

IV

THE BASIS OF THE GENERAL CHRONOLOGY OF THE GIZA NECROPOLIS AND THE PRINCIPLES FOR DETERMINING THE DATES OF THE INDIVIDUAL MASTABAS

1. THE CHEOPS CEMETERY

THE great Giza Cemetery was essentially the cemetery of Cheops. The nucleus was the great pyramid of that king with the three pyramids of his queens and the fields of mastabas designed by him, west and east of the pyramid, for his children and favourites. These mastabas consist of four cemeteries in the Western Field, of which three (Cem. G 1200, Cem. G 2100, and Cem. G 4000) were begun by the tombs of princes representing obviously different branches of the family of the king. All three cemeteries are overlooked by the great mastaba G 2000, the tomb of the most important person of the reign, probably the highest official, and a prince of the blood royal. In the Eastern Field eight great twin-mastabas were designed and partially completed for the favourite sons and daughters of Cheops. The king's own tomb, the plan of which was altered twice, leaving the first two designs unfinished, stood as the greatest of all true pyramids built of solid local limestone, cased with fine white limestone, dominating the whole plateau. Against its eastern face stood a great funerary temple of limestone paved with basalt and perhaps cased with hard stone. From the entrance a great corridor led down to a valley temple, the remains of which have not yet been excavated. In front lay the area marked off for the Pyramid City of Cheops, in which were to reside the funerary priests of Cheops and those of the members of his family and court, exempt from taxes and official exactions, maintained by endowments of agricultural land. The great plan was never completely carried out, but it is easy to visualize the rows of white-cased mastabas conceived by Cheops. The whole was to be a great city of the living *kas* of all members of the royal family and the court. The king lay in his pyramid provided with all the splendid equipment of his person and his palace; the daily supply of food and drink was guaranteed by the endowments of the servants of the *ka*, who were engaged to make offerings and recite the necessary formulas in the temples attached to the pyramid. The king's *ka* was free to pass unhindered from the grave to the temple and the outer world. His queens, his children, his officials, and his attendants lay in the small pyramids and the mastabas east and west of the pyramid, and these were provided with similar equipment and similar daily offerings, each in proportion to his rank and means. Their *kas*, also, were free to pass unhindered to and fro from the grave to the outer world. The mother of the king, Hetep-heres I, was also there, buried (or so the king thought) in a secret tomb, as the result of an accident, not as part of the original plan. Thus in the ghostly world of life after death the court of the great king, with the queen-mother, the queens, the children, and the great officials, was assembled around the *ka* of the king and in daily association with him.

The conception of a cemetery as a community of living *kas* is entirely in accord with the character of all Egyptian cemeteries, in particular the family cemeteries of the provinces. Usually these cemeteries were formed by gradual growth covering a number of generations, but we look in vain for cemeteries

built on a unified plan similar to the Cheops cemetery except at Abydos around the tombs of the kings of Dyn. I, and perhaps at Dahshur on the plateau east of the pyramid of Sneferuw. At Abydos the tomb of Narmer had the tombs of two queens and thirty-three other persons arranged in rows east of the king's tomb (thirty-six tombs). Around the tomb of Zer were eight groups, each consisting of blocks of small tombs built in trenches, 324 in number. The subsidiary cemetery of King Zet contained a lesser number, 174. Around the tombs of Merneith, Wedymuw, and Az-ib the subsidiary graves were arranged in a hollow rectangle. These Abydos cemeteries were not laid out entirely on a unified plan, but grew to a certain extent by accretion. So also the great cemetery of Cheops was not designed from the beginning on a unified plan; but having been begun with three separate nucleus graves, developed into three cemeteries built on regular lines and increased by two separate cemeteries (Cem. en Échelon and the Eastern Cemetery), which were laid out each on a separate unified plan. But in all these the basic idea is the association after death of the *kas* of the persons forming in life the family and the court of the king.

