal dogmatic strife among clergy, confessions, and churches, on the other hand, should cease. The young Dippel was not impressed by this sentimental program and felt compelled to defend the Lutheran orthodoxy which his family had been preaching for a century and a half. According to the orthodoxy, believers should not feel proud about their faith and particularly not about their good deeds. They should "sin bravely", knowing that they would be saved if only they believed, for then the sacrifice made by Jesus on the cross, atoning for human sins, would grant their salvation. The young Dippel was exposed to pietism at the Faculty, also because he received a stipend that gave him a close relation to one of the pietist professors there, Johann Heinrich May. But nonetheless he authored, as his very first piece of writing, a harsh attack on the pietist fashion wave - a piece that is unfortunately not preserved. In 1693, he took an MA degree with a dissertation about nothing - "De nihilo" - from which he would later argue that God could not have created the world out of nothing, but rather from parts of himself.8

Pietist from Strassburg to Giessen

Many have assumed that Dippel's conversion to pietism must be based on the arrival at the University of Giessen of the famous Gottfried Arnold in 1697. He was busy finishing his enormous treatise, Impartial History of Churches and Heresies, the first detailed church history charting heretics and dissenters of all sorts coolly, seriously, and without railing against them.⁹ Arnold himself drew radical implications from his work; he gradually concluded that heretics and mystics outside of the churches had, all through history, been the true believers, for they had really suffered tribulations for their faith and been subjected to persecution by clerical power hierarchies who remained fixated on externalities like ceremony, dogma, strife, and persecutions more than true and sincere faith. Arnold also took the personal consequence of leaving his new professorial position after just half a year, shocked by the dismissals of radical pietist preachers in the nearby Palatinate like I.H. Reitz and H. Horch, disappointed with conditions in the academic "Babel", and turned to developing his new Boehmean theory about the divine Sophia as a female symbol of wisdom.

Recent research, however, proves that Dippel was, already several years before the arrival of Arnold to the university, busy moving in pietist directions himself.¹⁰ Most probably, it was his reading of some marginal Church Fathers that took him in that direction: Makarios of Egypt and Gennadius of Marseille, maybe also Tertullian. Makarios put the emphasis on personal, sincere faith; he was skeptical of the church as an institution and also launched the theory that the soul had a material existence. 11 Gennadius was a persecutor of heretics, but he had himself been accused of the infamous heresy of "semi-Pelagianism", yea, even pure Pelagianism – the dreadful deviation it is to claim that a believer is able to do something in order to be saved. That was not possible in orthodox protestantisms. Tertullian spoke about God's bodily being, an idea that Dippel may

⁸ Cf. his 1704 Weg-Weiser, Eröff I, 934.

⁹ Unpartheyische Kirchen- und Ketzer-Historie, Arnold (1729) (org. 1698–1700).

¹⁰ Goldschmidt (2001, chs. 4–5), convincingly dates Dippel's pietism before the arrival of Arnold.

¹¹ Some argue that already Paul had, with Stoic inspirations, similar ideas, cf. Engberg-Pedersen (2010).

also have taken note of. Such things were adopted by the young Dippel moving in the pietist direction, but a decisive breakthrough seems to have occurred when he, after a year as house teacher 1694-95, went down to French-occupied Strassburg to continue his studies. Originally, he would have gone to the Lutheran stronghold of Wittenberg, far to the east in Saxony, but instead he came, in 1695, to the cosmopolitan city of Strassburg. Here, he assumed a high and excessive style of living - which may never have left him completely (Fig. 2). He dressed expensively, and it is here that rumors have him sinning studiously, maybe also with the intent of provoking and demonstrating his orthodoxy as against the moral doctrines of the emerging pietists. His Old Church inspirations had prepared the ground, however, and it seems it was actually his reading of Spener that constituted his breakthrough to pietism. After a period of atheist broodings, he emerged as a pietist in Strassburg, where he had excelled in student life with alcohol, tobacco, dancing, and dueling; he himself claims, though, that he kept away from Hurerey - from whoring. His skills with the rapier made the French commandant of the city propose to him a military career.

In one of his last writings, Abfertigung der absurden Prahlery (A refusal of absurd bragging), he relates many years later a mystic experience which also seemed to have pushed him in the direction of pietism. He was in his early twenties, around 1695-96, and he was a guest at a castle when he saw, through the window, a beggar arriving in the courtyard. Dippel wondered why the watchdogs had not reacted and went down to him, but instead of begging for alms, the beggar proved to be an oracle. He told Dippel that he was a human being with a good mind and will, with a good understanding of God, but also presumptuous with his own knowledge. But before long, you will have quite different thoughts about yourself and of all things, he told Dippel, and the world will have much to do with you, and you with the world. It is God who wants this, the beggar concluded and left, without anyone but Dippel having seen him. This experience made Dippel doubt the sect into which he was born, as he says, and in hindsight, he presents this as a decisive event in his shift from Lutheran orthodoxy to pietism. 12 The end of his stay in Strassburg is obscure. A murder was committed in Dippel's student circle; he was one among several suspects and he had to hide with a student friend until he, in August 1696, could be smuggled out of the city concealed in the bottom of a wagon. This would not be his last escape.

¹² Eröff III, 1747, 553f, cf. also Goldschmidt (2001, 108f).



Figure 2: Already in the middle of the 1690s, the young Dippel was sufficiently famous that portraits of him were published. He is described as a long, thin man – or tall and slender, if you are more positive. He had a longish, pox-marked face of a reddish, lively color, with rather big, dark, sparkling eyes. His shoulders were a bit bent forward; he appeared a bit outgrown. In personal relations, he was friendly and courteous, to people of formal piety, he would often be coarse and steep. He was unable to simulate as well as dissimulate and thus incapable of courtly behavior and intrigues – thus goes a description of him (Eröff III, 748f). The portrait of Dippel is painted by an unknown artist around 1704. It is the only existing painting of Dippel, who bequeathed it to Senckenberg in whose collection of portraits in Frankfurt it now resides. The 30-year-old Dippel is extravagantly dressed and gazes directly into the eyes of the observer. At the large humiliation ceremony in Altona 15 years later, Dippel would also wear red.

Back in Giessen, however, Dippel would soon grow much more radical than Spener, whose "middle road" he did not find amenable. In the meantime, pietism had grown and was taking over, as the first place in Germany, the Theological Faculty there. So, Dippel may also have sensed that Lutheran orthodoxy was busy be-

coming old-fashioned. 13 Soon, he would be the most radical there. The decisive point now was the theological doctrine of justification. How is the sinner justified? To the Lutheran orthodox, this procedure presupposed that the human being in question believed in the whole set of correct dogma, and then God would, on the Day of Judgment, simply "impute" justice, earned by the efforts of Christ, into the sinner, opening the road to salvation. This procedure was made possible by the death of Christ on the cross, a vicarious sacrifice in order to atone the sins of all human beings. That doctrine Dippel now found increasingly strange and erroneous. It implied that orthodox Lutherans could just carry on sinning, as if nothing had happened. Their faith consisted in nothing but emptily parroting some theological doctrines. It had no consequences for their life. This made Dippel articulate an alternative theory of justification. God does not need to be reconciled with humans – on the contrary, humans need to reconcile with God. Justification is not a process postponed to a remote future via a substitute – it is a real process which is possible already in this life and in this world, here and now. If you open your heart to Jesus and allow him to transform your soul, you may, already now, be born again, cleansed of sin and become just. 14 This is a version of "semi-Pelagianism", for it implies that human beings are able to act to influence their own salvation. 15 In the decisive moment of purification, of course, it is the Holy Ghost who actually performs the action, streaming through the pietist, cleansing away sin, Dippel admits. No human being could undertake this effort – but you can close off your soul against the activity of the Holy Spirit, or you can choose to open it up. This is a free choice for human beings, and for that reason predestination in its different protestant variants in Lutheranism and Calvinism must be rejected. The widespread idea

¹³ Characterizing Lutheranism as "the orthodoxy" was standard among pietists critical against that tradition, and Dippel uses the term all through his career. It is, of course, not without a polemical tone.

¹⁴ Dippel thus belongs to the long tradition of claiming that it is possible, by a certain personal spiritual effort in adult life, be it awakening or baptism or both, to become reborn and thus approach salvation more than ordinary believers not taking this step - an idea strong in the "left wing" of the Reformation, which, since then, appears in many versions, from "born again" evangelicalism to political "wokeness". In the eighteenth century, Dippel's alternative theory of justification seems to have been popular in the German Enlightenment - both Edelmann and Reimarus refer to Dippel's idea that human beings are unable to offend God who, on his side, does not demand atonement and is unable to take revenge.

¹⁵ The peer reviewer of this book proposed this might also be influenced by "synergism", referring to the collaboration of human beings with the deity about salvation, stemming from Melanchthon's strife with the "gnesio-Lutherans" after Luther's death. Dippel does not refer often, however, to Melanchthon who plays no role in Goldschmidt (2001)'s detailed analysis of the early development of Dippel's theology.

that the destiny of believers is predetermined, Dippel would reject and later compare to the nascent scientific determinism he found in parts of the Early Enlightenment. Jesus himself underwent, through his life, a long process of approximation to God, and only when he was 30 years of age did his mission become clear. He was not born a godly human; that was rather the aim of a long and complicated process of self-rejection, which should serve as the role model for the spiritual rebirth of pietist believers and their return to God. So, Dippel changes focus from the dying Christ to the living Jesus. Animals have feelings, logic, as well as soul but, by contrast, human beings also have spirit (also called temperament or reason). We are created in the image of God, but due to the Fall, we have forgotten it, and Jesus is the doctor who will cure us by leading us in the life-long, painful struggle with ourselves in a deification process in order to turn back and become again part of GOd, whom Dippel often spells with two or even three capital letters.¹⁶

Such ideas Dippel began to publish in the closing years of the 1690s in writings like Axioma Adami Veteris, Orcodoxia Orthodoxorum, and Papismus Protestantorum Vapulans, the latter two in German, despite their Latin titles. They provoked harsh polemics from shocked orthodox theologians and violent attacks on Dippel's person, as well as ensuing cases with seizing of writings, house arrests, writing prohibitions, and threats of book burnings; even his own Lutheran father had to turn against him. 17 The fact that his books were published in the vernacular, unlike standard academic treatises in Latin, potentially addressing ordinary readers, added to the outrage and was an explicit reason for theologians and authorities to persecute them. Dippel was one of the first-movers in changing from scholarly Latin to the German vernacular in theology. Count Ernst Ludwig of Hesse-Darmstadt, the local prince, and especially his consort Dorothea Charlotte, seem to have had much sympathy for radical pietism, and they hired Dippel, for a period, as a house teacher for one of their sons. Count Ernst, however, seems to have been pressured to admonish Dippel to stop publishing, with reference to the danger of bloodshed and threats of interventions from the Kaiser of the Holy Roman Empire.

For every new publication, Dippel's theory becomes more elaborated, detailed, and radical. The Old Adam must die; a new one should appear through the self-cleansing processes of the soul. The death of Christ on the cross was not at all a substitutive sacrifice for the sake of our sins - quite the contrary, it was a model for the true believer, a strong symbol for the process of self-denial and re-

¹⁶ Related ideas about the development of Jesus to Christ had already been rejected by Church Fathers in the first centuries AD under the headline of "ebionitism".

¹⁷ The titles "Teachings of the old Adam", "The hellish doctrine of the orthodox", and "The whipped papacy of the protestants". They are reprinted in Eröff I.

birth, which all true believers had to go through. This is why believers should imitate the sufferings of Christ, reject the joys and honors of this world – then you will be reborn as a new human being, as the new Adam, and achieve an intoxicating state of bliss already in this life. This went completely against the orthodox Lutherans, whose doctrines Dippel now saw as stemming directly from Hell: Orcodoxia Orthodoxorum means "the hellish teaching of the orthodox" (1697), the book in which he began assuming the pseudonym of Christianus Democritus. That is, the Christian Democritus – the actual, religious version of the radical Greek philosopher, known for his laughter and his unconditional search for truth. 18 Dippel oftentimes proclaims that he searches for truth only, without any regard for institutions or tradition, for himself or for others.

But his rejection of the orthodoxy also implied that Dippel was led to refuse the very Articles of Confession – spearheaded by the Confessio Augustana, the basic Lutheran set of dogma of 1530, authored by Melanchthon. Dippel observed that all the different churches and their various historical confessions claim to build on the Bible, but that they get completely different results out of the book. Articles of Confession, then, are mere human products, unfit for dictating faith. Actually, such writings directly correspond, in orthodox Lutheranism, to the role of the Pope in Catholicism, as Dippel now claimed: Papismus Protestantium Vapulans (1698) means the Flogging Papacy of the Protestants. They had merely erected a new papacy with dogma as the whip, a new papacy even worse than the Catholic one. Already Dippel's early writings emerged in storms of polemic with theological opponents and enemies, like the vicar Johannes Lentzer in Weitershausen, and polemics and infights would become a continuous source of inspiration driving Dippel's thought further, and all until his death almost 40 years later, he hungrily kept engaging in larger and lesser feuds, particularly with orthodox theologians.

Only now, in 1697, Dippel met Gottfried Arnold in Giessen and found a kindred spirit who drove his own radicalization even further. Dippel increasingly turned toward marginalized mystics and enthusiasts since the Reformation charted by Arnold: Kaspar Schwenkfeld, Johann Arndt, and Jakob Boehme, who might be inter-

¹⁸ Dippel explicitly identifies with the laughing Democritus and his free criticisms of the silliness of the world, after the classic dichotomy between Democritus and Heraclitus, the laughing and weeping philosopher. He does not, of course, identify with the atomism of Democritus, rather with his idea about a direct form of knowledge, stemming immediately from God rather than from the senses, cf. the myth that Democritus blinded himself in order to behold deeper things directly (Hannak 2012). The French Catholic theologian Pierre de Besse had used the pseudonym "Democritus Christianus" in his widespread writings in early seventeenth century, such as Le démocrite chrestien, c'est-à-dire le Mespris et mocquerie des vanités du monde (1615), attacking the vanity of the world, but it is unclear whether Dippel knew about him.

preted as inspirators or precursors to the actual pietist movement.¹⁹ In the *Papis*mus book, which Dippel published at 25 years of age in 1698, most of his theology is already articulated. Churches have no legitimacy at all. They are just human fabrications, just like Articles of Faith. They are a Babylon to be destroyed.

