

# THE LORD OF URANIBORG

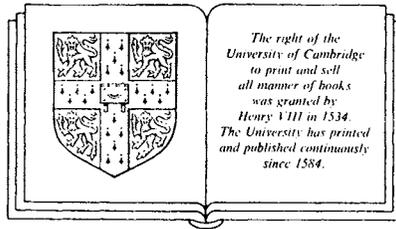
*A Biography of Tycho Brahe*

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*with contributions by*

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# Chapter 1

## *A Noble Humanist*

AMONG the mass of detail that constitutes the personal, social, cultural, and intellectual background of Tycho Brahe's scientific achievement, the one indispensable fact is that he was born a Brahe, that is, born not merely into the Danish nobility but also into the small fraction of the noble class that had historically played significant roles in the administration, governance, and defense of the realm. The epitome of this special status was membership in the Rigsraad, or Council of the Realm. Nominally an advisory body for the king but actually an oligarchical institution devoted to defending the interests of the most powerful noble families, the Rigsraad consisted of twenty-odd members who declared war, concluded treaties of peace, appointed regents (among themselves, naturally), seated kings, and participated with kings in virtually every aspect of the daily affairs of state.<sup>1</sup>

All four of Tycho's great-grandfathers and both of his grandfathers had been councillors (see Fig 1.1).<sup>2</sup> His paternal grandfather and namesake, Tyge Brahe, had held that honor only briefly before being killed during the siege of Malmø in 1523, fighting in the cause that put Frederick I on the throne and brought the Reformation to Denmark. But Tyge's widow, Sophie Rud, was descended from the equally powerful Rosenkrantz and Gyldenstjerne families and thus had her father and brother on the council to look after the interests of her young family.

In addition, Tyge's brother Axel was not only a *rigsraad* but long served as governor of the province of Skaane in which the Brahe heritage was seated. Axel was among the first Danish lords to convert to Lutheranism, and he supported the militant Lutheran King Christian III so effectively during the Danish phase of the Protestant Reformation that he won the honor of carrying the scepter at Christian's coronation in 1537. During these years of civil strife and religious upheaval, the sons of Tyge reached adulthood. Jørgen (George), the oldest, was brought to court in 1535, at the age of twenty, and Otte joined him shortly thereafter. In 1540 they

<sup>1</sup> See Chapter 11 for a summary of the council membership as of 1552 and 1590 and a discussion of the kinship of the members with Tycho.

<sup>2</sup> The genealogy of the Brahe family, with the vital statistics of all 177 members known to have existed from the fourteenth century until the line died out in the eighteenth century, is in *DAA* V, 97-115.