Radedef, who was probably the second son of Cheops and succeeded his father, avoided burial beside his father's tomb and began a new cemetery at Abu Roash on a high plateau of limited area. His pyramid was perhaps never completed and only six or eight other tombs were laid out on the plateau. In my reconstruction of the family history of Dyn. IV, I attribute the accession of Radedef of the Libyan line of Cheops descendants to the murder of the eldest son, Prince Ka-wab, of the legitimate Egyptian branch of the family. I imagine that Radedef's avoidance of his father's cemetery, his failure to occupy the site afterwards taken by the Chephren pyramid, was due to his reluctance to be associated after death with his murdered brother, Ka-wab. During the reign of Radedef practically no stone masonry was constructed at Giza. Radedef ruled only eight years, and I believe his life was shortened by the action of the princes of the legitimate line, either by assassination or in battle. His death enabled Chephren, a younger son of Cheops and of the legitimate branch, to take the throne.

With the reign of Chephren the growth of the Cheops cemetery was resumed. Chephren built his pyramid on the nearest available site. This was SW of the Cheops pyramid and west of the great quarry opened by Cheops. His own tomb, the Second Pyramid temples, and the Great Sphinx form the greater part of the work executed in his time. No large field of mastaba cores appears to have been laid out. I attribute to his reign the casing of the eighth twin-mastaba for his brother Min-khaf and the construction of four other cores east and south of the twin-mastabas of the Cheops field. Three of these were cased in fine white limestone in or previous to the year 13 of Chephren—the tombs of Prince Ankh-haf, Princess Merytyetes, and Queen Hetep-heres II (afterwards used for Meresankh III). In the same reign, but probably after the year 13, was constructed the mastaba of Queen Nefert-kauw (G 7050), a daughter of Sneferuw. Around the mastabas added later in the reign of Chephren, to the east and south, were built four filled mastabas of type VI, the tombs of 'Prince' Duwanehor, 'Prince' Sekhem-ankh, 'Prince' Min-dedef, and a prince whose name has been lost. West of the tomb of Queen Nefert-kauw (G 7050) were added two other grey mastabas of type VI, the tombs of Prince Nefer-ma'at, son of the queen, and that of Sneferuw-khaf, her grandson. Two others were added north of the tomb of Ankh-haf, Prince Zaty and Iy-nefer . . . , the husband of a princess. I assign the construction of these eight grey mastabas to the latter part of the reign of Chephren or the early part of the reign of Mycerinus. They represent the descendants of Cheops, mostly grandsons. In the Western Cemetery in the reign of Mycerinus was constructed the massive core G 5110, cased in fine white masonry, the tomb of Duwanera, and adjoining this on the north the grey stone mastaba of 'Prince' Khnum-ba-f, probably his son. East of the southern half of the mastaba of Duwanera stands the mastaba of the steward

Khemten, who served Prince Ka-wab, Princess (Queen) Hetep-heres II, and Queen Meresankh III, and perhaps Prince Duwanera. This mastaba, built of w-masonry with a one-niche chapel of u-masonry, was probably built in the reign of Mycerinus, although Khemten himself appears to have been still alive in the reign of Shepses-khaf, when he appears as the chief funerary priest of Meresankh III.

2. THE PRINCIPLES ON WHICH MASTABAS MAY BE DATED

This is the outline in brief of the nucleus cemeteries in the Giza Necropolis. It remains to establish this outline and to fill in the details, giving the position, as far as can be ascertained, of the individual mastabas. I approach this question first of all on the basis of the type forms of the mastabas and their topographical position. Before taking up the type forms I will lay down the means available for establishing the dates of the individual mastabas.