This is why Dippel would also now refuse to take any oath on his orthodox faith such as it was a standard premise to assume a position in school, church, or university. A central chapter of *Papismus* goes against the very concept of a religious oath which just serves to stop the human process of knowledge and rebirth. So, all at once, Dippel was forced to give up his ambitious plans of an academic or clerical career. He demanded full tolerance for all deviations of faith and now claimed that true self-rejection and the opening of the heart to God might take place in individuals of all confessions, independent of what they themselves believed to believe. This was a radical consequence of the "impartial" position of Arnold – the very word "impartial", unpartheyisch, became a characteristic of radical pietism, and it would reappear in the title of many Dippel writings. Confessions and churches were mere sects which had grown big - this is why radical pietists speak of established churches, Catholic, Lutheran, or Calvinist, as "sects". Church history is but one long history of decline, ever since the voluntary congregations of the first Christians, which is what should be reestablished. Ever since the Council of Nicaea in 325, churchly meetings and conventions have only striven to enshrine one correct dogma, which would then be used for the exercise of power and the persecution of heretics. But the real heretics are those who shame others as heretics, so Dippel.²⁰

This also has an acute, political background. In the Holy Roman Empire, only three confessions were allowed in its different parts, Catholicism, Lutheranism, and Calvinism – until Frederick the Great, in 1741, decreed freedom of faith in the Prussian lands of the realm. With the exception of certain freer cities such as Altona, it was a crime to hold other convictions than the three, and dissidents, deviants, and heretics of all sorts could simply be punished and banished from the realm. To Dippel, by contrast, faith is and ought to be completely individualized, and the only church-like structures Dippel would recognize are voluntary com-

¹⁹ To the root in Arndt of conceptions of self-denial and penance in Dippel and other pietists, cf. Faßhauer (2022) who also discusses Dippel's analysis of melancholia as an effect of the turning away of the spirit from God which should be treated with pastoral care as well as medicine against constipation in the spleen.

²⁰ Hannak (2013, 413ff) points to the parallel argumentation against criminalization and persecution of heretics in Dippel and the Early Enlightenment philosopher Christian Thomasius, who published, in 1697, two writings also attacking Lutheran orthodoxy for constituting a new papacy. There is no indication, however, that the two already knew each other at this point.

munities of reborn. So, the "impartial" stance took him close to Enlightenment universalism; not only does it not count whether you are a Jew or a Greek, as Paul had declared, it is also indifferent to which church you may belong – what is decisive is the inner faith. This is consequent indifferentism: it does not influence one's salvation to which organized confession one belongs, or what one thinks one believes. Even pagans, Jews, and Turks have access to Christ, also despite the fact that they may know as little about the Athanasian Confession of Faith as a cow, Dippel wrote, referring to the mythological prophet Hermes Trismegistos of Ancient Egypt as an early and pagan source of valid theology. Such claims gave rise to livid and fear-stricken counterattacks and contributed to establish his reputation as a blasphemer.²¹

But still worse: even the Bible itself cannot be regarded as the word of God, for it is also but a human fabrication, which is evident from the stylistic difference between its single books and the highly shifting degree of spiritual validity across them. One generation earlier, philosophers like Spinoza had begun reading the Bible as a human historical source from the past rather than as a special book given by revelation; here, Dippel seems to have known about actual Bible philologists like the Frenchman Richard Simon. Spinoza had taught that the role of the Bible was only to teach moral behavior; Dippel maintained that the task of the Book was to disseminate other persons' testimony about their experience with God, and it may be useful, particularly for people who have not yet experienced the pietist awakening. For once you have God in your heart, do you really need the book? You should rather use your own reason and experience than letting yourself be forced by old writings – here, Dippel already sounds like an Enlightener, and the abandonment of the idea that special, revealed texts exist becomes, to Dippel, the premise for seeing theology as an open process of research, on a par with other academic disciplines. Research must make use of both reason and empirical investigation – whose sources might also comprise personal revelation. For divine revelations are not finished in and with what is conveyed in the Bible; they continue to this day. Luther, for instance, was also a prophet, if delimited by his time, but now Dippel himself continues as a prophet and brings forth new revelations.

There is a characteristic mixture of extreme humility and rampant megalomania in Dippel's theology, such as he articulated it as a young scholar in the last years of the 1690s. Soon, he would be in contact with other radical pietists in Frankfurt and Laubach outside of Giessen, such as the pietist couple Johann and Johanna Petersen who, inspired by Jane Leade and other "Philadelphian" English-

²¹ Eröff I, 428, cf. Hannak (2013, 411).

men, taught that already the year 1700 would herald the Millennial Kingdom, and it seems as if Dippel was carried off. He had rejected the idea that knowledge about the last days was possible, but now he wrote Christenstatt Auff Erde - A Christian State on Earth – which came out just before the year 1700, adding to his theology Old Church ideas such as *chiliasm* and *apokatastasis*. The former refers to the Millennial Kingdom which will realize heavenly principles on earth, inaugurate the end of times, lead to the Day of Judgment, and which true believers may work on realizing already now. Many pietists believed that a precondition of this event was the conversion of all human beings which is why they inaugurated a large variety of missionary initiatives. The latter refers to the idea that by the Day of Judgment, all things shall be fully restored, even infidels and evil persons will be saved and devils and hell simply cease to exist. It was a radical move, as seen from the viewpoint of more moderate pietists such as August Francke in Halle who did not embrace the idea that restitutione omnium, the restitution of all things, could comprise the damned. Dippel's utopia has been called a "Constitution for the Millennium" and was but one among a wave of radical pietist political utopias claiming the imminent realization of brotherly love in a new social structure. "Philadelphia" means exactly "brotherly love" and became a radical pietist slogan for the new society soon to come, also in germ-like instalments of brother-loving pietist communes. The breathless young pietists, of course, were disappointed when the year 1700 came and went without any major changes, but Dippel kept variants of these eschatological ideas in his theology.

Suddenly, he was appearing as one of the leading radical pietists in the growing current of awakening, piety, and anti-clericalism that engulfed Northwestern Europe in the decades to follow. The movement was already busy splitting up in several currents, and Dippel came to despise those pietists – like Francke in Halle – who attempted to reform existing churches from within. To him, that would be yielding to the enemy. Seen from the Hallensian point of view, caution was paramount in order to convince the orthodox establishment to embrace reform, and they increasingly attacked radical pietists like Dippel outside of the church. So already now, Dippel had a position in which he was loved by many, hated by even more. Pietism was busily emerging as an international network of the awakened, an imagined community in which one knew to have brothers in faith, spread far and wide. Pietism turned against established estates, institutions, and hierarchies, envisioning a society of self-organized, "brother-loving" communities across gender, confession, and social classes. Radicals, in particular, became busy experimenting with new social ways in self-organizing congregations. There was no formal membership, entrance ticket, or confession, but certain signs, such as exclaiming "Brother in spirit!" or "Sister in spirit!" – then one knew it was a more or less a radical pietist colleague one was facing. But such exclamations

might also lead to persecution from enraged orthodox Lutherans. The networks of "Philadelphian" pietists simultaneously could be a source of mutual help and assistance: one pietist supported the other and referred to the next. Obviously, this particularly applied to famous pietists and preachers like Dippel, of which many came to lead migrating and nomad lives, preaching, missioning, opportunity-seeking, fleeing, or suffering banishment (Fig. 3). 22 Soon, Dippel was so famous that he would meet Dippelians wherever he went – this also meant that when he had to flee or was expelled from one place, oftentimes, a Dippelian offering support would appear in the next place.

Among radical pietists, however, Dippel is probably the one who most strongly sticks to a central demand in theological orthodoxy: that even if pietism should be

22 Cf. Eißner (2014) about pietism as an "imagined community". Using the term "radical pietism" generally refers to pietists who turned against existing protestant state churches rather than attempting to reform them from within. At the time, they were often called "separatists" because they withdrew from the churches and the obligation to participate in services. This, of course, does not necessarily imply that they agreed among themselves on other points, and "radical pietism" thus refers to a mixture of rather different characters, groups, and theologies, which might even wage more or less public feuds against each other. Schneider makes the important observation that separatism and heterodoxy are independent variables in pietists (2007, 3). Differences include, e.g., how much one had to do to purify one's soul of sin and how swift this could take place; or the attitude to baptism: Dippel is among those radicals who refuse all outward rituals, even baptism, while others preserve infant baptism and still others practice adult baptism. The term thus also refers to movements from which Dippel would distance himself, such as Conrad Broeske's chiliasm, Eva von Buttlar's "gang", the Schwarzenau "Inspirationists", Count Zinzendorf and his Herrnhutians, etc. There is also not always any sharp distinction between moderate and radical pietists, rather a continuum with different degrees of heterodoxy and attacks on church institutions, and oftentimes contacts and inspirations may cut across the continuum, such as Dippel's meeting with Spener in Berlin in 1704. A good overview over German radical pietism is Schneider (2007); on the interface between German and Danish pietism, see Pedersen (1951), Schwarz Lausten (2004, 170-87), Engelhardt (2017). There are ongoing discussions whether the radicals formed a secondary deviation from Spener's original doctrine, or whether the radicals, with their roots in Jakob Boehme, would rather predate the church pietists, who would then be a later, institutional compromise position. Shantz outlines seven points common to radical pietists (2013, 159): (1) they take inspiration from Boehme and Arndt; (2) they take a Philadelphian view of the pending arrival of Christ's kingdom on earth with peace, love, and harmony; (3) they have a migratory and "homeless" lifestyle; (4) they are eclecticists, mixing radical Reformation ideas with mysticism and alchemy; (5) they attack the heritage from the Reformation and downplay differences between existing confessions; (6) they may combine involvement in churches with attacks on them; (7) they allow for prominent roles of female preachers and members. Shantz also proposes a rough division between subtypes of radical pietism (156-57): (1) Spiritual-Alchemist; (2) Millenialist; (3) Conventicle; and (4) Sect Models, respectively – with Arnold/Dippel, the Petersens, J.J. Schuetz, and Alexander Mack as typical representatives of the four. Dippel clearly belongs to (1), even if his strict separatism approximates him also to (4).

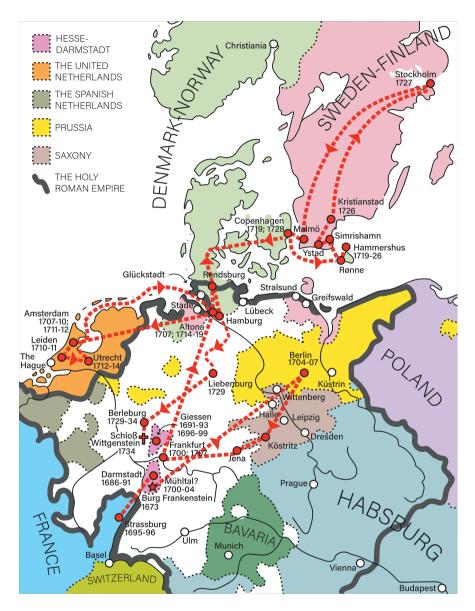


Figure 3: The map shows some of the main stations on the trajectory of Dippel's wandering life. Straight lines indicate abstraction from the more precise traveling trajectory: we know, e.g., that Dippel sailed from Amsterdam to Hamburg in 1714 and from Copenhagen to Rønne in 1719; on both occasions, the ships suffered wreckage during storm and only barely arrived at their destinations. Conversely, we do not know the exact route from Altona to the Netherlands in 1707. Dippel's many shorter trips in and around Hesse-Darmstadt between Darmstadt, Giessen, Mühltal, Frankfurt, etc. are not indicated.

oriented toward practice, toward life, the work of transforming the soul, accomplishing useful things in the here and now, it should still be based on a consistent, well-wrought theology, a philosophical doctrine. To many other radical pietists, it may have seemed obvious you just had to follow your purified heart. To Dippel, theory and practice should integrate in a grandiose, new world view. This, simultaneously, associated him to the emerging philosophies of Enlightenment.

For at the same time, Dippel's is an understanding of deity, world, and human beings which opens up to a series of new possibilities that were much less evident to an orthodox with a viewpoint in the established clerical hierarchies; scientific investigation of the world using experience and reason, critical interventions on behalf of the persecuted and suppressed, tough politicizing against unjust princes, advice and counseling of righteous princes, assistance and medical treatment of diseases, properly originating from impurities of the soul – all that which Dippel gradually, and with considerable energy, would add to his extreme pietism, also making him a part of the Early Enlightenment.

Gold in the Glass Hut

How did the radical pietist become an alchemist? When you gave up the narrow Lutheran dualisms, between body and soul, between law and gospel, between the fallen world and the world after the Day of Judgment, between the two regiments, the Sword and the Word - then much more traffic between the secular and the sacred realms became possible. It was a world view approaching a monism, in which there is one world only, and where secular and sacred become two aspects of one and the same world, rather than forming separate worlds with thin communication lines. In classic Protestantism, the connections between those worlds were narrow and few – there were the two sacraments, baptism and the eucharist, reaching out to the minority of true believers hidden among congregations, and there were princely authorities, reigning as the merciful and violent tools of God on earth. In Dippel's radical pietism, these connection lines between heaven and earth widened to a main road, potentially open to all believers to follow, already in this life. Sacraments as well as divine princes, by contrast, became marginal or religiously completely irrelevant. Baptism was but a human invention, confessional was an absurd theater, and the trinity in itself had no basis in the Bible.²³ It also implied a world view in which this world is not only a barren, fallen wasteland in temporary expectation of a better life in the beyond; instead,

²³ Cf. Schäufele (2009).

there is a continuum between the material and the spiritual, accessible to investigations of both scientific and spiritual kinds, maybe simultaneously. The church father Makarios, with his claim about the materiality of the soul, inspired Dippel who, in turn, would attack Descartes' sharp distinction between extended things and thinking things, between matter and mind.

Already in Strassburg, Dippel achieved a reputation for palm-reading and the computing of horoscopes, and it seems that it was in Giessen that he became interested in hermetic authors, such as Rámon Llull, Paracelsus, and Johannes van Helmont, addressing alchemy. In a small text titled "Fata Chymica" – about his "chemical destiny" – Dippel relates how he embarked on the road of alchemy.²⁴ On a hike around 1698, he had visited an old student buddy from Darmstadt, now living in the vicinity of Giessen – the preacher Philipp Wilhelm Geilfuss. During their conversation, he showed Dippel two small booklets from his library. The first was the famous Renaissance mystic Guillaume Postel's Revelation of Secrecies Concealed since the Beginnings of the World, 25 addressing many deep theological issues; the second was an anthology of tracts by different "chymical" authors: "... containing Raymund Lulls Experimenta, the Italian Count Treviso's Fata and Practica, Alanus' Dicta [on the philosopher's stone], and the Twelve Keys by the socalled brothers Basilius Valentinus". 26 While Dippel enthusiastically grabbed the Postel piece, he put the alchemist volume back with a laugh, for even if he had taken interest in medicine ever since he was very young, he regarded alchemy as less than nothing. His friend pressed on, Dippel yielded, read the small book, and realized that gold-making was neither against nature nor elevated over it, as he says – that it was but an ordinary empirical science and that he, if he had the time and occasion, would soon be able to master it. He thought that God probably

^{24 &}quot;Lebens-Lauff", c. 1730, 34-48. The chapter on "Fata Chymica" originally formed part of the introduction to the second volume of Dippel's philosophy of nature of 1705, Anderer Theil des Wegweisers (Eröff I, 1747, 919), and was presumably written around the time when Dippel went to Berlin. Dippel's chemical career, see Kraft (2019) and (2023).

^{25 &}quot;Velamen apertum arcanorum a principio mundi reconditorum", 36; probably a variant of his well-known writing Absconditorum clavis (1547), the key to secret issues.