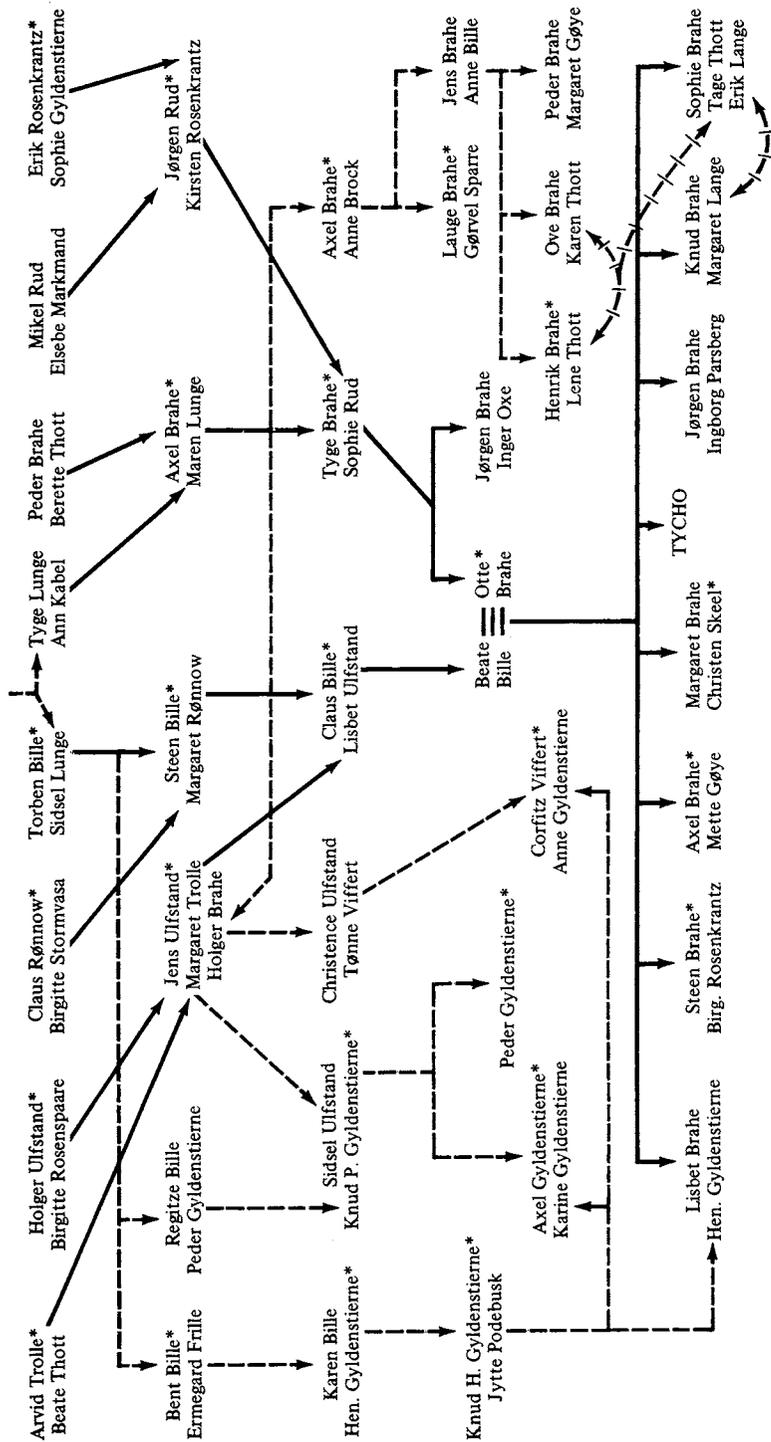


Figure 1.1. Tycho's ancestors and some collateral relatives. Compare the top two rows with the names on the arch (males) and supports (females) of the Frontispiece. Asterisks signify rigstraads.

received their first recognition for service to the realm, in the form of joint fiefdom of Storekøbing. By 1542, Jørgen had advanced to the command of Tranekær Castle, from which, through the next fifteen years, he was to move upward to successively more important posts. Otte's career was even more distinguished and culminated in the governorship of crucial Helsingborg Castle and a seat among the elect in the Rigsraad.

In 1544, Otte Brahe married Beate Bille. Unlike the Brahe family, which had achieved and maintained its influence by prowess with the sword, the Bille family owed much of its ascendancy to persuasion with the word. From as far back as Archbishop Peder of Lund, who was primate of Denmark for eighteen years before his death in 1436, the Bille family had combined ecclesiastical influence with secular service to channel great wealth into the hands of those members who did not enter the Church.

When the Church was threatened by the Reformation in the third decade of the sixteenth century, the traditions of a family whose blood relations included seven of the eight current (Catholic) bishops of Denmark could permit only one response. And because no fewer than six Billes sat in the Council of the Realm, and most were warriors who commanded key strongholds throughout Denmark and Norway, that response was not restricted to words. But after engaging in a determined, if ultimately losing, struggle in the cathedral, in the Rigsraad, and on the battlefield to retard the advance of Lutheranism, each sought to repair his fortunes in his own way.

One of the means chosen by the most powerful of them, Claus Bille, was alliance with the Brahes, by the time-honored practice of intermarriage. He gave the hand of his eighteen-year-old daughter, Beate, in marriage to the still-unproven twenty-six-year-old Otte Brahe. In so doing, this hard-bitten veteran of the Stockholm blood-bath and second cousin of the reigning (1523–60) king of Sweden, Gustavus Vasa, created the conditions under which he would become the grandfather of Tycho Brahe.<sup>3</sup>