a. Stages in the Construction and Use of Mastabas

During the Predynastic period and the early part of Dyn. I the open-pit graves, whether lined or unlined, were easily prepared. Only the pit could have been made before the burial, and it is probable that the whole grave, including the mastaba, was made after the death of the owner. It is possible that the treatment of the body with resins and oils, as in the later mummification, began as a result of the delay between death and burial, after the introduction of the more elaborate substructures of Dyn. I, although these would have required only a week or so to prepare. The mastaba of this time was still constructed after the burial. With the introduction of the stairway tomb of about the middle of Dyn. I, it became possible to prepare the roofed substructure and perhaps build the mastaba before the death of the owner, and have the tomb ready and waiting years beforehand. This created either two stages—the preparation of the tomb, and the deposition of the burial—or three stages—the roofing of the substructures, the burial, and the building of the mastaba. The stairway tombs with the substructure built of c.b. in an open pit or trench developed in Upper Egypt from the wooden-roofed to the corbel type during Dyns. I and II and finally to the IIIrd Dynasty stairway type, with chambers cut in the geological substratum. At Memphis the deep stairway tombs there excavated in rock developed in Dyn. II. These deep stairway tombs of Dyns. II and III presented in general three stages: (1) the preparation of the stairway and the burial-chamber or chambers, followed almost immediately by (2) the construction of the mastaba and chapel, and followed at greater or less interval by (3) the burial. In the interval between the preparation of the tomb and the burial, enlargements and additions were often made, particularly to the mastaba and chapel, and among these is to be reckoned the decoration of the walls of the chapels (as in Hesy-ra).

In the Great Western Necropolis at Giza, which was begun with the stone mastaba cores, the stages in the construction of each mastaba were increased in number by the fact that large blocks of mastabas were laid out by the works department of the king in regular lines and rows with streets of uniform width between the mastabas. These original mastabas were often used as they were built, but many of them were cased with a different kind of stone in later years, and I have adopted the word 'core-mastaba' to designate the original constructions made by the king. When these cores were used as mastabas, then the stages were four in number, as follows:

- (1) The construction of the core, including the stone-lined upper part of the 2-m. shaft, and in most cases the affixing of the slab-stela in the retaining wall of the core.
- (2) The excavation of the rock-shaft and the rock-chamber. The chamber was usually lined with fine masonry.

- (3) The construction of the exterior c.b. chapel, around the slab-stela.
- (4) The burial.

Stage (2) appears in most cases to follow almost immediately on stage (1), but examples occur in which the rock-cut shaft and chamber were not made until long after the construction of the core. Stage (3) certainly followed stage (1), perhaps after an interval in time. Five of the earliest of these cores had been reconstructed, apparently after they had reached stage (3), and thus presented additional stages as follows:

- (4) The destruction of the c.b. chapel, and the addition of massive core-work with white casing and interior chapel (completed in only two cases).
- (5) The decoration of the chapel, executed apparently in only one case (G 4000).
- (6) The burial.

The cores referred to here are those of type II a and b. Some of these were cased in stone and the intention appears to have been to case all the cores of type IV. These cased cores present five stages, as follows:

- (1) The construction of the core, which appears to have included the part of the burial-shaft above the rock. This part through the mastaba filling was cased with stone blocks.
- (2) The excavation of the rock-cut part of the shaft and the rock-cut burial-chamber: the burial-chamber was usually lined with stone.
- (3) The construction of the offering-chapel and the casing.
- (4) The decoration of the chapel.
- (5) The deposition of the burial and burial-furniture in the chamber, and the blocking of the entrance to the chamber, together with the filling of the burial-shaft.

The stages generally followed one another in the order indicated, but cases occur of the postponement of stage (2), the excavation of the burial-place, until after stage (3) and even (4) (see G 7110). The separation in time of the stages is variable, according to circumstances. In some cases the stages succeeded one another with no appreciable lapse of time. In others the evidence shows that years or even generations elapsed between stages (1) and (2) or stages (4) and (5). Moreover, each stage was sometimes complicated by additions and alterations, of which the most important was the addition of core-work of quite a different type from that of the original core.

The same series of stages is revealed by the private core-mastabas of Dyns. V–VI, but in these the operations appear generally to have been continuous through stages (1)–(4), when a delay may occur before (5) (the burial).