^{26 &}quot;Raymund Lull" refers to the really existing philosopher and theologian Rámon Llull from Mallorca in the thirteenth century, to whom also a number of later writings were ascribed; Bernardo of Treviso was a fictive Italian alchemist from the fifteenth century, who had been concocted in the sixteenth century, supposedly with inspiration from several real alchemists such as Eberhard I von der Marck-Arenberg, and who had been ascribed the authorship of a number of existing texts. Alanus is also known as Alain of Lille, a twelfth-century French theologian and poet ascribed the book Dicta de lapide philosophica. Basilius Valentinus is another fifteenthcentury alchemist, by some placed in the Benedictine monastery of Erfurt, but supposedly also an invented pseudonym for one or several German alchemists from the sixteenth century.

had not let him find these writings in vain and that he, now that he was cut off from pursuing an academic career, going through them might be able to find an honest way of making a living. So, Dippel entered alchemy for simple economic reasons, but also because he hoped to find the "physical tincture" for use in the art of medicine. Rámon Llull's Experimenta contained 34 descriptions of experiments, among which was the recipe for chymical gold, but Dippel got hold of another chymical manuscript showing the road to this tincture in a simpler way than Llull – maybe by the French alchemist Pierre-Jean Fabre.²⁷

He succeeded in completing the experiment, and even if he often had to move, he now carried his chemical equipment with him like a cat with her kittens, as he says. In the course of eight months, he now produced a tincture which could actually transmute 50 parts silver or quicksilver into gold, he claims, and he thought that he would now finally become able to withstand his theological persecutors trying to starve him in order to press him away from pietism. It was difficult for him, however, to keep these things secret and protect himself against robbery, so he decided to buy a glass hut, a glass factory, in which he could continue collaborating with a few select friends in order to make himself useful in chemistry as long as this would suit God. A glass hut would have furnaces able to reach high temperatures and would simultaneously supply his work with laboratory flasks, beakers, retorts, and other glassware. We do not know the exact location of this glass hut, maybe in Mühltal not far from Frankenstein, where a string of industries had emerged during the seventeenth century. In the first years of the new century, Dippel worked here. This workshop Dippel acquired from a baron at the price of no less than 50,000 guilders, which he decided to pay off by intensifying his production of tincture. Carelessness, however, destroyed his glass crucible and immediately spoiled all of the tincture he had produced up to then. So, he was unable to pay the mortgage and had to seek credit elsewhere in order to pay the 4,500 guilders instalment to the baron.²⁸ Dippel tried to force the process – which you should never do, as he adds – burning his fingers in haste. Three years passed without success. Dippel was persecuted by creditors and he had to comply with being called a big fool as well as an arch impostor. As time went by, he was tempted to give up alchemy completely, but his debt in the hut pressed him to continue; what is more, he had discovered that a higher hand was governing the process, without which you would never achieve the goal, as he says. To learn to behold the ways of penetrable nature and, through many errors,

²⁷ Kraft (2019, 34).

²⁸ Who the baron in question was, is not known. Kraft (2019, 35) makes the guess that it might have been Count Friedrich of Hessen-Homburg, also known as the Prince of Homburg, whose son much later attempted to enforce the repayment of an old debt from Dippel.

to approach the grasping of impartial truth would finally be not only of common utility but also to the praise of the good Lord, Dippel argues.

This story sounds like beginner's luck: he actually once succeeded in producing the philosopher's stone, but then he wasted three years in vain trying to repeat the miracle after his glass beaker broke. Maybe for this reason, his small personal history of alchemy ends with a conjuration; gold-making must serve God. Dippel's ambition is not to strive for honor nor picking fights, but only, naively, to show the path on which "... the GOd-desiring soul, through the investigation of external nature and its forces as well as its fall with Adam as its road to reinstitution in Christ", and through that to approach the highest, unmovable blessings - otherwise, you will be caught up in pagan philosophy based on atheist principles. Dippel seems to fathom that the chymical science might also lead completely away from religion. His repeated, erroneous experiments appear to Dippel to be due to the will of God: he can only be brought to understand the "penetralia", the secrets of nature, via a road ripe with error. Gold-making is actually what Dippel considers the lowest part of alchemy, for it is a mere side product of the true "chymie". Finally, Dippel solemnly exclaims that there should be erected Christian schools, colleges, penitentiaries or what else is useful for both Christendom and the republic, and he now pledges that he, as a proof of secrecies, obliges to procure, to all courts and republics of Europe, so much finished tincture as to suffice for the treatment of many ill persons. The less radical Hallensian pietism, spearheaded by August Francke, was busy launching their package of edifying institutions, orphanages, schools, hospitals, pharmacies, and print shops – Dippel obviously thinks that successful alchemy may play into related projects of social amelioration. Maybe this proclamation would also be implicitly addressed to his new benefactor, the Prussian King: goldmaking, of course, would be undertaken for his employer the King's sake, but Dippel's medical alchemy should be for the benefit of everyone. This is my good intention, but if nothing comes out of it, we shall all imagine that it was but a dream, he concludes, hopeful and modest. So, he is far from certain he will be able to repeat his success. This relative modesty was not typical for the alchemist wave of the time when many adepts craved high princely advances by promising speedy supplies of gold.

Dippel's text is a bit of a programmatic manifesto based on his initial alchemist experiences in the early years of the 1700s, after his theological breakthrough, probably written not long before his calling to Berlin in 1704 which is not mentioned. Maybe the small text also functioned as an advertisement for his skills and may have caught the eyes of the Berlin authorities, soon calling him there.²⁹ So, alchemy could solve both Dippel's economic grievances, provide a civil career outside of institutions, illuminate the secrecies of nature, serve the general utility of citizens and states, and approach the true practicing alchemist to God and the eternal things.

All in all, he decided to take it as his task to make the decisive breakthrough in the eternal attempts to make gold out of poorer metals, which was taking a large upswing in the period and attracted even luminaries like Leibniz and Newton – but also to pursue the other big dream of alchemy, the universal medicine against all diseases which might be approached via the distillation of parts of dead animals, from which Dippel assumed it was possible to extract particularly strong elixirs.

But how were Dippel's more exact procedures for making "chymical gold"? For obvious reasons, Dippel did not publish on this subject, but certain sources dug out by Kraft (2023, 151ff) may give us an idea: a main ingredient was phosphorous (P), easily inflammable and often kept under water, which could be isolated from distillations of animal and human urine and feces. Kraft quotes Dippel from an undated letter copied by Senckenberg many years later:³⁰

Author J. C. Dippelio / You must know that I still have no other experience with the tincture than from *phosphoro* with which ⊙ or \Im is dissolved and also sublimated by appropriate manipulations, afterwards dissolved and abstracted in W Rect. and you have an Elixir tingens within a few weeks. (Quoted from Kraft (2023, 152); ⊙ is gold;) is silver; **V**Rect. is Spiritus Vini Rectificati, that is, distilled ethanol, alcohol)

Elixir tingens is the philosopher's stone. So Dippel used phosphorous as the starting point in his gold-making all through the years. A lot of details, of course, are here only discreetly hinted at. Kraft discusses a number of versions of more detailed recipes, which we shall not go through here, but an overall idea (as in the ms. "De Phosphoro" found with Dippel records in the Senckenberg collection) is to derive phosophorus from putrefied urine, in order to make "fiery water", probably phosphoric acid, H_3PO_4 . This should then be mixed with gold lime, obtained from dissolving gold refined with antimon, that is, very pure gold, in "aquafort", nitric acid, HNO₃, to which salmiac, NH₄NO₃, was added, and then make it react with copper vitriol, CuSO₄. The result, a brown-red gold lime, would combine

²⁹ Such as argued by Kraft (2023), which is recommended for the many new facts and sources presented there, particularly regarding Dippel's chemical career.

³⁰ Johann Christian Senckenberg (1707–72) was a doctor, natural philosopher, and botanist in Frankfurt, inspired by Dippel. He kept a 40,000-pages diary with information of many events of the time – couched in a mixture of German, Latin, and abbreviations. Visiting him in Berleburg in 1732, he collected a lot of data from and about Dippel.

with the "fiery water" in a closed vial which, when heated, would progress through a series of colors until finally being fixed as a "red stone" - the philosopher's stone.³¹ We know from other descriptions that very small amounts of such tincture were supposed to be able to transmute much larger amounts of metal.

What is evident from another gold-making description of Dippel's lab work, much later in Berleburg, is the long-windedness of repetitions involved in his labor. Here, in order to extract gold directly from mercury and silver, Dippel mixed those metals with sulfuric acid, H₂SO₄, in a closed crucible, to be heated for 14 days. When the flask was broken open, liquid should be distilled away, new sulfuric acid added, and then all over again ten or twelve times, that is, approaching half a year in total. Quite a considerable amount of Dippel's adult life would be spent in the lab, much of it simply with keeping a constant fire burning over months, not the easiest task to reconcile with a migrating and tumultuous life. This process description also gives an idea of how Dippel tried to apply his elementary theory of fire and light as basic principles: he thought that in the course of such long experiments, the light and fire principles would somehow gradually purify and eventually enter through the vessel walls into the mixture and transform some of the silver into gold (Kraft 2023, 156).

Dippel, however, not only took interest in alchemy as a practical science, but also increasingly in its connection to the hermetic philosophical tradition since the Renaissance. It would form, in a certain sense, a bridge between his theology and his alchemy. Hermeticism referred to the idea of secret knowledge stemming from the ancient Egyptian prophet Hermes Trismegistos – the triple-wise Hermes or Mercurius – who was supposed to have lived at the same time as Moses and whose ideas had been collected in the legendary treatise Corpus Hermeticum, translated into Latin in Italy in the fifteenth century, and celebrated by many as a source of early Egyptian wisdom.³² It had been proven by the humanist scholar Isaac Casaubon already early in the seventeenth century, however, that Hermes Trismegistos was but a fictive name affixed to a late-Hellenistic corpus of texts stemming only from the first century AD. This did not, however, deter either Dippel or other radical pietists from taking inspiration from hermeticism for renaissance-like reasons: that there was one true theology behind the variety of different religions, which is why the pagan Hermes could be taken as an early source of true religion, also by Christian theologians. God had not only revealed himself to Christians, but also to heathens, and their sources should be put to use and reinterpreted by an open-

³¹ Kraft notes a chemical issue here: phosphoric acid does not dissolve gold (while aqua regia, royal water, the mix of hydrochloric and nitric acid, does).

³² Cf. the English translation in Copenhaver (1992).

minded theologian. Essentially true and reasonable knowledge, even if maybe abstrusely expressed, lay hidden in hermetic sources, which might enlighten Christian theology as well as present-day science.

It is such an idea that makes Dippel enumerate an impressive ancestral tree of more or less mystic inspirators, during a discussion addressing the material or "passive" aspect of God:

This passive ground, or suffering first principle of the deity – which is like the body of the eternal deity, which is why GOd in this respect is called a **fire** in the Writ, and it is said about him that he **lives in a light to which nobody has access** – is, according to the most ancient sages, **the eternal indestructible nature** and is also called the invisible store of semen from which particular created objects and visible, figuring bodies have emerged during the times from the most free and most-wisely acting GOd. This is why I bear witness that exactly this has, before me, been taught by *Zoroaster* among the Persians, *Mercurius Trismegistos* among Egyptians, the most ancient *Kabbalists* among the Jews, *Plato* among the Greeks, *Origen, Clement of Rome* and *Tertullian* among the first Christians, [. . .] but, among later Christians, *Robertus de Fluctibus* or *Fludd*, the wonder of his times among Englishmen, and *Theophrastus Paracelsus* among the Germans who surpasses anybody in thorough learning and true sincerity to GOd in his heart; and finally the crown and pinnacle of beauty among all the men mentioned, namely **our shoemaker and German** *philosopher Jacob* **Boehme**, whom the most learned men of our time, namely *Henrich Morus* and *Morhoff,* honor with special praise and cannot help but most supremely admire. ³³

Other top pietists like Gottfried Arnold and Johann Samuel Carl also took interest in the hermetic tradition which they sought to graft onto aspects of the metaphysic assumptions of their pietism, and recent research places increasing emphasis on such non-Christian sources to pietism, which had earlier also been recruited by mystics like Sebastian Franck and others. Along with Dippel's indifferentism – that you may be saved irrespectively of which church you may belong to – his hermeticism takes him close to deism, the syncretist religion of nature cherished by many scientists and Enlightenment philosophers of the period: the idea that there was one true, rational religion behind all particular confessions. Dippel would always continue emphatically to conceive of himself as a Christian,

³³ This mystic lineage is presented by Dippel in his medical habilitation of 1711 (Eröff II, 336–37, bold and italics are from Dippel's German version). The two contemporaries mentioned are Henry More, English philosopher among the Cambridge Platonists, and Daniel Georg Morhoff, German polymath and literary historian.

³⁴ Dippel's reinterpretation of heretical theology and hermeticism, particularly in the first decade of the eighteenth century, cf. Hannak (2008, 2013, 363–69); Hanegraff et al. (ed.) (2006, 955–59). It was the first and thirteenth chapters of the *Corpus* from which Dippel, just like earlier enthusiasts, primarily took inspiration.

but the structure of his theology approached, with its indifferentism and hermetic admixtures, universalist deism. 35

What Dippel, in particular, would take from the hermetic tradition was the abovementioned idea that God has an active as well as a passive side and that the former appears as a sort of invisible effective force in visible matter. Dippel claimed, influenced by Boehme, a double Fall in the early history of the world: before Adam's desertion from God, there had been a "cosmological" fall in which God's original presence in the world had been broken. God was originally light and fire in one but in this arch-Fall, light and fire had been split by the apostasy of Lucifer and his angels, so that the fire part of God became locked up in the material world where it manifests itself as an insatiable urge to reunite with light, a desire palpable both in animals and humans. It is this burning hunger that drives human beings, but because of both Falls, they most often misinterpret this desire and erroneously believe it may be satisfied in the material world alone. Such satisfaction, however, can really only take place in light which is equal to the joy of life. But when human beings experience the hermetic-pietist initiation, light and fire are again reunited in their hearts, and they thus reinstate God's presence in the world which is already much clearer in the animal world, subject to the first Fall only. Non-human animals, then, are less misled than humans, spontaneously living in a more divine and reasonable way. From this hermetic viewpoint, God and the force of life are one and the same thing - and Dippel appears as a sort of early vitalist, claiming that what dwells beneath the material surface of things, accessible to mathematical science, is this divine force of life, which thus – as against Cartesianism – explains why it is that life may arise in the material world.³⁶ This divine depth is not accessible to mathematics, but it may be experienced in the heart – or through empirical investigations, which is why alchemists may often turn to hermeticism in order to understand their experiments discovering the workings of this deep force in matter. Dippel's vitalism is thus a sort of anticipation or version of "vitalist materialism" in later Enlightenment thinkers addressing biology, like Buffon or Diderot.

³⁵ Cf. Mansikka (2007).

³⁶ Hannak (2008, 65) says, regarding Dippel's philosophy of nature: life takes over "... präzise alle Eigenschaften, die in theologischem Kontext Gott bzw. dem göttlichen Wort zugesprochen werden. Mit dieser Definition des Lebens naturalisiert Dippel nicht nur das hermetisch-spiritualistische Bild der Creatio continua aus einem ewig überfließenden göttlichen Geist, er spiritualisiert auch die im Cartesianismus abgetrennt und tot gedachte Materie zu einer holistisch gefassten Biologie im wörtlichen Sinne: Zum 'logos' vom 'bios', wobei das Leben direkt dem Schöpfungswort entströmt und wiederum auf dieses zurück verweist". Hannak argues that vitalist hermeticism constitutes the kernel in the Christian shell of Dippel's theology.