For the bride, the aristocratic splendor of the wedding was followed by the typical travail of repeated pregnancy and childbirth that was the common fate of women of all stations in that era. In Beate's case, it was twelve children in twelve years, of whom eight survived infancy. And Beate Bille – aristocratic women in sixteenth-century Denmark retained their maiden names after marriage – was one of the hardy and fortunate few who survived to live to the ripe old age of seventy-eight. Her first child, a daughter, Lisbet, was born within

<sup>3</sup> Claus Bille's maternal grandmother, Birgitta Kristiansdatter (Vasa), was a sister of King Gustavus's grandfather. The genealogy of the Bille family is in *DAA* VII, 58–94.

ten months of the wedding. A second child, who died very young, must have been born prematurely, because on 14 December 1546, fifteen months after Lisbet's birth, Beate gave birth to twins. The firstborn lived to be baptized with the name of his paternal grandfather, Tyge.<sup>4</sup>

The conditions of baby Tyge's birth virtually ensured him the opportunity to live as a veritable prince. But they did not dictate his destiny completely. For Tyge would not be raised by his parents. As he understood the situation in his mature years, his uncle Jørgen "without the knowledge of my parents (took) me away with him while I was in my earliest youth [and] brought me up and thereafter supported me generously during his lifetime . . . and always treated me as his own son."<sup>5</sup> Pierre Gassendi, writing a hundred years after the event and after having talked to two grandsons of Tyge's brother Steen, amplified this account slightly. According to him, Jørgen justified his action to Otte and Beate by pointing out that they had a second son, Steen, to raise and claiming that it was only fitting and proper for them to share their wealth, so to speak.<sup>6</sup>

There was nothing particularly unusual about taking in foster children. Indeed, when epidemic disease was rampant, warfare endemic, and child bed an ever-present mortal danger, children frequently lost one or both parents. In the Danish colony of medieval Iceland, blood feuds had rendered fostering the resort of choice, to reduce the likelihood that an entire family would be wiped out in a raid. Among the sixteenth-century Danish nobility, extended missions abroad for warfare or diplomacy often meant that children were left behind to be raised by grandparents or other near kin. In Tyge's case, however, it seems not to have been the interest of either the child or the parents that was being accommodated but that of the foster parents.

The sole basis for Tyge's fostering was that Jørgen Brahe and his wife were childless. And even this characterization was clearly an understatement, as at the time of Tyge's birth his foster mother (and aunt), Inger Oxe, was only about twenty.<sup>7</sup> Because Steen was born a

<sup>4</sup> Sometime around 1556, Otte recorded the birth dates of his family. The list was published as the first of 301 documents concerning the life of Tycho (exclusive of three volumes of letters) in vol. XIV of his *Opera Omnia*.

<sup>5</sup> V, 106, as translated in *Raeder*, 106. For a list of abbreviations of commonly used sources, see Appendix 1.

<sup>6</sup> *Gassendi*, 3–4.

<sup>7</sup> Inger's birth and marriage dates are unknown. However, if the birth dates and order of birth of various siblings are accurate, the earliest that Inger could have been born was late 1526. See *DAA XXIV*, 343. And unless she was married at a much younger age than her sisters were, she was not married very long before Tycho's birth. The earliest date documented for her status as Jørgen's wife is 10 February 1548. The closest thing to a justification for what

year and a week after Tyge, it seems reasonable to speculate that the "transfer" occurred in the middle of Tyge's second year, after baby Steen was past the greatest uncertainties of infancy, presumably after Jørgen had unsuccessfully attempted to obtain Tyge by negotiation, and during the months of pleasant weather when Otte and Beate would be away from home socializing instead of at home protecting their little sons against such an unlikely event as kidnapping. When the parents finally accepted the situation (consoled, probably, by the knowledge that another little one was already on the way), Tyge settled into a household very much like the one he had left.

Although Tyge was raised more like a cousin than a brother of his siblings, and therefore undoubtedly spent more time by himself than he would otherwise have done, in many ways he reaped the benefits of both possibilities. He was to grow up as the only charge of a doting aunt and uncle but would later compete in the adult world of power politics as the oldest of five brothers.

Tyge's stepfather and uncle, Jørgen Brahe, was a man cut from the ancient warrior pattern. He was a man of action rather than a statesman, but he was a convivial person who could hold his own in the hard drinking circles at court and function efficiently as an administrator of fiefs. Like his brother, he married into a family whose traditions were somewhat broader than the exclusively martial ones of the Brahes.