In the case of the filled mastabas with sloping grey casing which appear in the reign of Chephren (see below), the stages are modified by the method of construction and may be reckoned as (1) construction of mastaba with chapel and cased part of burial-shaft, (2) excavation of burial-place, (3) decoration of chapel, and (4) the burial.

b. The Indicia for Dating the Different Stages

In the tombs of kings all the stages are limited to the reign of the king or to that reign plus a few years in the reign of his successor. But in the royal mastabas of Giza, where intervals of time may have elapsed between the stages, each of the four requires separate determination. The indicia by which the date of any stage may be fixed consist in both inscriptional and archaeological evidence, as follows:

- (1) Stage 1: the construction of the core is never fixed by inscriptions on the stones themselves, but may be limited by the determination of the dates of the succeeding stages; the

direct evidence consists in the type of construction and the relative position of the core in the cemetery; the slab-stela affixed to the eastern face of the core undoubtedly marks its assignment by the king (in most cases Cheops) to a particular person.

- (2) Stage 2: the preparation of the rock-cut burial-shaft and chamber was in one case fixed by a mason's inscription to the reign of Cheops, but the evidence is usually confined to archaeological considerations.
- (3) Stage 3: the construction of the chapel and the casing may be fixed by more or less exactly dated masons' and quarrymen's inscriptions, but these are rare.
- (4) Stage 4: the most usual inscriptional evidence is that given by the decorations of the chapel walls: these inscriptions include name and titles of owner, names of his relations and servants, and the names of his funerary estates; they give actually the date of the decoration of the chapel, but this was usually in continuation of the construction of casing and chapel; the completion of stage 4 marks the 'finishing' of the tomb previous to burial (which may or may not follow immediately).
- (5) Stage 5: the burial is dated only by the contents of the burial-chamber; at Giza the most certain evidence of the date of the burial is that afforded by mud sealings impressed with the seal of an official of a named king; these sealings represented gifts of oil, ointments, incense, and linen made by the king to favourite persons at the time of their death and date the burial to the reign of the king or soon thereafter; inscriptions containing the name of a king inscribed on objects of the funerary furniture are also marked thereby as presents from the king named, and indicate that the owner lived in the reign of that king and died during or not exceeding a lifetime after the death of that king: the objects if numerous may serve to date the burial to a known archaeological group.

c. The Principles for Determining the Date of the Decoration of a Chapel

In general when scholars speak of the date of a mastaba they are referring to a date based on the inscriptions and reliefs in the chapel. As I have just said, this evidence actually fixes the date of the decoration of the chapel. But the evidence even as to that must be scrutinized with care, and general principles may be formulated of an axiomatic character which will clear away the danger of error in the scrutiny. The object of the reliefs and inscriptions on the walls of a chapel is to provide the means of a happy and prosperous life 'as on earth' for the *ka* of the owner. Apart from the archaeological evidence resulting from the comparison with other dated chapel decorations and the type of chapel, the main factors in determining the date of the reliefs are: (1) the name and titles of the owner, (2) the names and titles of his relations and servants, (3) the names of the estates of his funerary endowment, (4) biographical notices, which are very rare in Dyn. IV, and (5) inscriptions giving date of death and burial (one example). Each of these elements has its special significance.

(1) *Names and Titles on Chapel Walls*

The principal name inscribed in the chapel is of the greatest importance for identifying the owner of the tomb. The other names permit the reconstruction of his family, wife, children, and funerary priests. The titles used fix the rank of the owner and of the other persons mentioned, and it is necessary to make clear the conditions under which these titles were inscribed. In the first place the whole decoration of the chapel served the principal person in the creation of his life after death, and was

executed in most cases under his supervision and in accordance with his personal wishes. One of the objects aimed at was to impress the future visitors to the tomb with the high rank of the owner. It may be assumed that the owner would inscribe among his titles everything that would exaggerate his importance, and we may expect every courtesy title used by his friends and servants in addition to the designations of his actual rank and place in the administration.