Simultaneously, the hermetic insistence on repeated processes of distillation and purification in alchemy, aiming to reach and reunite the principles of fire and light, could be seen as parallel to or even a part of two similar processes: the ongoing cleansing and self-denial manoeuvers in order to expel sin from the soul, and the purification and healing of the sick by means of mixtures and elixirs influencing body and soul alike.³⁷ Hermeticism, then, would directly connect to Dippel's tendency toward monism and to why he, despite much scornful criticism of Spinoza, remains fascinated by the Spinozist doctrine about God as disseminated within or even identical to the world.

How Dippel escaped from the debt-ridden glass hut, we do not know. But now Berlin was calling.

Alchemist in Berlin

In the fall of 1704, Dippel was invited to Berlin on the initiative of Count August von Wittgenstein who served as a minister under King Friedrich I of Prussia in the so-called Three-Count Cabinet of 1702–10, the "Three Ws", Wartenberg, Wartensleben, and Wittgenstein – in German pronounced like "Die drei Wehen", the three evils.³⁸ The limping King, with the nickname of "Crooked Fritz", not only invited many scholars to the city, but also many of the Huguenots who had escaped from France since the abolishment of the Edict of Nantes in 1685. Around

³⁷ The relation between Dippel's theology and medicine is currently being investigated by Rasmus H.C. Dreyer and Tine Reeh, among others, cf. Dreyer (in press) and Reeh & Hemmingsen (2023). 38 It is an interesting detail that Dippel also, in 1704, received two requests from even more radical pietists who had settled in Schwarzenau on Count Wittgenstein's home turf. Dippel, however, rejected them as dreamers subjected to dangerous illusions and compared them to the infamous Eva von Buttlar, who had added to radical pietism Boehmean ideas of androgynous arch-humans from before the Fall, chiliastic ideas that God was already now entering the flesh of radical pietists, making them free of sin, and who was rumored to have developed a libertine sect, with her followers practicing group sex and celebrating her as the "fiancé of the Holy Spirit". The correctness of such rumors is debated, but Dippel distanced himself from her in the Weg-Weiser (1705), approximately at the same time as legal procedures against the "Buttlarian gang" were initiated. She would go on to settle, under the name of Brachfeld, in Altona where she had the son "Messias" in 1713 before she died in 1721, so she was in the city simultaneously with Dippel. But Dippel seems to have realized that his growing public reputation might suffer if he became associated with everything developing under radical pietist headlines, cf. Voss (1970, 44). To Dippel, such even more radical pietists nurtured a superstition that they had already reached perfection, and he compares them to Gnostics – also, 30 years later in Berleburg, he distanced himself from the "inspirationists". The difference in doctrine seems to refer to whether perfection can be achieved in one swift revelation or whether it only appears as the result of a life-long struggle.

1700, almost a third of the inhabitants of Berlin were French-speaking Calvinists who also contributed to heightening the intellectual level of the city. In the year 1700, Friedrich was still only the Elector of Brandenburg when he founded the Prussian Academy of Science, with the philosopher Leibniz as its leader, also in order to support his declaration of Prussia as a kingdom and his own coronation as King of Prussia in Königsberg the next year. Fusing the imperial land of Brandenburg with Friedrich's extra-imperial Duchy of East Prussia into one state in 1701, he aspired to emerge as a new major power on the continent. Friedrich, in short, was busy striving to make Berlin a center of erudition and the capital of a kingdom.

His Comital minister August had known Dippel since 1701 and had become convinced about Dippel's alchemist talents. He would become a life-long benefactor and supporter who, time and time again, would interfere to save Dippel and help him escape emerging jams and conflicts.³⁹ August himself toyed with alchemy and had attempted distillations of human excrement, practiced by many to acquire phosphorous. Maybe he thought Dippel had larger talents. Now, Dippel was equipped with a lab in a city mansion in Berlin, which seems to have been at the peak of alchemist activities, much of it state-subventioned research. Here, alchemists of rather different degrees of seriousness and ambition worked, such as J.F. Boettger (who later contributed to the solution of the enigma of China porcelain in Saxony), Johann Kunckel, the colormaker J.J. Diesbach, the Italian Count Domenico Caetano, C.M. Spener – son of the pietist – Baron von Meder, and many others, until the "soldier King" Friedrich Wilhelm with other interests ascended the throne in 1713. In a certain sense, alchemy was the "big science" of the time – considerable state funding was invested in alchemists, many royal and noble houses threw themselves into the competition of being first with the expected scientific breakthrough, from the Emperor in Vienna to the Kings of Prussia and Denmark-Norway, the Electors of Bavaria and the Palatinate, and further on to numerous Counts, Barons, and lesser nobility, all of them hoping to emerge victorious from the scientific race for gold. If the victor proved able to keep the secret, eminent economic, political, and military power was awaiting.

³⁹ In the longer run, Dippel would have no less than two patrons from the noble Wittgenstein family, on two neighboring castles in the small old County of Wittgenstein to the northwest of Hesse. The family Sayn-Wittgenstein had split the small principality in two in 1506; Count August, Dippel's alchemist sponsor from the Berlin years and later, resided in the Schloß Wittgenstein outside of Laasphe, the residence of the line Sayn-Wittgenstein-Hohenstein, while Count Casimir, Dippel's pietist benefactor after his return to Germany in 1729, resided at the Schloß Berleburg, residence of the family branch Sayn-Wittgenstein-Berleburg and at the time famous as a haven for dissidents, separatists, and freethinkers. The two Wittgensteins seem to have favored Dippel for rather different reasons: August supported his alchemist research, while Casimir seconded him as a radical pietist.

The Berlin sojourn would prove to be Dippel's most successful period as an alchemist, and he seems to have understood that self-presentation was not irrelevant in this context. He was rumored to dress extravagantly and appear in the company of a black servant boy in a fantastic costume.

Again, however, he failed to repeat his success with gold, despite intense attempts involving his radical pietist friend, the wandering preacher Johann Georg Rosenbach, who moved in with him. But he actually did make substantial progress on the medical front. The first was "Dippel's Oil", oleum animale dippelii, a foulstinking liquid resulting from repeated, different distillations of matter from dead animals, such as horns, leather, hooves, blood, etc (Fig. 4a). Such a thing had often been produced before, but Dippel meticulously distilled the same matter again and again, with different additions of potash, burnt limestone, etc., gradually producing a light, transparent liquid consisting of hydrocarbons with a number of different organic nitrogen compounds, still emitting a disgusting stench. Probably, the smell would be interpreted as a sign of acute effect, for it did not prevent Dippel from having success in marketing it as the wished-for universal medicine and elixir of life, but also endowed with certain special effects, as a remedy against fever, epilepsy, typhus, and tapeworms. The product survived him and could be found in German pharmacies far into the twentieth century; yea, it can be purchased to this day with traders of alternative medicine but seems to remain relatively ineffective. 40

He also developed a wound balm which seems to have had better effect; here, you should use one pound freshly squeezed juice of the medical plants hedgenettle (*Stachys*), French parsley (*Anthriscus*), and wood sanicle (*Sanicula*). This extract is mixed with four pounds of wine vinegar and a pound of common salt, after which the blend is distilled over a water bath. The product was inspired by a recipe from an immigrant Huguenot doctor in Berlin and marketed under the name of "Tinctura Vulneraria". It was claimed to heal all wounds, even piercings directly

⁴⁰ You can still buy products under the name of Dippel's Oil on the market for alternative medicine, cf. https://www.remedia-homeopathy.com/shop/Oleum-animale-aethereum-Dippelii/a9023876. None less than Diderot, in vol. XVII of D'Alembert's and his large *Encyclopedia*, proved a skeptic as to the effects of Dippel's Oil (1778) and called for control experiments: "Huile animale de Dippelius ... destinée à l'usage interieur, est une huile empyreumatique animale, rectifiée par quarante ou cinquante destillations successives, et vantée comme un specifique éprouvé contre l'epilepsie. Si cette vertue est confirmée par des observations decisives, ces observations ne sont pas encore publiques" (quoted from Aynsley and Campbell 1962, 283, who also list the exact chemical ingredients of the drug).

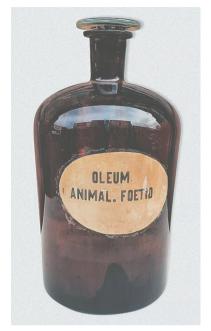
⁴¹ The recipe is reported in a letter from Dippel 27 July 1706 from Berlin to Baron von Geuder in Utrecht, Landesarchiv NRW Abteilung Westfalen, 6507, Msc. VII, Regierungsbezirk Arnsberg, Fürstentum Nassau-Siegen, 1705–1737; here quoted from Kraft (2019, 67–68), from where also the anecdote about the dog experiment. Kraft (2019) takes the history of Prussian or Berlin Blue as its main subject, but it also contains several new results about Dippel's life and career.

through the heart, if it could be applied there. When Dippel was paid a visit in Berlin by his radical pietist doctor colleague Johann Samuel Carl, he obtained a sample of the remedy, and in Halle Carl repeated, with a leading German doctor of the time, Friedrich Hoffmann, Dippel's macabre experiment to prove its efficiency. A dog had a nail hammered deeply into its brain and pulled out again, the balm was applied, and the dog survived and recovered. This prompted the top German doctor Georg Ernst Stahl to also repeat the experiment. Dippel also experimented with the remedy on patients seriously wounded and was able to report that the direct application on the wound proved more efficacious than giving the liquid to imbibe – but he kept recommending both.⁴²

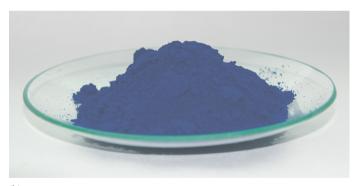
Dippel's third commercial success was "Hirschhorn", hartshorne, which was produced by the distillation of antlers or blood of deer, consisting of ammonium carbonate and some other ammonium compounds, emitting an intense smell of salmiac. It had been produced before and was a commercial success by the addition of fragrant perfumes in the function as a smelling salt which, fast and shock-like, could arouse consciousness in fainting people. It was a fashion among swooning ladies to keep ready a small capsule with smelling salt. Dippel's success with medical remedies gradually began to eclipse his real results in the art of gold-making, a struggle that he never gave up. His orientation toward practical medicine may also make more understandable his surprising skepticism with regard to the many new anatomical discoveries of the time. Dippel pragmatically claimed the results obtained by the dissection of animals and human corpses should immediately serve the treatment of diseases and saw the charting of anatomical structures as but the surface of deeper, physiological processes which remained the proper task of treatments to influence.⁴³

⁴² Dippel's letter to von Geuder 27 July 1706, Briefe an den Baron von Geuder i Landesarchiv NRW. See also Kraft (2023).

⁴³ There exists a much later printed sheet (c. 1730) listing six remedies recommended by Dippel to a friend, with detailed descriptions of which conditions they are supposed to improve. They are (1) Elixir polychrestum (against stone, podagra, spleen, piles, bleeding, menstruation pains, congestion of the flow of blood and other liquids, heartburn, fevers, kid's smallpox, coughing, -15-20 drops to be taken in 3-4 spoonfuls of wine), (2) Tinctura balsamica (a stimulant, for old people, for encouragement and driving out stuff in all diseases, an antidote against poisons), (3) Elixir balsamicum (against the inner damage of lungs, liver, kidneys, against bowel diseases, colic, wind, pains, female problems in childbirth, problems of mothers, infertility, cold fevers), (4) Sapo chymicus (painkiller, against pains in limbs, dissolves old tumors, against cold limbs), (5) Tinctura vulneraria (cures all wounds not serious or lethal, is given to drink and applied directly in the wound, also against obdurate cold fevers), and (6) Oleum antiepilepticum (against epilepsy, used along with Elixir polychrestum). Dippel developed quite a taxonomy of diseases and their cures (Christian Democritus c. 1730). In his Berlin period, Dippel also seems to have produced a "vera auri solutio", a true gold solution, also known as "aurum potabile", drinkable gold, or "essentia dulcis", a sweet essence (cf. Petersen 1893, 75), a product sought by many adepts and rumored to have strong healing effects on many diseases.



(a)



(b)

Figure 4a and 4b: Dippel's most famous medical result bears his name: Dippel's Oil. He produced the clear, foul-smelling oil by repeated distillations of dead animals. For many years, the oil appeared among the standard inventory of European pharmacies and was regarded a universal medicine, but with special effect against fever and epilepsy. The pharmacy flask with Dippel's Oil here is German, from around 1930. The Oil is still marketed by certain producers and may be bought with traders of alternative medicine. Berlin Blue - or Prussian Blue - was discovered by accident in Dippel's Berlin lab in 1706 and would soon be used as a pigment and a dye with commercial success. In the first decades, the recipe remained secret, and we have reason to believe that Dippel, during his time in the Netherlands, lived from manufacturing various medical produce as well as Prussian Blue.

Dippel's fourth success was the famous pigment Berlinerblau - Prussian Blue - which saw daylight for the first time in Dippel's lab in 1706 and swiftly became a commercial success as a substitute for the far more expensive ultramarine, both as a pigment in paintings and for the dyeing of textiles (Fig. 4b). Ultramarine ("beyond the sea") was a rare import from lapis lazuli-mines in present-day Afghanistan, and with Berlin Blue, a competitor emerged that could be produced locally by chemical means. It was the first artificial coloring agent and remained a profitable industrial secret until 1724, when the process was leaked to the Royal Society in London, after which prices plummeted.

The pigment seems to owe its discovery to a series of coincidences in Dippel's Berlin lab, where several other alchemists had access to work, among them being "the young Rösser" and the colormaker Johann Jakob Diesbach. In Dippel's production of hartshorne, he used a mixture of dried oxen blood and potash (potassium carbonate) which was glowed until a gas escaped to be caught by a cooling pipe and condensed to the wished-for "volatile salt". Dippel interpreted this event as the soul which was set free, while the remaining slag was but a "caput mortuum", a useless skull bereaved of soul. This slag, however, was diluted by Rösser, whereafter he reduced the result to obtain a white powder which he interpreted as common potash. He saved it in a jar, labeling it as such, "sal tartari". What he did not know was that the powder contained a considerable amount of potassium cyanide from the protein-heavy ox blood. When now Diesbach appeared in the lab, intending to follow the standard procedure for producing the red pigment "Florentine lake", on the base of dried cochenille-lice powder imported from the Canarian Islands, boiled with alum and vitriol, he began using Rösser's potash, little knowing that it was impure. He was surprised to see that, instead of red, the precipitation produced sediment of a beautiful, clear, and insolvable blue compound, both dense and transparent. He quickly realized its potential and began producing and selling the pigment to Berlin painters behind Dippel's back. But when Rösser's contaminated potash was spent, and Diesbach turned to normal potash, the blue result failed to materialize. He had to turn to Dippel who realized what had happened, reconstructing the procedure which now became ready for exploitation.