The Oxes were relatively recent arrivals in Denmark, having come from France at the end of the fourteenth century.<sup>8</sup> Although much less prolific than the Billes, they had produced four *rigsraads* during the preceding hundred years before losing their influence as a result of the civil upheavals of the 1530s. By the late 1540s, however, the Oxes were on the rise again, largely through the drive and ingenuity of Inger's oldest brother, Peder Oxe. As early as 1548, at the age of twenty-eight, Peder led Princess Anne's entourage to her wedding with Duke Augustus of Saxony: A few years later he was to mediate the peace that made Augustus the elector of Saxony. By 1552, Peder's diplomatic talents had propelled him into the select group of older men that constituted the Council of the Realm.

Peder's sister Inger seems to have shared many of his intellectual interests and capacities. Her letters reflect a woman of charm and highly developed social grace, and she is known to have remained very close to Princess Anne of Denmark/Saxony, who later gained

may have been arranged as a platonic marriage is S. C. Bech's statement: "Although it was very abnormal not to be married, because holy marriage was almost a Christian duty, prominent personalities . . . could get permission to live and die as batchelors" *Danmarks historie* 6 (Copenhagen Politikens: Forlag, 1963), p 427.

<sup>8</sup> DAA XXIV, 339-45.

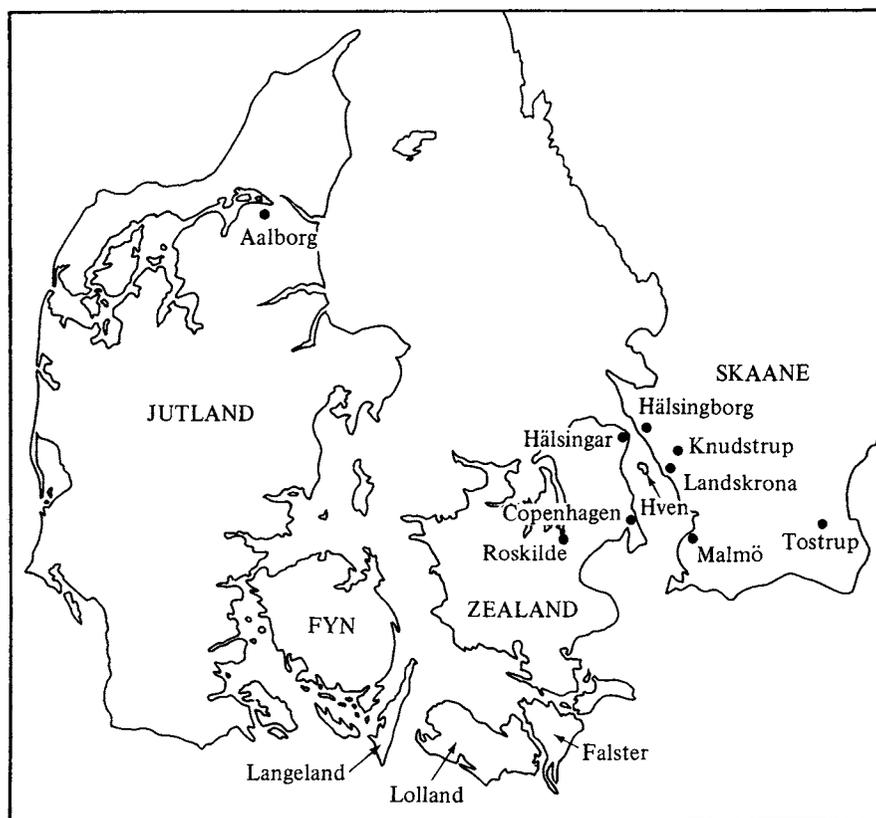


Figure 1.2. Tycho's Denmark.

some fame as an alchemist. Most significantly – for we know little of Inger's actual attainments – she came from a learned and cultivated family. Her mother was a Gøye, a daughter of the kingmaker of the Reformation era, councillor Mogens Gøye of Krenkerup. And unlike Beate Bille, Inger used her family traditions to impel Tyge toward an education that was markedly different from what his natural father regarded as appropriate to a Brahe.