The most significant titles are 'king's son of his body' and 'king's daughter of his body', for which 'king's son' and 'king's daughter' occur as synonyms. Down nearly to the end of the reign of Cheops these titles are to be taken literally. But at the end of that reign we have the two sons of Prince Khufuwkhaf referred to as 'king's sons', although not the sons of a king. A short time thereafter we find the Queen Meresankh III, a daughter of Prince Ka-wab, using the title of 'king's daughter of his body', probably granted by her stepfather, Radedef. There are other cases such as Khnumbaf (G 5230) and Mer-ib (G 2100 add.). Thus after the reign of Cheops the title of king's son or daughter may be hereditary or honorary, but this use of the titles appears to be confined during the Old Kingdom to grandchildren of Cheops.¹

The most common of all titles at Giza is that of *rh-nswt* ('king's clansman'). During the reigns of Sneferuw and Cheops this title seems to designate a grandchild of a king. Apparently in the later part of Dyn. IV this title became hereditary and designates then and later merely the descendant of a king. Cases occur at Giza in which only one parent is a *rh-nswt*, and the title is inherited by the children. The usage after Dyn. V is uncertain and perhaps the title was sometimes conferred by the king or assumed without a right to it.

Unfortunately these titles very seldom give the name of the king to whom the title-bearer was related. There are a few exceptions such as Hetep-heres II and Neferma'at of Giza and his son, but these only emphasize the general rule. Consequently the name of the father or grandfather has to be deduced from other evidence, generally archaeological. A principle which runs throughout Egyptian cemeteries is that the members of a family desire to have their tombs in close proximity. The desire for association is clearly shown by the inscription in the tomb of Zaw at Der-el-Gebrawi (Davies, *Der-el-Gebrawi*, II, pl. XIII): 'My burial is in one tomb together with this Zaw (his father) in order that I might be with him in one place, not because there was lack of means to make a second tomb, but I have done this in order that I might see this Zaw (his father) every day in order that I might be with him in one place.' The consequence of this desire of relations and servants to be buried in family or court cemeteries with their parents or masters is exemplified by the great complexes of the royal and even the large private tombs of Dyn. I, and in almost every provincial cemetery. The principle has been utilized in the examination of the Cem. N 500-900 (see *Naga-ed-Dér*, III) and in the royal cemeteries of Ethiopia (see *Nuri*). Another striking case is the cemetery of the governors at Kerma with their great tumuli and groups of subsidiary graves (see *Kerma*). A son makes his tomb near the tomb of his father. Thus a prince whose tomb is on a primary site near the tomb of a king may be presumed to be the son of that king. In the case of a cemetery laid out by a king, as was that at Giza, the presumption is even stronger. But the possibility must be admitted that in some cases a brother or cousin of a king may have through personal attachment elected to be buried near his brother rather than his father. This would apply in particular when the tomb of the elder king was at a distance from that of the king, his son, as was the case with Sneferuw and Cheops.

The title of *rh-nswt*, which in the reign of Cheops generally indicates a grandson of a king, presents

¹ In the text the title of real king's son is printed without quotation marks and the courtesy title of prince or princess is printed in quotation marks.

greater difficulties in the determination of the grandfather. He may have been a cousin of the king in whose cemetery his tomb stands, or he may have been a grandson. When he stands in a family group headed by a prince, the *rh-nšwt* may be assumed to have been a son of that prince. But each case must be examined on the basis of all the evidence.

Of the other titles which give a basis for dating the chapel the most important are those which mark the priesthood of a king. These are *hm-ntr* of a king, *hm-k* of a king, *wrb* of a king, or of a king's pyramid.

The original holders of such titles were undoubtedly selected by the named king in his lifetime and accompanied by contracts like those used in engaging all the servants of the *ka*. After the death of the original holder the office passed to his heir or to a new appointee by some official act. We have proofs that in some cases a priesthood was exercised by a man living several hundred years after the death of the king named. The mere title does not allow any conclusion as to the length of time which had elapsed after the original appointment. In a few cases it is evident from the titles held by a king's son and from the date of the mastaba that he was a son of the king in whose funerary service he stood. Generally, however, the title indicated that the chapel was decorated in or after the reign of the named king, but not before that reign. In a few cases the owner of a tomb held the funerary priesthoods of two or more kings, and then it is to be assumed that the chapel was decorated in or after the reign of the last king named.