Shortly thereafter, production became industrialized and became an immense commercial success, in the hands of Diesbach and the enterprising philosopher of nature and language J.L. Frisch – but by then, Dippel had already been forced to flee the city for other reasons. Frisch and Diesbach effectively had a monopoly on the product and were able to sell it at 30 thaler per pound. Their systematic production was skillfully marketed and must have exceeded, by far, what Dippel himself was subsequently able to produce on his own in the Netherlands and Altona. After Dippel's banishment to Bornholm in 1719, the two were the only producers on the

market until an emerging German competitor was able to reconstruct the procedure and submit it for publication with the Royal Society in London, Hereafter, prices naturally dropped by around 80%. 44 On the basis of this industrial adventure, many assumed that Frisch was the discoverer of the pigment; only in 1731, the famous doctor Stahl made it known that Diesbach and Dippel had been the real discoverers. Dippel and others after him understood the process in terms of a certain "colored substance" inherent in ox blood, which was then transformed and isolated through a series of steps. The more precise chemistry behind the process long remained an enigma, and only much later it became clear that Berlin Blue was a mixture of iron cyanides stemming from the large concentration of protein containing nitrogen in the ox blood. Only recently, the double error in Dippel's Berlin lab has been reconstructed. 45 Dippel, of course, never managed to produce gold in Berlin, but you may conclude that the King's investment in him and his lab proved profitable in other, unforeseen ways. Prussian Blue became a strong commercial item for local industry and Dippel Oil grew to a stable standard article in German pharmacology for many generations.

As mentioned, Dippel was far from the only alchemist active in Berlin at the time; among others, there was the Italian Domenico Caetano, the self-declared "Count of Ruggiero", working as a gold-maker from 1705. Caetano had obtained large advances for expected results, and Dippel came to witness – as a sort of peer reviewer invited by the Prussian King – an experiment in which Caetano actually, according to Dippel, succeeded in producing silver from quicksilver. ⁴⁶ Dippel has given a detailed account of the event, one of the few successful transmutations he

⁴⁴ Cf. Kraft (2019, ch. 2.20).

⁴⁵ This is possible on the basis of Senckenberg's diaries (vol. II, 406), cf. Kraft (2019, chs. 1.13–16), which this section resumes; cf. also Roth (2021). Prussian Blue consists of different iron cyanides after the formula $XFe^{III}[Fe^{II}(CN)_6]$, in which different metals or metalloid compounds may assume the X spot, typically potassium (K), but also sodium (Na) or ammonium (NH₄). The blue color is due to the fact that the compound absorbs red light, triggering an ongoing exchange of electrons between the two iron ions with different valencies, Fe^{III} and Fe^{II} . Kraft (2019) tracks the detailed chemical history of Prussian Blue, also with subsequent developments in the chemical industry.

⁴⁶ Dippel describes the visit to Caetano in Christianus Democritus (1733, 47f), see also Bender (1882, 86). In his (1733), Dippel looks back on his meetings with and knowledge about many other alchemists, such as his encounter with the legendary traveling Greek Archemandrit Lascaris whom Dippel – as against most other claimed alchemists – appreciated. Formal peer review was first introduced by the Royal Society of Edinburgh in 1731; in Denmark with the founding of the Royal Academy of Science and Letters in 1742, but already in 1705, the Prussian King several times utilized Dippel as peer reviewer of Caetano. It is obvious that the large royal investments in gold-making would have been a driving force behind the interest in making experienced chemists judge occurring claims, experiments, and results.

admitted. Dippel colorfully describes the meeting with Caetano. Dippel and his companions were taken into a room where three to four dozen of loaded guns were displayed on the walls. The Count himself quivered and trembled and behaved as little as a nobleman as a traveling Savoyard with his curiosity cabinet and his marmot, as Dippel says. As a barking impresario, he immediately spread a series of letters and recommendations on a table, documents from Emperor Leopold and his consort, the Elector of Bavaria, and other princes which he kept in a gold case. Patiently, they awaited the end of this charlatanry, and only an excessively flattering compliment from Dippel finally persuaded the Count to conduct an experiment. He sent for seven pounds of quicksilver and proceeded as follows:

This quicksilver he poured into a medium-size glass flask which he placed in the sand room of an oven which he kept ready under the fireplace. When the gius was hot, he discreetly brought forward his two tinctures, that for ∋ as well as that for ⊙, the one for ∋ looked like a light-glistening salt, rather powderized, but also shimmering in a reddish, meatlike color, and must have weighed all in all one kvintlein [c. 3 gram]; that for ⊙ was a rather pale red powder, very little, hardly weighing a skrupel [a bit more than one gram]. As the grius began smoking, he took one *gran* of the white tincture and said, in order to excuse himself, that both tinctures were of the same power and that he for that reason chose the white tincture for the test, because he, as we saw, had more of that than of the red one. As this gran, or a sixtieth part of a kvintlein, fell into the flask, then seething and fizzling began, as is usual by the tincturing of quicksilver, and as it ceased after some minutes, he grabbed around the neck of the flask with his pincers and let it fall and break on the oven plate, so that it displayed a cake of fine silver which had formed after the inner concave rounding of the flask and, on the underside, was somewhat blackened, no doubt from the sediment of Hungarian wine which was here burned to carbon and had formed itself on the outside of the \mathcal{I}^{47} (the alchemist symbols of \mathcal{O} , \mathcal{I} , and \mathcal{V} refer to gold, silver, and quicksilver, respectively).

The Count offered to subject the result to a further testing, but we knew well what color silver has and thanked him for his effort, Dippel concludes. Subsequently, however, he rejects that the recipe presented by the Count afterwards would be able to produce this effective tincture, and he declares in hindsight, almost 30 years later, that he is well satisfied with the subsequent execution of this charlatan and fool. So, Dippel was not impressed, but simultaneously he had to recognize the result of the transmutation anyway. But even if he approved of Caetano's experiment, Dippel held that Caetano was an impostor who had just received, bought, or stolen the decisive tincture giving rise to transmutation from some other and actually skillful alchemist, one he might even have murdered to obtain the powder.

⁴⁷ Christianus Democritus (1733, 49).

Caetano continued not long after by showing an experiment for the whole Prussian political leadership spearheaded by King Friedrich, the "three W's", and Crown Prince Friedrich Wilhelm who had been highly skeptical, scrutinizing the instruments closely and insisted on participating in the experiment himself. Here, Caetano succeeded in convincing the spectators that he first transmuted quicksilver into a pound of gold, then guicksilver into a pound of silver, to conclude by "tingering" half of a bar of copper into gold. Hereafter, he is reported to have handed the King 15 gran of the white and 4 gran of the red tincture, but as Dippel received from the King a sample of the red tincture for gold production for a test, he found no result. 48 Caetano seems to have made grandiose vows about gold production against substantial advances, but several times he fled Berlin when deadlines approached, and every time he was caught and sent back to the lab. Alchemists in state service were often treated more like state prisoners rather than free employees, and eventually, the King lost patience with Caetano and had him imprisoned in the fortress of Küstrin with a sharp deadline. Finally, he had him executed there in August 1709 (cf. below) – so maybe it was Dippel's luck that he had to flee, for completely different reasons, already in the spring of 1707.

Despite his intense lab work, Dippel's authorship did not die away while in Berlin, nor did his pietism. Already shortly after his arrival to the city, he was invited to meet with his old inspirator, Spener himself. Dippel's later account of their conversations portrays Spener as surprisingly well-intentioned toward Dippel's work. Spener referred to his own timidity as the only reason why he did not himself act so incisively in public as did Dippel. 49 Dippel also did not cease publishing but put out the second volume of his enormous Weg-Weiser Zum verlohrnen Licht und

⁴⁸ Anonymous (1861, 342). Caetano was rumored to use tricks like hollow spoons for stirring in whose interior gold or silver lay ready encapsulated in wax which would melt in the hot quicksilver and thus secretly add the noble metals to the experiment. Other tricks might comprise using prepared quicksilver, already amalgamated with silver or gold which could then be extracted through the experiment, or importing the noble metal in the tincture itself which might be gold chloride, AuCl₃ (cf. Kraft 2019, ch. I.11.2). Such fraud, of course, would be able to "produce" small amounts of gold or silver only, but the alchemist would then maintain that he was yet in a preparatory phase and would soon be able to transmute larger amounts.

⁴⁹ Dippel, through Spener's alchemist son, was invited to visit the old and sick Spener only months before he died in Berlin. Much later, around 1730, he several times refers to Spener's support at this 1704 meeting in order to counterargue moderate pietists playing out Spener against himself in attacks on his Vera demonstratio, cf. his 1731 defense against the attacks from Erdmann Neumeister and Joachim Lange (Eröff II, 1092ff), and his 1732 response to Christophilus Wohlgemüth (Eröff III, 29f). Dippel had dreamt that the latter pen name would refer to the Tübingen theology professor Eberhardt Weißmann who publicly had to deny it; in reality, the author was J.U. Schwentzel.

Recht in 1705 ("Road map to the lost light and right") in a polemic against the moderate Hallensian pietist Johann Michaëlis's Licht und Recht from 1704. The second volume contains Dippel's sketch of a philosophy of nature to serve as the foundation of the practice of medicine. 50 Nature, to Dippel, is a battlefield between the fallen, material world and the divine fire power, the Paracelsian *Archeus*, which still streams through matter. It is matter, in its many different gestalts, which is the cause of all diseases, while the force is what the awakened doctor must base his cures upon when he, among material objects, selects certain of them which may direct the force to impinge on certain others. Diseases, in general, are errors in the large cycle of nature emerging from God and terminating again in God. Thus, Dippel's conception of nature remains firmly theological – but the material, fallen side of nature makes it, on the other hand, open to scientific investigation and medical intervention. Yet, anatomy with its focus upon visible nature, materialism, and mathematical investigation of nature goes astray, for it sees but the surface of things, not the invisible, deeper, effective, and divine force, Dippel holds. Thus, medicine and theology are intimately intertwined aspects of one and the same process: to Dippel, pietist conversion and medical cures both strive for reestablishing the power of the spirit over the body by restoring the eternal divine root of human creatures and reintegrating fallen matter in God.⁵¹

Such ideas give Dippel some interesting distinctions in his philosophy of science. Disciplines like economics, geometry, astronomy, arithmetic, statics, mechanics, optics, and the like are externally useful auxiliary disciplines, which must indeed be cultivated by many, but they remain necessarily superficial.⁵² Here, Dippel anticipates the schools in the philosophy of science wanting to reduce much of science to mere technical utility. The medical doctor, by contrast, cannot be satisfied with reason only, and he cannot act without prayer and supervision from the "divine light" which has all the honor of the potential healing of a patient. It is the animal life force itself, ultimately emanating from the deity, which the doctor must seek to influence. Doctors who do not realize this will degenerate to mere "prescription writers". The sciences of judgment, such as medical science, physiognomy, astrology, and chiromantics, by contrast, teach us that the single individual soul is unique and not accessible to universal abstractions, a fact that the doctor must take into account in his treatment. With his distinction between external, universal, and useful sciences versus deep, particular, and interpretive sci-

⁵⁰ There are few analyses of Dippel's philosophy of nature; most thorough is probably Hannak (2013, ch. 6.5).

⁵¹ The close relation between theology and medical cures in Dippel's "pietist medicine", cf. Dreyer (in press).

⁵² These issues, cf. vol. II of Wegweiser, Eröff II, 1747, 988ff. See also Kraft (2023, 141f).

ences, Dippel approaches an early version of the neo-Kantian distinction between nomothetic and idiographic knowledge; here on a theological basis. True Chymie also belongs to the latter, deep category of sciences, for it strives to acknowledge and reconstitute the divine, unified gestalt of light and fire which presently lies separated and concealed within dark, fallen matter. For this reason also, the alchemist tripartition between the three elements of salt, sulphur, and quicksilver must be given up, for there are at least four or six chemical principles, and all of them, in turn, are derivatives of the two elementary forces, light and fire. The noble and real art of chemistry is basically occupied with nothing but "drawing out the pure Gestalt of fire and light, from the curse of the dark and falsely degenerated Gestalts of fire and light, namely the dark soil and the grim matrix and bad-tasting water, or light turned stupid, and elevate them to permanence in fire". 53 In the few hints we have of Dippel's more specific alchemist procedures, he would often cast the processes in terms of his light-and-fire metaphysics.

All in all, Dippel bases himself, despite his strong efforts in empirical investigations, within the framework of an almost gnostic view of nature, with the foundation in his spiritualist theology.

In early 1706, he published one of his most popular achievements, the booklet Ein Hirt und eine Heerde ("A Shepherd and a Flock", cf. below), calling for full freedom of faith and of expression, and for the prince not to prefer certain sects among his people to others – this was Dippel's theology transformed to a proposal for a practical policy of religion which he might have hoped would inspire the Prussian King for whom he was working.

Not so. Now, Dippel got enmeshed in one of his recurring theological fights, this time with the Superintendent – the Bishop – of Greifswald in Swedish Pomerania, J.F. Mayer, addressing Lutheran Sweden's persecution and banishment of pietists, also in its North German provinces. Mayer was agitating his congregations to take action against local pietists, and his campaigns had already succeeded in organizing persecutions of pietists in Hamburg where he held a position before coming to Pomerania.⁵⁴ But Dippel's attack on Mayer proved to put him in serious trouble. Mayer met with his Swedish superior King Karl XII who had occupied Saxony and stood with his army outside of Leipzig to the south of Prussia, and he urged the

^{53 &}quot;Diese kurtze und gründliche Anatomie dem gantzen Systematis, oder Gebäues der äussern Natur, zeiget uns nun überhaupt in einem Anblick den gantzen Grund der wahrafftigen Chymie, welche edle und richtige Kunst allein damit beschäftiget ist, daß die reine Feuer- und Lichts-Gestalt, aus dem Fluch der finstern, und falschen degenerirten Feuer- und Lichts-Gestalt, nemlich der finsteren Erde und grimmigen Matrice und dem ungeschmacken Wasser, oder dumm gewordenen Licht, heraus gezogen und zur Beständigkeit im Feuer erhöhet werde", Eröff I, 1012. 54 Cf. Voss (1970, 46f).

warrior King to put pressure on King Friedrich in Berlin through his envoys there. So. Dippel was arrested on 7 February 1707, and when he escaped from prison a week later, thanks to the swift intervention of Count August, he had to flee the city because of new accusations against him, based on letters with harsh attacks against the Prussian court found in his home. According to rumors, he left on horseback, disguised in a Swedish uniform so that he could pass through Swedish-occupied Saxony in the direction of his native Hesse, bringing with him a small, wicked polemic against the Prussian King - more on these Berlin writings below. On his escape route from Berlin, he would seek shelter with fellow pietists like Count Heinrich XXIV in Köstritz. When he passed Jena on his way to Frankfurt, people are said to have taken him to be the tall Swedish King Karl XII.

Already on 1 March, Dippel was appointed Royal Danish Chancellery Councilor in Altona, after nomination by the ambitious Count Reventlow who had himself recently been appointed General and who had also protested the incarceration of Dippel in February. The fateful friendship between the two may have been inaugurated during one of Reventlow's many diplomatic missions for the Danish King on the continent, and the best guess is they met at the Prussian court in Berlin. The argument behind the royal title probably had to do with Dippel's reputation as a gold-maker, a project with which we know the Danish King Frederik IV was also obsessed at the time, but it could also be motivated in Dippel's strife with Swedish authorities in the North of Germany which indicated that he might serve as a tool for Denmark-Norway in the ongoing Northern War (1700–21). Such issues are not mentioned, however, in the general standard appointment letter regarding Dippel's title, emphasizing that Dippel now becomes a subject of the Danish sovereign and thus obliged to put his knowledge, intellect, and loyalty at the service of him and his realm. 55 With this appointment, Dippel moved to Danish Altona in the course of 1707.