We know little about Tyge's early youth, not even where he was raised. "Home" was his uncle's ancestral seat of Tostrup, in the eastern portion of the province of Skaane, on what is now the Swedish side of the shipping channel (Øresund) which then constituted the heart of the sea kingdom of Denmark. But there must have been at least occasional visits to Otte's somewhat distant seat at Knudstrup (Figure 1.2) to see his natural parents and their ever-increasing brood. When Tyge was five years old, the manor house in which he had been born was torn down and replaced by a great

fortress of red brick, part of which still stands. This new building, at that time surrounded by the waters of a broad moat, would one day belong to him.

Otte's and Jørgen's status as members of one of the conciliar families entitled them to "employment" in the profitable task of administering a royal fief. Aside from the element of preparedness for defense, traditionally implicit in most of these fiefdoms, conscientious administration demanded a certain amount of time in residence at the fief, which might be located anywhere in the realm. Moreover, because the distribution of these political plums was subject to the vicissitudes of power politics and the vagaries of royal whim, one had to maintain enough presence at court to protect one's interests. Any vassal, therefore, who was at all ambitious, found himself frequently moving. Jørgen was promoted from Tranekær Castle on Langeland to Naesbyhoved Castle on Fyn in 1549 and then to Vordingborg Castle in 1552. By this time, Tyge would probably have been old enough to remember the move and the ceremonies by which the command of this immense medieval stronghold was transferred to his foster father.

Vordingborg was on the south coast of Sjaelland, on the main travel route between Copenhagen and the continent and it therefore, attracted many visitors besides the various members of the Brahe, Oxe, Rud, and other related families who came regularly. Duke Ulrich of Mecklenburg arrived with his court in 1556, and the party of young Princess Elizabeth of Saxony passed through in 1557, accompanied by sixty knights, on the way to visit her Danish grandparents. The peripatetic court of King Christian III also stayed in Vordingborg from time to time. Vordingborg was near the estates of Peder Oxe and across the waters of the Smaalund passage from the fertile islands of Lolland and Falster, which were part of the widow's jointure of Queen Mother Sophie, King Christian's stepmother. Their administrative center was Nykøbing Castle, another medieval fortress that stood on an islet in the straits between the two islands. In 1555, Queen Sophie invested Jørgen Brahe with the fief and command of Nykøbing, giving him one of the greatest assemblages of fiefs in Denmark.

Jørgen's perhaps ill-advised attempt to serve simultaneously two masters who had never been on good terms with each other came to grief rather quickly. In the opening rounds of a power struggle that was to culminate in the spectacular fall and exile of Peder Oxe in mid-1558, Jørgen relinquished his fief from the king and transferred his seat to Nykøbing.<sup>9</sup> Presumably, Inger and Tyge followed Jørgen on his periodic moves from one fief to another and on his frequent

<sup>9</sup> For a brief sketch of Jørgen's life, see *DBL* III, 566-7.

trips back to Tostrup in Skaane. When they did not accompany him to court, they may well have gone to check on the property held by Inger as her share of the Oxe family domain. This all was part of the life of a lord, and it was the only life Tyge would know until he started school at about the age of seven.<sup>10</sup>

As was the case throughout Europe for at least two hundred years both before and after Tyge's day, grammar school in Denmark was the place where one learned Latin grammar. Not surprisingly, such institutions were almost invariably associated with the church. Most were monastic schools. If a nobleman's son attended one of them, it was probably because the school was under the administration of some noble (Lutheran) governor who was related to him.<sup>11</sup> At such schools, the noblemen's sons chanted and studied with the common schoolboys but served as pages in their kinsman's household to develop the aristocratic graces appropriate to their station.

Most of the noble children, however, went to cathedral schools in the episcopal towns. In order to ensure suitable accommodations and proper supervision in cultivating the habits of a gentleman, they were generally lodged in the household of the bishop or some other substantial clergyman of the city. Twenty years earlier, such a household would have been the establishment of a celibate Catholic aristocrat like Tyge's relatives on the Bille side.