(2) *Names compounded with the Name of a King*

Names compounded with the name of a king have a varying significance for the date of the birth of the person concerned. That person was probably not born before the beginning of the reign of the named king. I say 'probably' because the renaming of a child on the accession of a king is not impossible. When the person whose name is under examination was a king's son, the natural assumption is that he was a son of the king named. In the case of other persons it is clear that in general the name of the reigning king would have been used in compounding the personal name, and a number of persons are known who were certainly born in the reign of the king with whose name their names are compounded, or died within a period of years after the death of the king which does not exceed the ordinary probabilities of human life.

On the other hand, persons are known who could not possibly have been born in the reigns of the kings for whom they were named. These names appear to have been adopted for other reasons. In the Egyptian families the same names were used repeatedly by succeeding generations. In the Giza mastabas the name of the father is often given to a son with the addition of the word 'small' (*šr*); see Seshem-nofer and Seshem-nofer-she, Khemten and Khemten-she, &c. It is probable that names compounded with the name of the king were passed on in a similar manner; see Prince Khufuw-khaf I and 'Prince' Khufuw-khaf II, and Khufuw-khaf III, the son of the latter 'prince'.

The fact must also be kept in mind that by reason of family quarrels members of the royal family may pass over even the name of their immediate ancestor and compound the names of their children with that of the grandfather or even a more distant ancestor. For example, the family of Queen Nefert-kauw, daughter of Sneferuw and one of the queens of Cheops, was obviously at variance with the successors of Cheops, and probably with Cheops himself. It is natural, therefore, to find a grandson of the queen named Sneferuw-khaf after his great-grandfather. Some similar explanation may lie in the case of Khufuw-mery-neteruw, the son of Mer-ib and a great-grandson of Cheops. It must be admitted that both the men named may have been born in the reign of Sneferuw and Cheops respectively, but with no great degree of probability. The inheritance of the funerary priesthood of a king

and estates of his funerary endowment probably also influenced the selection of names of children of later generations.

The great majority of the persons found at Giza whose names are compounded with the name of a king of Dyn. IV and such elements as *ankh*, *khaf*, *seneb*, and *nekht* were probably born in the reign of the king for whom they were named. Other examples can be cited from Dyns. V and VI. But cases certainly occur in which persons whose names are compounded with the name of a king were obviously born after his death. The conclusion is forced upon us that the name of a king compounded to form a personal name does not *ipso facto* date the birth of the person concerned to the reign of that king.

The above considerations show that the utilization of names compounded with the name of a king for dating their owners presents great difficulties. Each case must be examined with a view to all the other available facts. In general I am of the opinion that a king's children whose names are compounded with the name of a king (in a cartouche) were born in the reign of that king, unless the other facts positively contradict that assumption. In other cases, the person concerned was born in or after the reign named.

(3) *Names of Estates*

Great use has been made of the names of the estates of the funerary endowment (*pr dt*), when such names are compounded with the name of a king, and has frequently led to the misdating of Old Kingdom mastabas. The significance of these compound estate names must therefore be given greater precision. It is to be noted that such a compound signifies that the estate in question has been the property of the king named and probably acquired by him. Such estates mentioned in tombs as part of the funerary endowment of the owner must have come into the possession of the owner by grant, inheritance, or purchase. The estate of any particular king passed (1) to his wives, sons, and daughters by gift or testament, or (2) to the servants of his *ka* by civil contract (grant). It may be assumed that a king would have made provision for his adult children by gifts of estates during his own lifetime. The list of eight Cheops estates mentioned in the tomb of Khufuw-khaf, which was built before the end of the reign of Cheops, is confirmation of this statement. It was customary in Egypt for men to divide their property after death by testaments prepared while they were still alive. It may be assumed that kings also made testaments dividing their private property among their wives and children and that estates thus bequeathed passed to the legatees after the king's death. The estates granted to servants of the *ka*, either of the king himself or of favourite relations, were probably delivered before the death of the king (see the contracts of Hep-zefa of Dyn. XII).

King's estates which passed by gift or by testament to other members of his family, especially children, would in turn be disposed of in the same two ways: (1) by gift or testament to members of their family, or (2) by civil contract to funerary priests. It is possible that in exceptional cases the royal estates bequeathed or granted to members of the king's family passed into the possession of the grantees or the legatees after the death of the king concerned.