⁵⁵ The appointment text surprisingly exists (RA: Tyske Kancelli, Indenrigske Afdeling, Patenten 1707, 42-44), and is aimed at "Christian Dippel", a compromise between Dippel's name and his pseudonym. It is a worn piece of paper, which has been folded twice to form a letter and has later been inserted into the protocol booklet. The outside reads: "Copenhagen, 1st of March 1707. Appointment. For Christian Dippel in Altona as Chancellery Councilor". In the appointment text itself, somebody has attempted to erase Dippel's name. The document could hardly be identical to the certificate that Dippel was forced to hand over when his title was canceled in 1719 and which the Copenhagen administration reported had been burned in October that year; it is rather the original draft that has been passed on to a scribe in Copenhagen or Altona in 1707. In all cases, the document deviates from the other documents of the protocol which is a booklet with copies continuously added in writing, into which the appointment letter has been inserted later. So, somebody has taken care to preserve the document and archived it. The document thus bears witness to an unknown tension regarding Dippel internally in the German Chancellery in

Why Dippel not only accepted the offer of a royal title, but also to settle in the city, should probably be seen in the context of his situation. He was wanted in Prussia, but the fact that he might also be in danger in other German states was suggested by the intricate destiny of his Berlin alchemist colleague Caetano. In March 1706, he had escaped from his gold-making appointment with the Prussian King, but in May he had been arrested in Hamburg by a militia operating outside of Prussian territory and brought back to Berlin. So, Dippel might also be in danger, as long as he was within reach of the Prussian King. Altona, it is true, was close to Hamburg and also part of the Holy Roman Empire, but with a royal Danish title, Dippel would be untouchable there. Another motivation may have been that while back in Frankfurt and his native Hesse after his swift escape in the spring of 1707, he was met with demands for payments of an old debt, maybe for the glass hut, which may have made it less attractive for him to stay there. So

We do not know exactly when Dippel arrived in Altona in 1707, probably during summer, but in any case he only stayed there for a short period. In the archives of the German Chancellery in Copenhagen there is a supplication from Dippel from the fall of 1707, asking King Frederik IV to grant him three conditions to settle more permanently in Altona: 1) he demands full freedom of religion and protection against being "molested"; 2) the right to practice alchemy without being forced neither directly nor indirectly, as well as full right to leave the territory; 3) freedom to publish a defense against what had happened to him in Berlin. These demands are granted to him by the Danish King in a letter of 15 October 1707, yet with considerable restrictions as to the third claim: he must express himself with full respect for the Prussian King and his officials and keep strictly to what historically happened.⁵⁸ The result of these publication plans may have been Dippel's poem Berlinische Arrest-Gedanken. Berlin Prison Thoughts, which came out the same year; we do not know when or where. Dippel's demand regarding alchemy is probably based on his knowledge about conditions in Berlin where Caetano, as mentioned, was squeezed by the King with deadlines for goldmaking. Already the year before, he had attempted escape and was now in reality kept prisoner with the King impatiently awaiting results from his laboratory. So, Dippel wishes to be secure against such conditions in Altona, a wish the Danish

Copenhagen: somebody has preserved the document, while somebody else has attempted to make invisible to whom it was addressed. Hojer 1829 (1732), 209, claims that Dippel's appointment only took place in October 1707.

⁵⁶ On Caetano's various escape attempts, cf. anonymous (1790).

⁵⁷ Cf. Kraft (2019, 98).

⁵⁸ The supplication with the King's reply is in RA: Tyske Kancelli, Indenrigske Afdeling, Patenten (1707, 193–94).

King admits him. This demand thus also seems to refer to some degree of existing understanding about Dippel's future alchemist activities in Altona, an appointment regarding which Dippel is now demanding guarantees, so that it would not become too restrictive. Conditions on the ground in Altona, however, do not seem to have been pleasant; the protection against being "molested" seems to refer to the fact that the pietist and his servants were suffering persecution in the city.⁵⁹

In all cases, Dippel did not remain in the Danish realm but preferred the Netherlands. At the time, the Netherlands and cities like Amsterdam, Rotterdam, and the Hague were known for their relatively wide degree of freedom from which many controversial intellectuals had profited already in the seventeenth century, such as Descartes, Pierre Bayle, and John Locke. Since then, its reputation as a center of freethinking and a publication hub had only grown. It seems probable this would have been a contributing motivation for a Dippel on the run to settle in Amsterdam, to which he arrived already before the turn of the year 1707-08.

Doctor in the Netherlands

So, Dippel's tumultuous year of 1707 took him from Berlin via Frankfurt to Altona, and toward the end of the year he left for the Dutch republic where he would stay the next seven years until 1714. It is one of the lesser-known phases of his life. 60 Initially, he lived incognito with a doctor in Amsterdam and stayed most of the time until 1710 in the city where he continued with alchemy, medicine, and publications. Maybe a rich local merchant by the name of Christian Meschmann offered

⁵⁹ Cf. Rustmeier (1957, 92). Here, a no longer existing document from the Altona city archives is quoted, according to which Frederik IV should, in 1707, have intervened and, referring to the freedom of belief for sectarians in Altona had granted Dippel's security, also with reference to the fact that Dippel and his domestics had been assaulted in his Altona home by the common mob. We know nothing about who would have agitated which people in Altona to harass him and his servants, but the fact that Dippel, in his own supplication, mentioned the grant against molesting in connection to freedom of faith suggests that he was persecuted in Altona for religious reasons. In any case, it probably gives an idea of why Dippel did not, this time around, find it attractive to stay in the city.

⁶⁰ Parts of the information about Dippel in the Netherlands stem from letters to his friend, the pietist Baron von Geuder in Utrecht. Kraft (2019) (2.4; 2.10; 2.12; 2.13) presents an account on which the biographical information in this section is based. Cf. Briefe an den baron von Geuder, genannt Rabensteiner, Landesarchiv NRW Abteilung Westfalen, 6507m Msc. VII, Briefe von Johann Conrad Dippel (1706-15).

financial support to his alchemist activities. 61 In October that year, he moved to the small town of Warmond on the outskirts of Leiden in order to enroll in the medical faculty at the famous university there. After his doctorate in April 1711, he returned to Amsterdam and then, around 1712, he settled in Maarssen, close to Utrecht, where he bought the stately mansion of Vredenhoef which still exists. He enjoyed increasing success as a doctor and was able to continue the production of remedies and also of Prussian Blue. 62 The oldest known painting in which Berlin Blue is used as a pigment is the Dutch painter Pieter van der Werff's Entombment of Christ of 1709, painted in Rotterdam, and it is probable that he bought his powder from Dippel in Amsterdam (Fig. 5).⁶³

In Amsterdam he published, among other things, his major philosophical work Fatum Fatuum (Foolish Necessity) in 1708, a large diatribe against determinism in Early Enlightenment thinkers like Hobbes, Descartes, and in particular Spinoza, whose atheism is directly singled out by the subtitle as the ultimate consequence of attacking free will:

Obvious Proof that all who dispute, in theology and ethics, the freedom of the will of the reasonable creature, are led to, by evident consequences, to cancel freedom in the nature of God himself or decide for Spinoza's atheism. Whereby also the secrets of the Cartesian philosophy are discovered, and it is demonstrated how absurdly this trickery rejects itself, and which damages are thereby caused in society.⁶⁴

The book was probably triggered by Dippel's new residence, for as he says, this new atheist philosophy thrives nowhere as strongly as in Amsterdam. The materialism of Hobbes – this crooked snake from England with his devil's mask, as Dippel vividly paints him – is briefly presented as the premise of the whole movement. To Dippel, the problem is that the mathematical laws of movements in Hobbes include even God himself who for that reason becomes incapable of taking initiative. Dippel held, as indicated, that God possesses a material, passive side, without which he

⁶¹ Cf. Hojer (1829, vol. II, 209), speaking about 20,000 Guilders.

⁶² Cf. Kraft (2023, 147).

⁶³ Cf. Bartoli (2008); already around the same time, Berlin Blue from von Frisch's production was used by painters around the Prussian Court from where the earliest surviving examples date

^{64 &}quot;Fatum Fatuum, das ist Die thörige Nothwendigkeit/ oder Augenscheinlicher Beweiß/ Daß alle/ die in der Gotts-Gelehrtheit/ und Sitten-Lehre der vernünfftigen Creatur die Freyheit des Willens disputiren/ durch offenbahre Folgen gehalten sind/ die Freyheit in dem Wesen GOttes selbst aufzuheben/ oder des Spinosæ Atheismum fest zu setzen// Wobey zugleich die Geheimnüsse der Cartesianischen Philosophie entdecket/ und angewiesen/ wie absurd diese Gauckeley sich selbst vernichtige/ und was für Schaden dardurch im gemeinen Wesen gestifftet worden" (Eröff I, 1115). The year after, a Dutch version appeared.



Figure 5: The first known painting using Berlin or Prussian Blue as a pigment is by the Dutch painter Pieter van der Werff in his rendering of the *Entombment of Christ* from 1709. It is a biblical standard scene with Nicodemus, the holy Virgin, and Mary Magdalene, which had earlier been depicted by Michelangelo, Titian, and Caravaggio, among others. In van der Werff's version, the new blue color plays a central role, and the spectacular blue robe of Mary the Virgin connects her to the heavenly blue of the background. The painting was made in Rotterdam, and it is probable that van der Werff bought his blue pigment from Dippel in Amsterdam.

could not create material things or interact with them, and Hobbes and himself refer to some of the same church fathers, but Dippel did not find that the materiality of God would obey laws of mechanical movement. Descartes, then, is analyzed as a further attempt at improving what is wanting in Hobbes – the two had met and debated in Paris. Descartes realizes that pure materialism could not account for spirit or thought which is why he introduces his famous dualism of extended versus thinking substances. If that idea is followed all the way through, then ani-

mals and plants will be philosophers, Dippel poignantly argues, and it is in order to escape such a consequence that Descartes must make machines out of animals. In this, Dippel refuses to follow him – to him, animals have feelings, reason, and logic, and even to some degree freedom.⁶⁵

Spinoza, then, becomes the third step, combining the two by fusing Hobbes' laws of movement with Descartes' thinking substance into one overarching machine. All things now become local modifications of a determinist universe which has both a material and a spiritual aspect and which is one and the same thing as God. Even if all three of them are "stupid fools", and Dippel piles pejoratives upon Spinoza, he clearly remains most obsessed with Spinoza's system which he recognizes does solve some of the problems in the two other determinists and on which he spends his most thorough analysis (Fig. 6). 66 The problem, again, is the status of God. He is now both spiritual and material, which certainly appeals to Dippel, but he is also one and the same thing as the whole of the universe, and creation ceases to have happened at a certain point in time and is now continuously ongoing, never to cease. But what annoys Dippel the most is that all sorts of error and evil in the world would now immediately become parts or modifications of God himself. Dippel misses some sort of alleviation of Spinoza's tightpacked universe, so it becomes less solid: he would like to build into it the possibility of a Fall and of human freedom, so that God could not be made responsible for errors committed by human beings.

⁶⁵ Dippel is not completely clear here: sometimes he makes freedom that which distinguishes humans from animals; human beings may freely choose to direct their desire toward the material world or toward God (Fatum fatuum, Eröff II, 1747, 75), other times all creatures possess some degree of freedom (Des thierischen Lebens, Eröff II, 1747, 186), even if animals are more well-fitted to their life and in that sense more reasonable. On the other hand, this degree of similarity between humans and animals implies that sexuality is deprived of sin. Animals are not sinful, and as sex belongs to the animal life of humans, it cannot be sinful. Sin, by contrast, is the self-chosen turning away from God, toward oneself and this world (Fatum fatuum, Eröff II, 1747, 13). 66 Lessing thus found, much later, that Dippel was the author with the deepest understanding of Spinoza. Lessing's friend Klose said: "Imgleichen wurde Spinozas Philosophie der Gegenstand seiner Untersuchungen. Er las diejenigen, welche ihn hatten widerlegen wollen, worunter Bayle nach seinem Urtheil derjenige war, welcher ihn am Wenigsten verstanden hatte. Dippel war ihm der, welcher in des Spinoza wahren Sinn am Tiefsten eingedrungen" (quoted from Hoops 1891, XVIII,14). Some later authors echo Lessing's assessment, such as Bell (1984): "despite his implacable hostility, he seems to have grasped the structure of his system better than many of his contemporaries" (10), even summarizing his metaphysics "with every appearance of accuracy" (172), while he still finds that Dippel's real understanding remains of "limited accuracy" (11); others are less generous, such as Freudenthal (1895) claiming that Dippel was a "harebrained" person simply misinterpreting Spinoza (51), or Schroeder (1987) judging that Dippel should simply be left out of the history of Spinoza receptions (21).

Another interesting thing is that Dippel realizes how the hypothesis that existing religions are mere results of deliberate deceit may result from Spinoza's doctrine. Spinoza's pantheist – or atheist – vision of God as equal to the universe makes all existing theologies false and this falsity now would be a result of selfish actors operating in this world. It is powerful persons, clerics, and regents of different sorts who have cynically invented religious doctrines as strong political tools of governance, fooling ordinary people. It sounds as if Dippel knew about the infamous, clandestine "Treatise on the three Impostors" which circulated in the Netherlands during these years, and which claimed exactly that the implication of Spinozism would be that Moses, Jesus, and Muhammad were nothing but political fraudsters.⁶⁷ In any case, Dippel mentions the impostor hypothesis only in order to refute it – but we shall later find how he approaches it after his Danish experiences in 1719. Finally, Dippel addresses the French philosopher Malebranche who is interpreted as an attempt to improve on Spinoza by pulling again God a bit out of the material world which regains a certain autonomy. Yet, every minimal event still requires the intervening activity of God – Malebranche's famous "occasionalism". Again, Dippel ironizes: if I drink a glass of wine, God must act in my act of drinking as well in that modification of matter which decides the taste of the wine.

On the positive side, Dippel spent the first part of the book on his theological argument that God must possess free will, appearing in his voluntary acts of creation in which he creates, among other things, free creatures in possession of free will. Toward the end of the book, Dippel adds the political argument that a wellordered civil society would dissolve under a determinist doctrine: if people cannot voluntarily accept to take responsibilities, appear as parties of deals, contracts, and other relations of trust, then ordered societies will break up, and people without inhibitions will follow their every whim or desire. Atheists are described as animals who just want a doctrine to legitimize their obeying any impulse. It is a bit funny to find the radical Dippel here as a Hobbesian defender of regents and legislations of civil societies in order to prevent the wicked from flying at each other's throats as well as keeping them from assaulting the good. He does not address, however, Spinoza's ideas of freedom nor of the possible amendments of reasoning. We shall return to Dippel's unfinished business with Spinoza.

Dippel maintains that neither humans nor God can be understood without free will, and if you reject human free will, God's freedom would be next. By contrast, Dippel thinks that the increasing mathematical understanding of nature ad-

⁶⁷ Early versions of the treatise of the three impostors are believed to have originated in Spinozist circles in the 1680s; oftentimes, manuscripts of the treatise were titled "l'Esprit de Monsieur Benoît de Spinoza". Most often, it circulated in handwritings; the first known dated version is from 1709; the first printed version is from the Hague, 1719. Cf. Berti et al. (ed.) 1996.