Since the Reformation, however, the bishops had been Lutheran theologians of middle-class origins, whose livings were prosperous but not princely and whose households centered on their families. Virtually all of them had studied at Wittenberg, and they modeled their households on those of professors like Martin Luther and Philipp Melancthon, with whom they had lived as student boarders. Around the long tables in their paneled chambers, family, pupils, guests, and cathedral colleagues all gathered for meals, just as their various counterparts had done at the castles in which Tyge had been raised until then. As the focal point of a center of learning, however, this table featured conversation very different from that at a castle table. Because of this innovation of the Lutheran Reformation, Tyge was able to participate in table talk of a kind to which he would not have had access just a generation earlier, when all learned communities in Europe had still been organized as celibate colleges, monasteries, and cathedral chapters.

Tyge's next younger brothers, Steen and Axel, are known to have gone to the cathedral school at Aalborg, where Otte Brahe was in

<sup>10</sup> V, 106.

<sup>11</sup> On the Danish grammar schools of this period, see Birte Andersen, *Adelig opfostring: Adelsbørns opdragelse in Danmark 1536-1660* (Copenhagen: G, E, C, GAD, 1971), pp. 62-80.

command of castle and county. If Tyge's experience can be inferred from theirs, he was sent to a cathedral school near Vordingborg. All we actually know is that he "was sent to grammar school in my seventh year" and continued his elementary studies until he was about twelve.

All the schools had a decidedly clerical stamp, one that had not changed greatly through the Reformation. Except for an occasional rector, the teachers were unmarried men. The students were nominally in the Church too and joined their teachers in wearing clerical garb. Schooling began at seven o'clock and lasted until late in the afternoon, except for Wednesday and Saturday afternoons, which usually were free. Latin grammar and Lutheran religion dominated the curriculum, but some schools taught Greek and even elementary mathematics. Music and theater were also regarded as essential to a basic education. Students sang at church services, weddings, funerals, and festival processions. They memorized whole plays of Terence and Plautus as part of their study of Latin, and they frequently gave performances of them. By the time they reached their early teens, they were supposed to be sufficiently grounded in the teachings of Lutheranism and the essentials of Latin grammar to proceed to the university.

The transition from Latin school to university was primarily the progression from studying the Latin language to studying the classical works written in it. Personally, it was – for a student of Tyge's class – only the move from the household of a bishop to the intellectual milieu of a university professor's home, where the young students began by sitting in on discussions at the table, read and attended lectures under the supervision of their learned host, and often were tutored by one of the older students living in the same household. For many students, the biggest change was probably the transition from a rural or provincial town to metropolitan Copenhagen – the capital, largest city, and seat of the only university in the realms of Norway, Denmark, and Schleswig-Holstein.

The University of Copenhagen occupied the old palace and grounds of the Catholic bishops. Its portal was emblazoned with an eagle, under which was the Latin inscription translated as "He looks up to the light of heaven."<sup>12</sup> No one who ever entered the university would fit that description better. Tyge's three years there were so uneventful that we have virtually no information about them. Not even the place of his lodging is known, but the relatively early age at which Tyge's mathematical interests began suggests that his aunt and uncle may have placed him in the household of Nicolaus Scavenius,

<sup>12</sup> GADE, 15.

professor of mathematics and client of the Oxe family. There are other reasons to think that he may have lived with the famed professor of theology, Niels Hemmingsen, as his future brother-in-law, Christen Skeel, and as his preceptor of later years, Anders Sørensen Vedel, did. The fact that we have a date for the beginning of his tenure in Copenhagen, 19 April 1559,<sup>13</sup> suggests that Tyge may actually have matriculated at the university. In general, however, noblemen's sons did not register for university degrees but merely attended selected courses of lectures and various other exercises as part of a more widely diversified program of study.

Although the sons of middle-class merchants, urban patricians, or Lutheran clergymen could benefit from university degrees in their pursuit of clerical or academic careers, boys of Tyge's rank were born with all the credentials that they would need. However, Tyge's later career is evidence that he acquired as good a classical education as any of his contemporaries did. Basically, this meant expanding his control of Latin grammar to acquire skill in logic and rhetoric, the other two arts of action comprising the medieval *trivium*. Such studies in the formal techniques of debate and public speaking were regarded as relevant to a career in power politics. We also know that Tyge learned some Greek and possibly even a bit of Hebrew.