King's estates in the possession of funerary priests passed as a rule to the heirs (wives and children) of the funerary priests, carrying with them the obligations imposed by the original contract. The group of estates might pass undivided to one heir or be divided among all the heirs, in which case each portion carried a proportional share of the funerary obligations. The transfer of such funerary estates from *ka*-priest to *ka*-priest would usually take place after the death of the king to whom the estate originally belonged, and such transfers might continue for generations. Legally such king's estates in the possession of a funerary priest were inalienable and barred by this fact from inclusion in the funerary

endowment of the *ka*-priest of the king. Whether irregularities in the observance of the rule may have occurred it is now difficult to determine.

These legal methods by which estates passed from person to person give rise to the following conclusions:

- (1) A king's son or a king's daughter, among whose funerary estates are those compounded with names of one or more kings, was in the direct line of descent from the kings named and probably the son or daughter of the last named (see the estates of Cheops and Chephren in the tombs of Khufuw-khaf, Meresankh III, Nekauw-ra, Sekhem-ka-ra, and Neb-m-akhet): the decoration of the tomb may have taken place late in the reign of the father of the prince or princess, but more usually after his death, but not exceeding the maximum length of a human life after that death: each case requires careful sifting of all the evidence (cf., for example, the case of the estate names in the tomb of Meresankh III which appear to have been granted to the funerary priests by the mother, Queen Hetep-heres II).
- (2) When the owner of the tomb is a *rh-nswt*, a grandchild or a descendant of the king, he or she may have inherited king's estates through the direct line of descent from a king's son or king's daughter. In such cases the tomb was certainly prepared after the death of the king concerned.

The general conclusion appears to be that when the name of a king's estate appears in the funerary endowment of a tomb, the decoration of that tomb is to be dated in general after the death of the king to whom the estate belonged; but if the owner of the tomb be a king's son, the tomb may have been decorated towards the end of the reign of the king in question.

(4) *Names and Titles of Relations*

The inscriptions often give various relations of the person to whom the tomb belonged, and, from these, family groups can be composed including two or more generations (cf. tomb of Meresankh III). These relations may be used in two ways. First in importance is the case where one or more members of the family is dated by a reference in another tomb. For example, Prince Neb-m-akhet, who is proved by the estate names in Lepsius G 86 to be a son of Chephren, occurs as the son of Queen Meresankh III in her tomb. Again, by means of family or funerary relationships two or more tombs may be placed in proper chronological order and so facilitate the dating of the whole group. The reconstruction of certain families has been of great service in working out the relative chronology of the mastabas in some parts of the Giza Necropolis.

(5) *Biographical and Similar Inscriptions*

Biographies or autobiographies are very rare in Dyn. IV, but extremely valuable. They are more common in Dyns. V and VI. In some of these the account may even include a description of the building of the tomb or the presentation of sarcophagus or carved stones by the king. All such accounts (Debehen, Senezem-ib, Nekhebuw, &c.) are of great value for dating the stages of the mastabas in which they occur.

There are also biographical notices such as that of Neter-puw-nesuwt, Prince Sekhem-ka-ra, Merytyetes, and Ptah-shepses, which give us the names of the kings under whom the person lived. These notices enable us to calculate the length of life of each person concerned, and thus to control the length of the reigns assigned to the kings under whom they lived.

Other documents which give biographical informations are the few wills and deeds which have come down (Neka-ankh, Pennuw, Pen-meruw, Nekauw-ra, &c.).

(6) Dated Inscriptions regarding Death and Burial

In the biographies of Dyns. V–VI occasionally a definite date is given as in the letter of Isesy to Senezem-ib-Yenty. Quite different from these documentary dates are the two inscriptions on the chapel doorway of the tomb of Meresankh III, one of which gives the date of the death in the first year of an unnamed king and the second the date of the burial. Something similar was inscribed on a niche in the mastaba above the tomb of Meresankh III, the mastaba built for Hetep-heres II, but there the date and the inscriptions are fragmentary. The year appears to be 3 (*hʿt sp 2*) of an unnamed king.