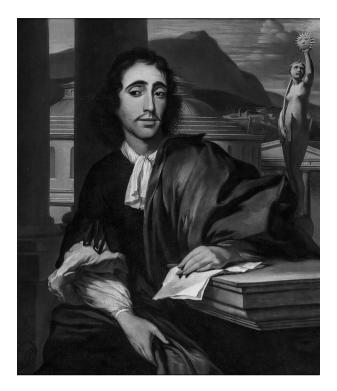


Figure 6: It was hardly an accident that it was during his stay in Amsterdam that Dippel felt the need to launch his great attack on determinism in early Enlightenment under the title of *Fatum Fatuum* – foolish necessity. Amsterdam was, as he said, a main seat for the new determinist materialism, and none was so harshly attacked in his book as the famous and infamous son of Amsterdam Baruch de Spinoza of the generation before. His name was already a feared pejorative for atheism, hereticism, and democracy, and Dippel became his first German critic. Simultaneously, however, none of the other determinists challenged and occupied Dippel himself to the same degree as did Spinoza. Barend Graat's *Portrait of a Man in Front of a Sculpture* (1766) is believed to depict Spinoza.

dresses the surface of things only. Of course, this is in a certain sense correct, but to Dippel this implies a severe shortcoming in the nascent natural sciences, and he demands a deeper insight into the essence of things which may be achieved by reason, investigation, as well as by pietist-hermetic spiritual rebirth. His broad notion of experience thus unites a spiritualist emphasis on revelation as experience with a scientific emphasis on experience as rational reflections on empirical investigations. The result is a curious combination of empiricism and spiritual metaphysics – which may find concrete example in his own alchemist investigations. Contrarily, his skepticism against the purely theoretical systems of existing

scholarly institutions, based on theological and philosophical tradition, is palpable – he compares the academic dependence on Aristotle with the belief in the Easter bunny.⁶⁸

Dippel was now so famous that it was possible for him to publish, in Amsterdam in 1709, a no less than 1,200 pages compilation of all his writings up to now, titled Eröffneter Weg zum Frieden mit Gott und alle Creaturen – The Road Opened to Peace with God and all Creatures – featuring exactly Fatum Fatuum as its crowning achievement. Not bad for a 35-year-old. The book would grow to three enormous chronological volumes with its republication in 1747 after his death, now exceeding 3,000 pages.

Also in the Netherlands, Dippel had success with his remedies developed during his Berlin years, and it was probably this fact that gave him the idea to become a doctor, also in a more formal, academic sense. So, at the already then highlyregarded University of Leiden, he signed up at the medical faculty and defended, in 1711, a Latin dissertation titled Vitae animalis morbus et medicina – that is, "The Disease and Cure of Animal Life", including also the animal-spiritual aspect of human life. 69 Here, among many other things, he marshals his theory about Dippel's Oil as a universal remedy: 30-40 drops of it would calm fever as well as cramps and induce a sweet and wholesome sleep. It did smell terribly but had a pleasant taste, Dippel claimed, and this small part of his dissertation became the basis of the increasing fame of Dippel's Oil. The dissertation also continued his attack on the determinists, and it was soon translated into Dutch and German. The local medical faculty also provided an important sounding board; here, the famous doctor Herman Boerhaave was authoritative: he applied Cartesianism on medical science and presented strong arguments that the body is a purely material res extensa and should be medically treated as such. This was directly against Dippel's more vitalist or psychosomatic ideas of the individual as consisting of the body, spirit, and soul alike, where the invisible parts may often be medically more relevant than the visual parts. Boerhaave had planned a strong opposition at Dippel's doctoral defense, but after Dippel had explained to him his main points, Boerhaave withdrew, and Dippel praises the great doctor for being unprejudiced, unarrogant, and open to change his viewpoint faced with evidence - and that Dippel himself contributed to leading him away from purely mathematical proofs in the direction

⁶⁸ The common rejection of mechanicism in the three doctors Dippel, Johann Samuel Carl, and Carl's teacher Georg Ernst Stahl, as well as the connections between the three of them, see Geyer-Kordesch (2010, chapter IV.3).

⁶⁹ The German translation appearing in 1713 speaks about "Animal-spiritual life" because Latin "animalis" means "animal" as well as "spiritual".

of chemical experiments in medicine. 70 But he also introduces the dissertation with a strong declaration of free, enlightened, and independent research. For why is he now doctoring in medicine instead of theology? Well,

... medicine has, along with the natural sciences supporting it, in our time almost solely the happy destiny among the learned that it and it alone opens the road to something better and higher for all who make experiences in it and speak without pretense and express their reports without danger, without binding themselves to the rules and words of anybody, and may make use of this freedom, decently as a righteous human and an industrious investigator of truth and a disciple of true wisdom. (Eröff II, 1747, 128)

This was also an indirect attack on the lack of similar freedom at the theological faculties. Dippel argues against a purely mechanical medicine and argues psychosomatically with cases from his own practice that patients be treated not only as bodies but as bodily-spiritual wholes, which may hence be influenced both by drugs, diets, and virtuous living. On the other hand, theology is painted as unfree, prejudiced, and forcing its practitioners to live in danger, binding themselves to given rules, becoming hypocrites and unfree disciples of false wisdom.

Unsurprisingly, he would soon continue his classic attacks on protestant orthodoxy, now turned against Dutch Calvinism presently surrounding him, in a small piece from the same year. In the shape of a dialogue, it assaulted both Calvin's predestination doctrine and his infamous burning of Michael Servetus as a heretic in Geneva.⁷¹ The booklet *Alea belli musulmanici* (The Muslim Wargame, also 1711) compared Christian and Muslim orthodoxy and claimed among other things that Islam, a strong force in south-eastern Europe, was superior to protestant orthodoxy and would be able to dampen its arrogance. Satan as a murderer had even greater influence in Lutheran orthodoxy than among the Turks who, by comparison, were more worthy than others to influence the governments of orthodoxy.⁷² Dippel refers to the Swedish King Karl XII's actual attempts to forge an alliance with the Turks which he interprets as an eschatological event. He observes the expression of anti-orthodox religious toleration on both sides which might terminate with completely eradicating orthodoxy on all of the European continent and so trigger the advent of the last times. As a citizen of the world, who has traveled through many countries, Dippel says, he sees two major political problems of the time: the empty orthodoxy in the churches and the excesses

⁷⁰ Senckenberg's diaries, vol. II, 358.

⁷¹ Published under the pseudonym "Kleinmann", titled Wahrhaffte Historie Von Johanne Calvino, Wie er mit MICHAEL SERVETO und andren verfahren – The True Story of John Calvin, How He treated Michael Servetus and Others (Eröff II, 489-510).

⁷² Voss (1970, 52).

and evil at the courts. But you cannot demand to get good publicity – so Dippel concludes his booklet addressing both parties, clerics and princes – if you act in a wicked manner and cheekily gag the mouths of people.

The pamphlet was republished in 1714; many argue that this provocation may have been responsible for Dippel's sudden exit from the Netherlands that year; another reason might be debt in his large Maarssen mansion, which he was unable to pay. 73 Dippel's high standards of virtue and piety may not always have included paying debts on time. He left Amsterdam in great haste on a ship destined for Hamburg, in all probability on 9 September 1714. Tt turned out to be a dramatic vovage caught up in a storm, where the captain long kept the vessel on the inside of the Dutch Wadden See islands, but as they entered open sea, the ship was wrecked, mast and sail broke off, and the wreck only reached Hamburg after three and a half days' fragile journey. Now it proved lucky that the Chancellery Councilor title from seven years earlier lay ready for use. With Dippel in Hamburg, contacts with Reventlow in the twin city were resumed, but we do not know when or how exactly that took place, presumably in late 1714 or early 1715.

So, this was the character now arriving in Danish Altona. A reborn pietist, pious and virtuous at least in his own estimation, and famous for his radical, challenging writings, targeting Lutheran and other churches. A no less famous alchemist who might not yet have found a stable way to gold, but who had discovered and marketed a handful of other remedies that had proven commercially attractive, and from which he seems to have had a sizeable income after Berlin. A doctor sought by an increasing stream of patients of whom many seemed satisfied with

⁷³ Still other reasons may be failed medical cures or lack of alchemist success. Cf. Buchner (1858, 278) and Kraft (2023, 149).

⁷⁴ In a letter dated 9 September (but without year) to his benefactor von Geuder in Utrecht, Dippel mentions that he must abruptly leave for Hamburg the very same day and remain there for a considerable period. Von Geuder is instructed to keep secret his new residence. In the NRW archive Briefe an den Baron von Geuder, the letter is tentatively dated to 1710-11, but as Dippel mentions the liquidation of his duties in the house in Maarssen, his last Dutch resort - which he lays, to a large degree, on the shoulders of von Geuder - the letter rather stems from 1714. He keeps corresponding with von Geuder from Hamburg, far into 1715 - maybe because mail connections to Utrecht were better from there than from Altona. The main issue of this correspondence is the house in Maarssen and Dippel's debts to von Geuder in that connection. He does not at all mention either Altona or Reventlow here; on the contrary, he speaks now and then about returning to the Netherlands and even to spend the rest of his life there, and the house remained a property of von Geuder – yet hired out from 1719 – and only sold by von Geuder in 1723 when it seemed like Dippel would never escape prison. But why is Altona not at all mentioned in their 1715 correspondence? Would Dippel hide from his sponsor von Geuder that he now had a new sponsor in Altona? During his Altona period, Dippel seems to have spent considerable time in Hamburg, staying with the architect L.C. Sturm and also straying to other towns of North Germany (Wotschke 1931, 123).

what he was able to offer. And a frenetic author pouring out writings into the germinating international European public sphere — long, learned treatises on God, nature, philosophy, and medicine, but also brief, pointed, satirical pamphlets turned against anyone who came in his way, particularly in the theological field. A religious and political critic, a scientist, a cosmopolitan, and a polemical intellectual. This was a type of which the Enlightenment would soon see more examples – but there was not yet so many of them. Dippel was among the first of its kind. No wonder he was already famous and infamous across the borders of Northern Europe.

Goldmaker in Altona

The history leading up to Dippel's sojourn in Danish Altona goes back to his appointment as Danish "Kancelliraad", Chancellery Councilor, in March 1707, as mentioned probably motivated in his strife with the Swedish General superintendent – Bishop – J.F. Mayer in Greifswald in Swedish Pomerania on the south coast of the Baltic. Dippel was forced to flee Berlin in February 1707 and he now emerged as an enemy of Swedish rule and might for that reason have interested Denmark-Norway, embroiled in the Great Northern War (1700-21) in shifting alliances with Russia and North German states against Greater Sweden dominating the Baltic Sea.⁷⁵ There is a special irony in the fact that he who had nominated Dippel for the title was Count Reventlow whom he had probably met at the court in Berlin and who would later become his nemesis in Altona. Dippel's royal title was formal and did not imply actual political assignments, but this Danish connection was the prerequisite when Dippel was again called to Altona in late 1714.

Altona was part of the Duchies of Sleswick-Holstein, of which the Danish King served as a Duke, and with its 12,000 inhabitants Altona was the second city of the Danish realm, after Copenhagen, followed by Bergen in Norway.⁷⁶ The language of Altona was German and Low German, like in most of Holstein in general. It was the most important trade port of the Danish realm on the west face of the

⁷⁵ Two recent, detailed accounts of that war: Andersen (2021) and Christensen (2022).

⁷⁶ The Danish King shared the title of Duke with the Duke of Gottorp, at the time the young Karl Friedrich, and the two Duchies were subdivided into a mosaic of smaller territories, governed by one or the other of the two, while considerable parts were governed by the two in common. Altona sat in the County of Pinneberg, also under the Danish Holstein administration. At that time, relations between the two Dukes were inimical; Gottorp was allied with the Swedes in the ongoing Northern War. The southerly Duchy of Holstein - but not the more northerly Sleswick - simultaneously formed part of the Holy Roman Empire, so that the two competing Dukes of Holstein were German princes and so obliged by decisions made by Emperor Karl VI and his government in Vienna.

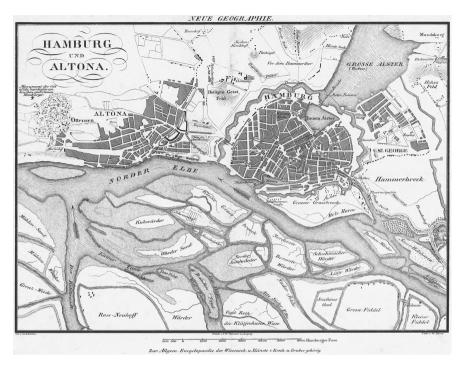


Figure 7: When the county of Pinneberg came under Danish rule in 1640 the city of Altona was part of the acquisition. Already then it was a flowering town, among other things because of the relatively wide freedom of faith enjoyed by Altonians. It had been granted in order to attract craftsmen and merchants with dissenter faiths to the city. In 1664, the city acquired Danish trading rights and became the first free port of Northern Europe, soon growing to the second city of the Danish realm, after Copenhagen. It became a thorn in the side of nearby Hamburg, and the two twin cities lived in double competition and symbiosis. Hamburg was the larger and stronger city, while Altona offered larger degrees of economic and religious liberty and enjoyed continuous support from the Danish power center of Copenhagen. This map shows the twin city in 1833, but the overall structure was present already in early eighteenth century.

Jutish peninsula and enjoyed a series of privileges, such as larger religious toleration than in other parts of the strictly Lutheran Denmark-Norway – or in nearby Hamburg. This is why the city attracted craftsmen with dissident faiths such as Jews, Catholics, Calvinists, and Mennonites, but for the same reason it also became a sort of safe haven for religious and philosophical dissidents and free-thinkers fleeing persecution, particularly from North-German states but also, e.g., from Denmark-Norway and Sweden. They might settle here and live relatively peacefully under pseudonyms, a practice that only continued to grow through the eighteenth century. The city was in competition with nearby Hamburg, and al-

ready then it was said the name of the city had its base in the fact that Hamburgers found it was "all zu nah" – all too near (Fig. 7). 77

Altona had suffered a disaster the year before, in 1713, when the city was burned down by the Swedish Field Marshal Magnus Stenbock. It happened on 8–9 January as an act of revenge for the Danish siege and shelling of the fortress city of Stade in the Swedish Duchy of Bremen-Verden on the south bank of the Elbe the year before. Swedish troops walked house to house and set fire to buildings with torches and pitch wreaths. Already at the time, it was seen by many as a war crime because Altona was an unfortified city, and estimations mention that around 70% of the city burned to the ground (Fig. 8). In March, King Frederik IV sent his new brother-in-law Count Reventlow and his wealthy consort Benedicte von Brockdorff to Altona in order to conduct reconstructions, physically as well as institutionally. The City Council of Altona had fled for the advancing Swedes and had to be reconstructed from the bottom up. The new "Overpræsident" -Chief President - Count Reventlow was an experienced officer and diplomat, one of the wealthiest and mightiest noblemen of the realm; his spouse, the Countess, may have been the richest noblewoman. They were Dippel's peers, agewise around 40, on top of their game.