Already in these early years at Copenhagen, Tyge was apparently developing an interest in the four mathematical sciences of the *quadrivium*: arithmetic, geometry, astronomy, and music. During 1560, Tyge acquired the great elementary astronomy text of the Middle Ages, Sacrobosco's *On the Spheres*, which Professor Scavinius used in his lectures. In the following year Tyge purchased the much more advanced *Cosmography* of Peter Apian and the *Trigonometry* of Regiomontanus. In his inscription in these works, "Tycho Brahe, Anno 1561," we have the first appearance of the Latin form of his first name (pronounced Teeko),<sup>14</sup> under which Tyge (pronounced Teegeh) was to make his way in the learned world and by which he is remembered today.

Even though Tycho undoubtedly pursued astronomy further and more successfully than his schoolmates did – to the point of even purchasing an ephemeris of planetary motions<sup>15</sup> during this period –

<sup>13</sup> Tycho recorded the dates of his various moves in a horoscope of his life, some of whose details were preserved by one of his students. See John Christianson, "Tycho Brahe's Facts of Life," *Fund og Forskning* 13 (1970); 20–25.

<sup>14</sup> Tycho always signed his name with either an *ij* or the equivalent, frequently used but somewhat nonsensical, *ÿ*. In the handwriting of Tycho's Denmark, *ij* stood for the sound pronounced like the *ee* in the English "sheet." If Tycho had wanted his name to be pronounced to rhyme with the English "high," he would presumably have spelled it "Taecho," which he never did.

<sup>15</sup> V, 107. The ephemeris was that of Stadius (*Gassendi*, 6).

his interest was by no means unusual. Indeed, a general concern for astronomy permeated the whole intellectual atmosphere at Copenhagen.

The basis of this orientation was a movement called Philippism. Although it was primarily a theological doctrine developed by Luther's chief lieutenant, Philipp Melanchthon, Philippism articulated a conception of the church that emphasized education. To Melanchthon, the church was essentially an educational institution, whose great and vital purpose was to teach the true path to salvation. In order to succeed at this mission, Melanchthon believed that the church had to be staffed by a clergy of scholars and teachers, men whose theological training was firmly grounded in a mastery of the seven liberal arts. Fluency in Latin, Greek, and Hebrew was prerequisite to a true comprehension of the Holy Scriptures and the writings of the church fathers. Competence in rhetoric and dialectic as well as broad familiarity with literature and history were essential to effectiveness in the pulpit. And knowledge of the four mathematical disciplines paved the way to understanding the secular and spiritual worlds. Music required no justification. Arithmetic and geometry were subjects of great practical use, as well as the path to knowledge of the heavenly science of astronomy. Astronomy, finally, not only established the calendar of church ceremonies but also led to contemplation of the Creator and revealed the cosmic (astrological) influences that affected people's lives.<sup>16</sup>

By Tycho's day, Melanchthon's ideas had won sufficiently broad acceptance to have been institutionalized in many of the leading Lutheran universities. This development was important to both astronomy in general and Tycho Brahe in particular. It created the environment in which Tycho acquired his interest in the heavens and provided the resources that were to allow him to develop it. It meant that the Lutheran universities had at least one professional chair in mathematics (which consisted largely of astronomy) and frequently had two, as did Leipzig, Wittenberg, and Rostock, where Tycho was to study subsequently. In England, by contrast, where Melanchthon's theological ideas did not prevail, there was not a single university chair in mathematics throughout the whole of the sixteenth century.

It was not merely a matter of having formal instruction: In fact, there is no indication that Tycho attended many lectures. But it cannot be irrelevant that two of his earliest texts, those by Sacrobosco and Apian, were the ones on which the professor at Copenhagen based his lectures in astronomy. And if the eclipse of the sun

<sup>16</sup> Karl Hartfelder, *Philipp Melanchthon als Preceptor Germaniae* (Berlin, 1899), pp. 183-97.

that occurred on 21 August 1560 was indeed the source of Tycho's serious interest in astronomy, as his first biographer asserted,<sup>17</sup> he was almost surely drawn to the phenomenon by his university contacts, for he is unlikely either to have found a reference to it in the literature by himself or to have noticed on his own the obscuring of less than half the sun.