So, it was a particularly powerful married couple who now presided over the rebuilding of a city. Count Reventlow was the son of Grand Chancellor Conrad von Reventlow and, as such, born into the Danish political elite in 1671 (Fig. 9). King Christian V was his godfather, and he had a good match ready for him: his own daughter Anna Christiane Gyldenløve who unfortunately died young. Reventlow became close to Crown Prince Frederik of the same age (from 1699, King Frederik IV), and after a Grand Tour to France and England with an emphasis on military and diplomacy he soon held top positions. At 19 years old, he became county governor in Haderslev, and before 30 he was the Master of the Royal Hunt with forestry of

⁷⁷ Whether the origin of the name Altona actually should be "all zu nah", all too near, as seen from Hamburg, or whether it is rather "An den alten Aa", by the old stream, remains contested. As compared to other similar toponyms, the latter appears most probable as seen from historical linguistics. But in that case, "all zu nah" is a joke or a folk etymology appearing at an early point, expressing the state of fact that many in Hamburg would have good reasons to regret the existence of a nearby, competing city undercutting Hamburg's custom rates for commerce. The folk etymology was connected to more or less mythological stories such as that about the fisherman Joachim von Lohe who placed his tavern on the borderline brook of Hamburg, a place with dubious reputation where he served his home-brewn red beer, attracting craftsmen and fishermen, some of them settling and eventually forming a fishing village. The City Council of Hamburg found that this outlet was an unfair competitor to the privileged inns of the city and thus was "all zu nah" (https://www.hamburg.de/sehenswertes-altona-altstadt/).

⁷⁸ Portraits of the couple are sketched after Dansk Biografisk Leksikon, 1. and 3. edition.

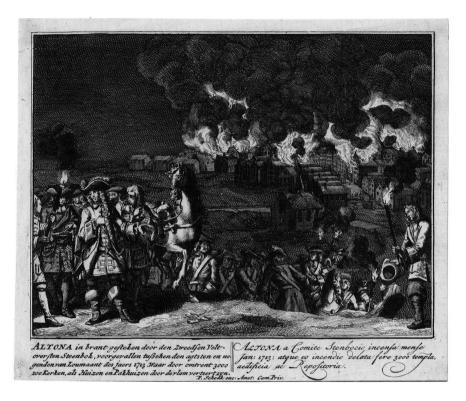


Figure 8: Important parts of the Great Northern War (1700-21) took place in the North of Germany and the Duchies of Sleswick-Holstein, partly because of the Swedish alliance with the Dukes of Gottorp, who ruled considerable parts of the two Duchies in a strained relation to the Danish King, also a Duke of the same double structure. The overall opposition of the war pitted an alliance of enemies against successful Greater Sweden, such as Denmark-Norway, Russia, and Saxony-Poland. These countries formed changing alliances to carve chunks out of Sweden, having made of the Baltic Sea almost a Swedish inland lake. The attacks on Sweden had the result that the young Swedish warrior King Karl XII embarked on a decades-long campaign in Eastern Europe, ending up in Turkey, until he went back and was finally killed in a battle against Denmark-Norway in 1718. During the war, Danish troops conquered the Swedish Duchy of Bremen-Verden on the south bank of the Elbe in 1712, laying siege to its capital, Stade. As a revenge, the year after, the Swedish army burnt down Danish Altona on the north side of the river. The Swedes demanded the payment of a fire tax from the city which it was unable to pay, and then Swedish troops walked into the city, igniting houses. As Altona was no fortified city, the allies against Sweden claimed it was unheard of among Christian nations to let an innocent, open city perish in ashes. When Dippel arrived there in late 1714, the city would most of all resemble something between a sooty ruin and a construction site.

the realm as his responsibility. As a top officer he was active, in the 1690s, both in the Danish-Norwegian military and in the Holy Roman Empire with frequent missions on the continent; as a diplomat, he participated in forging the alliance of Denmark-Norway with Saxony-Poland against Sweden. In periods, he served as second-in-command to the famous Austrian commander Prince Eugen, and in several important battles of the Spanish War of Succession the imperial army was commanded by Reventlow. In 1707, he was named General of the Infantry of the Danish army, he received, as Knight of the Elephant and Privy Councilor, the highest decoration and rank, and in 1709, he was appointed to lead what proved to be Denmark's last attempt to win back from Sweden the Eastern provinces of Scania, Halland, and Blekinge. He had to admit defeat, however, in March 1710 after the battle at Helsingborg, probably due to failing support from Frederik IV who sacked him the next month. That was a severe blow to Reventlow who would never again lead the army. In 1712, he participated in coordinating Danish-Russian military action against the Swedish army in the Duchies, and this engagement in the southern borderlands of the realm might have fed into his appointment to lead the reconstruction of burnt-out Altona in 1713. Rumors had it that it also supported his appointment that Frederik saw an opportunity to get him away from court, where Reventlow had been very critical of the fact that the King had, the year before, abducted Reventlow's much younger half-sister Anna Sophie from the castle of Clausholm after a masked ball at the castle of Koldinghus and taken her as his mistress. Reventlow did participate in "the great deliberation" of 1718 when the King consulted a circle of leading men about how to end the Great Northern War, and where Reventlow also produced sharp criticisms of the King.⁷⁹ Maybe for these reasons, he never reached the absolute top as a Grand Chancellor but he remained one of the richest and most influential men of the realm with his large estates in Sleswick, Holstein, Zealand, and Lolland. So, when Reventlow needed to exploit his contact to the King during the case against Dippel it was not immediately a connection without certain knots. In practice, he was the brother-in-law of the King, but still with an edgy prehistory that might raise issues. Probably, this was why his access to the King oftentimes went through Reventlow's friend Christian Sehested, leader of the German Chancellery in Copenhagen and thus foreign minister as well as member of the State Council.

Countess Reventlow, Benedicte von Brockdorff, was no less powerful than her husband (Fig. 10). Already at 13 years old, she was married to the wealthy landed proprietor Jørgen Skeel on the castle of Gammel Estrup on the Jutish peninsula of

⁷⁹ Cf. Holm (1895, 303).



Figure 9: Christian Detlev von Reventlow was already an experienced official, diplomat, and top officer when he was sent to Altona in 1713 by King Frederik IV in order to reconstruct the city after the "Swedish fire" the same year. He had come to know Dippel during his stay in Berlin in 1704-07, and when Dippel was jailed in early 1707 Reventlow was not only among those demanding his release, he swiftly extended his support to persuade Frederik IV to appoint Dippel a Danish Chancellery Councilor in Altona. In 1714, Reventlow again called him to Altona, presumably with the idea that he would make gold and thus contribute to the rebuilding of the city.

Djursland. Skeel died young in 1695, however, while she, 18 years old, was pregnant with their first child. This implied that she inherited not only the large Gammel Estrup but also a series of other estates which she fused into the independent manor estate of Gammel Estrup in a defiant gesture aimed against the new rank

nobility of absolutism whose estates should be fiefdoms granted by the King. By means of her marriage to Reventlow in the year 1700, then, two large Danish estate empires were brought together. At an early point, she acquired a reputation of being both avaricious and greedy in financial matters. This comes to the fore in the anecdote about the enormous baroque epitaph which she, as a widow of tender years, had constructed for her spouse Jørgen Skeel in the church of Auning. She hired a European-level sculptor, the Flemish-Danish Thomas Quellinus who - directly against the King's orders of a modest grave monument - added a whole chapel wing with a huge and magnificent marble tableau. Here, the statue of Skeel rests in full periwig and armor on a heavy, red sarcophagus, surrounded by goddesses for justice, prudence, reputation, and moderation, while he waves his arm up toward the central figure of the whole epitaph, a depiction of none other than the young widow herself. Also in white marble is the ancestral tree of Skeel on the left side of the monument and Brockdorff's own on the right. But in her ancestral table, the crowns have been chopped off, and the coats of arms remain empty. One explanation goes that this is because she herself never came to rest here, but a competing explanation claims that when Quellinus showed up on the castle to collect his salary she refused to pay him more than half, after which he went down to the church in anger, polished blank her coats of arms and cut off the crown signs of the shields. Later, circulating rumors claimed that she enriched herself on supplies to the army which her own husband was commanding in Scania during 1709-10, and in general there are few descriptions of her that do not mention her stinginess and covetousness. Even her grandson and prime minister of Denmark, C.D.F. von Reventlow, claimed that her greed was insatiable. But there is no doubt that she was also an impressive lady in more positive respects: her prudence and energy, her efficiency as an estate manager, and her affection for her husbands are also noted, and with the Count's manifold extrovert occupancies, the administration of their vast empire of estates seems to have been in her hands. No matter to what degree the rumors about Brockdorff's economical behavior are true, however, they would come to play a central role in the case against Dippel, for circulating legends about her rapacity and possessiveness were also heard in Altona, and the financial activities of the Countess would prove to be a main theme in the development of the case.

The Reventlows may have been the ultimate power couple of Denmark-Norway at the time. They were not only wealthy and powerful but also experienced and skillful administrators with large networks in the Danish realm as well as abroad. They exercised extremely wide authority in the reconstruction of Altona, also because of the flight of the magistrate by the arrival of the Swedes in 1713 – Reventlow resolutely sacked the remaining mayors for their "incompetence and drinking" the next year, and the Comital couple quickly proved able to speed up reconstruction with new stone houses sponsored by considerable tax exemp-



Fru Benedicte Margrethe Brockdorff Grevinde Reventlow, f. 1678 † 1739.

Figure 10: Benedicte von Brockdorff was a skilled administrator and noble lady who had inherited, as a young widow by the age of 18, a large portfolio of estates in Eastern Jutland and Lolland as a result of the early death of her first husband Jørgen Skeel. In her marriage with Count Reventlow she governed their common, extensive estate empire. The extent to which circulating rumors about her stinginess and greed are correct is hard to determine but, in Altona, she and Reventlow formed a strong partnership as a presidential couple invested with vast powers. In the case against Dippel he believed that she, in particular, was the active force in his prosecution.

tions for those willing to build – even if their brusque activity level was also sure to generate local friction. Paving of the streets, street sweeping, and fire insurance were initiated, a penitentiary, an orphanage, and a poorhouse were established; a new harbor was constructed. The later splendid prospect of the city, the

Palmaille, was turned into a public avenue. The two of them led a vast, high profile household in their Altona residence with their 11 children and a large staff.⁸⁰

Soon, the Count decided to call Dippel to the city as an alchemist. He could produce gold to speed up reconstruction, and a lab was organized for him.⁸¹ The city to which he arrived in late 1714 must have resembled nothing more than a giant construction site. Initially, things seem to have gone well, and Dippel is reported to concur about religious matters with Frederik IV, the Danish King taking increasing interest in the growing pietist movement.

We do not know much about Dippel's early years in Altona. There is a letter to his brother of 19 September 1716, but it only addresses theological matters and brings no information about his life in the city. He published little in the period; in 1717, he interfered in a local Sleswick-Holsatian strife between the orthodox Lutheran Theodor Dassow in Rendsburg and the pietist court preacher Henrik Muhlius in Gottorp, with a pamphlet titled *Unparthevische Gedanken* (Impartial Thoughts) under the pseudonym of Cordatus Libertinus (the Hearty Libertine). Here, he attacked Dassow and the orthodoxy, defended a radical version of Spener as well as

⁸⁰ Where the Reventlows had their residence in Altona, also in periods housing Dippel, I have not been able to locate. Contemporary sources speak about it as a mansion. The Palmaille, originally a ball-playing lane, only later developed into the present representative avenue, but already at the time it comprised some large estates with gardens down toward the Elbe, so that might be a candidate. Another possibility is the Elbestraße along the river where the next Chief President von Schomburg took residence in the 1730s.

⁸¹ It is the standard assumption that a motivation of Reventlow and the Danish government for calling Dippel to Altona was gold-making but it is not evidenced by any documents by Danish authorities nor by Dippel or Reventlow themselves. In 1707, alchemy had been addressed in Dippel's supplication and the King's answer regarding his first stay in the city, cf. above, so the issue was in play already back then. But if the "Gecken-Spiegel" (Fool's Mirror, below) pamphlet against Dippel from May 1719 is actually the initiative of Reventlow, then it expresses the Count's deep disappointment with the absence of promised gold deliveries from Dippel. According to Hojer (1829) (org. 1732), vol. II, 209, Reventlow "as Chief President of Altona ordered him to administrate such a task and soon let some secret but costly processes be elaborated under his direction". A May 1715 letter from the Hamburg mathematician and pedagogue Christoph Heinrich Dornemann to Dippel's old Pietist professor Johann Heinrich May in Giessen, is informing him that Dippel was now busy with laboratory work: "I suspect that he is searching for gold, although he found a medicine lately, and our gentlemen pastors are also looking for the same with him". (Wotschke 1931, 122-23; Kraft 2023, 149). Those gentlemen were the Hamburg clerics Johann Theodor Heinson, senior pastor of St. Peter's Church, and Johann Friedrich Winckler, senior pastor of St. Nikolai Church, who "did their utmost to find the lapidem". So, according to Kraft, Dippel collaborated in his Altona lab with top Lutheran clergy from Hamburg. Gold-making, in any case, much occupied Frederik IV and the Danish government in the period; in 1708, the Italian Grimaldi had been hired to work in a lab at Rosenborg Castle in central Copenhagen; he was later jailed for fraud. In 1723, another Italian, G.G. Maldini, resumed work there, cf. Fielstrup (1906) and Fink-Jensen (2016).

the controversial Danish baptist Otto Strandiger in Flensburg, who had been banished from the realm in 1716 after many years of separatist activity. It concludes with a poem celebrating the death throes of Lutheran orthodoxy: "Hier lieg ich armer Wurm/ Orthodoxie genannt/ Das liebe Sachsen ist mein rechtes Vaterland/ Ich bin in Wittenberg gezogen und gebohren/ Doch habe den Credit fast überall verlohren" – I, the poor worm of orthodoxy in Saxonian Wittenberg, now lay dying and have lost credibility almost everywhere. Finally, Dippel shows his colors: It is *Democritus* who is now singing my death song and will bury me, the poor worm concludes.⁸² Dippel had not lost his poisonous pen.

Dippel lived in an apartment in the Reventlow residence, but in periods he seems to have moved out and into the city where he lived with the author and blue-dyer Jacob Denner who was also a preacher for the Mennonite sect of "Dümpeler" or "Dompelaer", that is, dippers, because they practiced adult baptism with complete submersion under water.⁸³ Dippel, of course, was known for the discovery of Prussian Blue, which was already now in use as a pigment, so both radical religion and blue-dyeing would have been common interests of the two of them, and later Altonian pietist groups even assumed the name of "Blaufarber", blue-dyers. Dippel published, in 1718, a satire over forced infant baptism, particularly of Dümpeler children, such as it was practiced by the orthodox Lutheran Dean Fleischer in Altona's main church, the Trinity Cathedral – a pamphlet to which we shall return.⁸⁴

But during the almost three years of 1717–19, a case against Dippel developed in Altona, ending with a draconian sentence: banishment for life to the island of Bornholm. How on earth could this happen? Why should the pious gold-maker go to jail?

⁸² The 1716 letter to Dippel's brother: Eröff III, 625ff. The quote from *Unpartheyische Gedancken*: Cordatus Libertinus (1717, 15). See also Rustmeier (1956).

⁸³ Winkle (1988, 23).

⁸⁴ It came out anonymously under the title Glückwünschender Zuruff An die Würdige und andächtige Herren Gerichts-Diener der Stadt Altona – Happy Wishes to the Worthy and Decent Servants of Justice in the City of Altona (1718). More about it below.