It is not inconsistent with Gassendi's story that Tycho might have learned about the eclipse only after the event, from a tract published at the end of the year by one of his professors. Written in Danish by the professor of rhetoric, this piece interpreted the eclipse as a sign that doomsday was near. At that time such apocalyptic ideas were not considered farfetched. Moreover, Melanchthon had been convinced that humanity and the stars were closely linked. And although he had been unable to carry the day with his views on this issue (Luther had scoffed at all ideas of astral influences or astrological portents), astrology remained a subject of great general interest throughout the sixteenth century. In any case, the incorporation of mathematics into the standard curriculum provided a stimulus for astronomical interests. The result was the creation of a reading public for astronomical literature that included students, professors, and university graduates in all walks of life (but primarily in the clergy) and called forth a large number and variety of publications from the German presses of the era.

During his years at Copenhagen, Tycho joined that public and began to explore the astronomical and astrological literature. He learned that the motions of the heavens were not works of caprice but were subject to calculations that allowed them to be predicted well in advance. Tycho was developing other academic interests too and was forming friendships with fellow students, older tutors, and perhaps even professors, such as the young Dr. Johannes Franciscus, who came to the university in 1561 as professor of medicine. Certainly, as the first Brahe to enter a university, living in his professor's household and frequenting the streets and halls of the Latin quarter, Tycho was being drawn into a way of life very different from that of his uncle's or his father's noble households.

At the end of 1561, when Tycho turned fifteen, it was time to move on. The sixteenth-century nobleman who contemplated entering public life needed to know the languages of foreign lands; the customs and personalities of foreign courts; the polity and policies of foreign kingdoms; and the history, political theory, music, literature, art, architecture, and military science that made up the common European heritage. The traditional way of acquiring this

<sup>17</sup> Gassendi, 5. This notion is refuted convincingly in *Norlind*, pp. 14-15.

knowledge was by attendance at foreign courts. It remained the form of education chosen for Tycho's four younger brothers. After apprenticing as pages in the households of some noble kinsman, they would proceed to training as squires under some prominent foreign lord. They would win their spurs around the age of twenty-one, broaden their experience with further service as courtiers or armed knights, and eventually return home to serve the Danish court. By the time they were ready for marriage, they could expect to have the credentials necessary for governance of a major fief. Informal as it was, it was an education that could still in Tycho's day equip men for careers in the highest echelons of government. Accordingly, his brothers all matured into men of culture and social grace, who inspired confidence in their ability to plan and administer competently both civil and military matters. Two of them were to become councillors of the realm. But their education could never have produced an astronomer.

Tycho Brahe escaped from it by a hair's breadth – by the quirk of fate that took him out of Otte's and Beate's care and into Jørgen's and Inger's. With that turn of fortune, he was brought into the tradition of the Oxe family, under which the great Peder himself had spent five years traveling with a tutor among the universities of Europe. Whether Jørgen simply yielded to the family tradition of his charismatic brother-in-law or whether he perceived that the hoary exercise of arms in a courtly atmosphere was no longer sufficient in itself as training for the life of a great aristocrat is not known. Either way, he probably had to debate the issue with Otte. By the time Tycho had spent three years in city and university, however, there was probably no returning to the feudal pattern of castle and court education, and in the end, Jørgen and Inger prevailed. When the time came to take the Grand Tour that had become a standard feature of the education of Danish aristocrats, Tycho followed the path of the Billes and the Oxes to foreign universities, rather than the path of the Brahes to foreign wars.

The obvious place to start was Saxony. It was a land where the purest form of High German – still a language of the Danish court – was spoken and where the holy places of Lutheranism could provide a source of inspiration. It was also a land where Jørgen and Inger had close ties to the court, because they had accompanied Electress Anne to her wedding ceremonies there when Tycho was a baby, and Inger had continued to correspond with her since.

Tycho left Denmark on 14 February 1562. He was not alone. Not only did he travel most of the way in some kind of ad hoc caravan, but he also was being looked after by a preceptor who had been chosen with great care by Jørgen and Inger. This companion-guide-